

## 2.0 PROPOSED ACTION AND ALTERNATIVES

### 2.1 Alternative Formulation and Description

Alternatives were developed to address the range of issues that were discussed in Chapter 1. Alternative 1 is the No Action Alternative. The No Action Alternative provides a baseline for comparison with the other alternatives, and describes the current management scenario. Alternative 2 is the proposed action. This alternative balances resource uses with resource protection, while still providing for high quality recreational experiences. Alternative 3 provides management for high density experiences, and emphasizes recreation facility development and increased maintenance to address higher impact levels. Alternative 4 provides management for low density experiences, requiring more restrictions on use or types of recreation behavior.

### 2.2 Management Actions Common to Alternatives 2, 3, and 4

Management actions developed for Alternatives 2, 3, and 4 assume that sufficient funding and personnel would be available for implementation of the proposed management actions.

#### 2.2.1 Outstandingly Remarkable Values (ORV) and Management Objectives

The ORVs and associated management objectives described below will not change in any of the alternatives. ORVs are not a land use allocation or a management action, but rather a finding based on a study/inventory process of what values or characteristics that make the river worthy of special protection. Management guidance for the establishment of ORVs can be found in Section 1(b) of the WSRA and in the BLM Wild and Scenic Rivers—Policy and Program Direction for Identification, Evaluation, and Management Manual (1993, BLM M-8351). The identification of ORVs is a critical step in developing the revised DWSR Management Plan. ORVs describe why a river is important enough to be designated and managed as a unit of the WSRS and what combinations of resource conditions and visitor experiences will best protect and enhance these values. Clearly defined management objectives address how these conditions and experiences can be achieved. ORVs are typically identified in a study prior to the designation of a WSR. The DWSR was designated as a component of the WSRS in ANILCA, but the ORVs were not identified in the legislation. In this case, ORVs have been identified from historical study reports and documentation of management activities at the time of designation. The proposed ORVs were identified based on a review of previous documents prepared for the Delta River and its environs<sup>1</sup>.

Criteria for identifying ORVs has been developed by the Interagency Wild and Scenic Rivers Coordinating Council (IWSRCC) in its guidelines for implementation of the WSRA. The IWSRCC consists of representatives of the four wild and scenic rivers administering agencies: the BLM, National Park Service, U.S. Fish and Wildlife Service, and U.S. Forest Service. In these guidelines, the IWSRCC has established two criteria that must be satisfied for a characteristic to be included as an ORV:

1. The value must be river related. To be considered river related, a value must:
  - Be located in the river or on its immediate shorelands (generally within ½ mile on either side of the river) *and*
  - Contribute substantially to the functioning of the river ecosystem *or*
2. Owe its location or existence to the presence of the river. The value must be rare, unique, or exemplary in a regional or national context. To be considered rare, unique, or exemplary, a value should be a conspicuous example from among a number of similar values that are themselves uncommon or extraordinary.

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<sup>1</sup> The Wild and Scenic Rivers Act (WSRA).  
 Alaska National Lands Interest Conservation Act (ANILCA).  
 "Delta River: A Wild and Scenic River Analysis", Bureau of Outdoor Recreation, March 1976.  
 "Draft Environmental Statement: Proposed Designation of the Delta River as an Element of the National Wild and Scenic Rivers System, Heritage Conservation and Recreation Service, 1978.  
 "Delta River: A Wild and Scenic River Analysis", Heritage Conservation and Recreation Service, February 1978.  
 "Delta River Management Plan", Bureau of Land Management, December 1983.  
 "Soil Survey of the Delta River Area, Alaska", Mark H. Clark, 2005.

The proposed ORVs for each classification segment of the DWSR corridor are included in Table 2, and are common to all alternatives in this planning effort. The WSR classification segments are displayed in Map 2 on Page 16.

**Table 2: Proposed Outstandingly Remarkable Values by WSR Classification**

<b>WSR Classification</b>	<b>Proposed Outstandingly Remarkable Values</b>
<b>Wild</b> Segment (32% of the WSR corridor/ 20 Designated River Miles)	Recreation, Scenic, Cultural, Fisheries
<b>Scenic</b> Segment (39 % of the WSR corridor/ 24 Designated River Miles)	Recreation, Scenic, Cultural, Wildlife
<b>Recreational</b> Segment (29% of the WSR corridor/ 18 Designated River Miles)	Recreation, Scenic

Following is a more in-depth discussion of the proposed ORVs listed above. Management objectives for each are also described:

### 2.2.1.1 ORV-Recreation

Within all WSR classification segments, the DWSR corridor provides outstandingly remarkable opportunities for a diversity of recreational experiences in a setting dominated by natural scenery and landscapes. The DWSR is one of a few easily-accessible Wild and Scenic Rivers in the State of Alaska, providing both day use and overnight boating opportunities. A wide range of outstanding recreational opportunities attract people of all ages and abilities to the DWSR corridor where individuals, families, and groups have historically established traditional family ties with the area. Some segments of the river corridor provide outstanding opportunities for river-related solitude, enjoyment of natural river sounds, and primitive and unconfined recreation in a natural, undisturbed environment. Other segments provide a remote setting for recreational activities such as wildlife viewing, fishing, hunting, trapping, camping, hiking, snowmachining, skiing, photography, OHV travel, and a variety of water for both the floater and motorized boater. Boating opportunities include both lake paddling and river paddling on clear and glacial water stretches, challenging whitewater, and exceptional opportunities for both day use and extended overnight backcountry excursions.

Management Objectives (all WSR classification segments):

- Preserve the river and its immediate environment in its natural condition while seeking to maintain a diversity of recreational experiences.
- Manage to maintain a primitive and semiprimitive recreational experience on specific segments of the river where visitors have opportunities for solitude.
- Manage recreational activities and facilities to maintain or enhance the undeveloped character of the river and surrounding environment.
- Ensure adequate instream flows to accommodate recreational opportunities.

### 2.2.1.2 ORV-Scenic

Within all WSR classification segments, the DWSR corridor provides unmatched and outstandingly remarkable scenic opportunities. The DWSR is flanked by both the low, rolling tundra hills of the Amphitheatre Mountains and the high, rugged snow covered peaks and ridges of the Alaska Range, providing high quality scenic vistas. The river and surrounding hills provide undisturbed views of the river canyon, waterfalls, channelized riverbeds, tributaries, granite rock outcroppings and glacial alluvial processes. There is a scenic interface of river, rock, tundra, and spruce dominated forest within the river corridor. Photographic opportunities are nearly limitless with snow, water, rock, and vegetation interspersed over rolling hills, mountains, and deep river valleys.

Management Objectives (all WSR classification segments):

- Management activities will retain and seek to enhance the existing character of the landscape and Class I Visual Resource Management (VRM) viewshed within the river corridor.
- Improvements to recreational facilities within the river corridor will remain rustic and will be developed to harmonize with the natural surroundings of the area.

### 2.2.1.3 ORV-Cultural

The DWSR corridor contains outstandingly remarkable cultural resources within the *wild* and *scenic* classification segments, including portions of a 226,660 acre National Register Archaeological District created in 1971. The Tangle Lakes Archaeological District (TLAD), managed by the BLM, contains approximately 25,677 acres within the DWSR corridor, with nearly 280 recorded archaeological sites (Bowers 1989), representing a roughly continuous history of human occupation from more than 10,000 years ago through the recent past. Almost all of the earliest known sites in the region are within the designated river corridor and hundreds of other sites are expected to exist within these areas (West 1981; Bowers 1989; Jangala et al 2009). Together, these factors make that portion of TLAD within the DWSR corridor nationally significant as one of the densest areas for early Holocene archaeology in the North American Sub-Arctic (Bowers 1989). Evidence of this prehistoric occupation can still be found within close proximity to many common campsites along the river corridor. The area also remains culturally significant for the Copper River Basin's natives, the Ahtna Athabascans (Kari and Tuttle 2005; Jangala et al 2009). The river corridor contains dozens of recorded Ahtna names and was likely a long term travel and trading route between the Copper River Basin and the Tanana Valley. The Tangle Lakes are considered by the Ahtna to be the ancient origin place of one of their oldest clans.

Management Objectives (Wild and Scenic classification segments):

- Manage activities within the DWSR corridor to preserve cultural values that contribute to its primitive character.
- Inventory areas within the DWSR corridor that have not received previous archaeological surveys for additional historic and archaeological sites, as well as places of religious and cultural importance for local native peoples.
- Manage dispersed campsites and trails within the river corridor to eliminate erosion and minimize bare ground to reduce potential for disturbance of archaeological sites.
- Increase public knowledge of the significance of TLAD and the fragile nature of artifacts and archaeological sites that may be found within the river corridor to reduce looting or vandalism.

### 2.2.1.4 ORV-Fisheries

Within the *wild* classification segment, the DWSR provides outstandingly remarkable habitat for a resident, world-class Arctic grayling fishery. Few rivers anywhere in the world can match the quality and quantity of the Arctic grayling fishery in the DWSR. Results of recent abundance estimates for Arctic grayling in the *wild* classification segment indicated the 17 km study area had one of the greatest densities ever recorded for a population of Arctic grayling  $\geq 270$  mm length (Gryska, in preparation).

Management Objectives (Wild classification segment):

- Manage designated campsites and social trails to reduce soil compaction, soil erosion, sedimentation, and riparian vegetation loss and damage.
- Maintain and restore elements of the sediment regime including timing, volume, rate, and character of sediment input, storage, and transport.
- Maintain water quality necessary to support healthy riparian, aquatic, and wetland ecosystems.
- Maintain or enhance the physical integrity of the aquatic system including shorelines, streambanks, and bottom configurations.
- Maintain instream flows sufficient to create and sustain riparian, aquatic, and wetland habitats and to retain patterns of sediment, nutrient, and wood routing.
- Maintain and restore the species composition and structural diversity of plant communities in riparian areas.

- Maintain habitat to support well-distributed populations of native plant, invertebrate and vertebrate riparian-dependent species.
- Cooperate with partner and research agencies in existing and future fish population monitoring, habitat assessment, habitat restoration, and research projects that are consistent with management objectives.

### 2.2.1.5 ORV-Wildlife

Within the *scenic* classification segment, the DWSR provides outstandingly remarkable wildlife viewing and photographic opportunities for a diversity of wildlife species. Migratory birds and waterfowl use the river corridor and the surrounding lakes as nesting areas. Trumpeter swans, a BLM sensitive species, nest in the wetlands of the Upper Tangles. Bald eagles frequent the area to nest and hunt for fish and various waterfowl. Grizzly bears frequent the lowlands to fish and to hunt where moose drop their calves. Moose inhabit the lowlands in the summer while generally wintering at higher elevations in the surrounding hills. The *scenic* classification segment is also within the historical migratory path of the Nelchina caribou herd. Up to 34,000 caribou travel through the area each year in an annual migration to and from the calving grounds farther west. This exceptional combination of pristine habitat and wildlife contribute substantially to the functioning of the river ecosystem. Moreover, a unique tradition of subsistence use allows rural hunters to harvest moose and caribou in the river corridor, following long-held traditions passed on through thousands of years.

Management Objectives (Scenic classification segment):

- Maintain or enhance wildlife habitat for migratory birds and waterfowl.
- Protect habitat for Trumpeter swans, a BLM sensitive species.
- Reduce potential sources of disruption for the migration and wintering of the Nelchina Caribou Herd.
- Ensure sound wildlife management for continued subsistence opportunities.
- Minimize human-bear encounters by encouraging visitors to use Leave No Trace camping techniques.

## 2.3 Alternative 1 -- No Action Alternative

In this alternative, current management would continue on the Delta River, guided by the 1983 DWSR Management Plan and the EARMP. ORVs and related management objectives would not be identified, and no decisions to manage use levels and associated impacts of recreational use would be made. BBM actions, including adaptive management standards and indicators, would not be implemented within the river corridor. Management options to address issues that were identified during scoping would be limited, and the management strategy would lack clear management goals and objectives to address impact issues within the river corridor. The no action alternative would not meet the objectives stated under “*Purpose and Need for Action*”, which include the development of a Delta River SRMA Plan and associated LUP Amendment.

## 2.4 Alternative 2 -- Proposed Action Alternative

The proposed action alternative is the BLM's preferred alternative. The BLM proposes to adopt the following BBM recreation objectives for the DWSR corridor, and the described indicators, standards, and adaptive management actions in Chapter 2.4.2.

### 2.4.1 Alternative 2 -- Benefits Based Management (BBM) Actions

The BLM has developed specific BBM goals and objectives to address key issues identified during the initial planning studies for the Delta River SRMA, including specific indicators, standards, and adaptive management actions to address impacts associated with recreational use. The BBM planning process involves identifying distinct Recreation Management Zones (RMZs) for the entire Delta River SRMA, each having a specific recreation niche, or specialty, that serves the primary recreational market being targeted within each zone. The development of RMZs within the Delta River SRMA is a recreation allocation decision, based on the primary recreational activities that occur within different areas of the river corridor.

In some cases, RMZ boundaries do not exactly match the WSR classification category (wild, scenic, and recreational) boundaries (Map 2). However, RMZ decisions will be consistent with WSR classification categories described in Section 2(b) of the WSR and BLM WSR Planning Guidance (BLM M-8351).

The Recreation Opportunity Spectrum (ROS) has been adopted by the BLM as a tool for describing the existing recreational setting character and for prescribing the desired recreational setting character (BLM LUP H 1601-1, Appendix C) for each RMZ. The ROS provides a framework for classifying the diversity of recreational opportunities on public lands to accommodate a wide range of recreational users and activities. Typically, the ROS is divided into six major classes: urban, rural, roaded natural, semiprimitive motorized, semiprimitive nonmotorized, and primitive. Along this continuum, physical, social, and managerial conditions vary. One ROS class will be applied to each RMZ to help define the actual experience setting that will facilitate the desired outcomes for each RMZ. Proposed RMZs and targeted ROS experience settings for the Delta River SRMA are included in Tables 3 and 4 and Map 2.

**Table 3: Alternative 2 - Delta River SRMA Proposed Recreation Management Zones and Acreages**

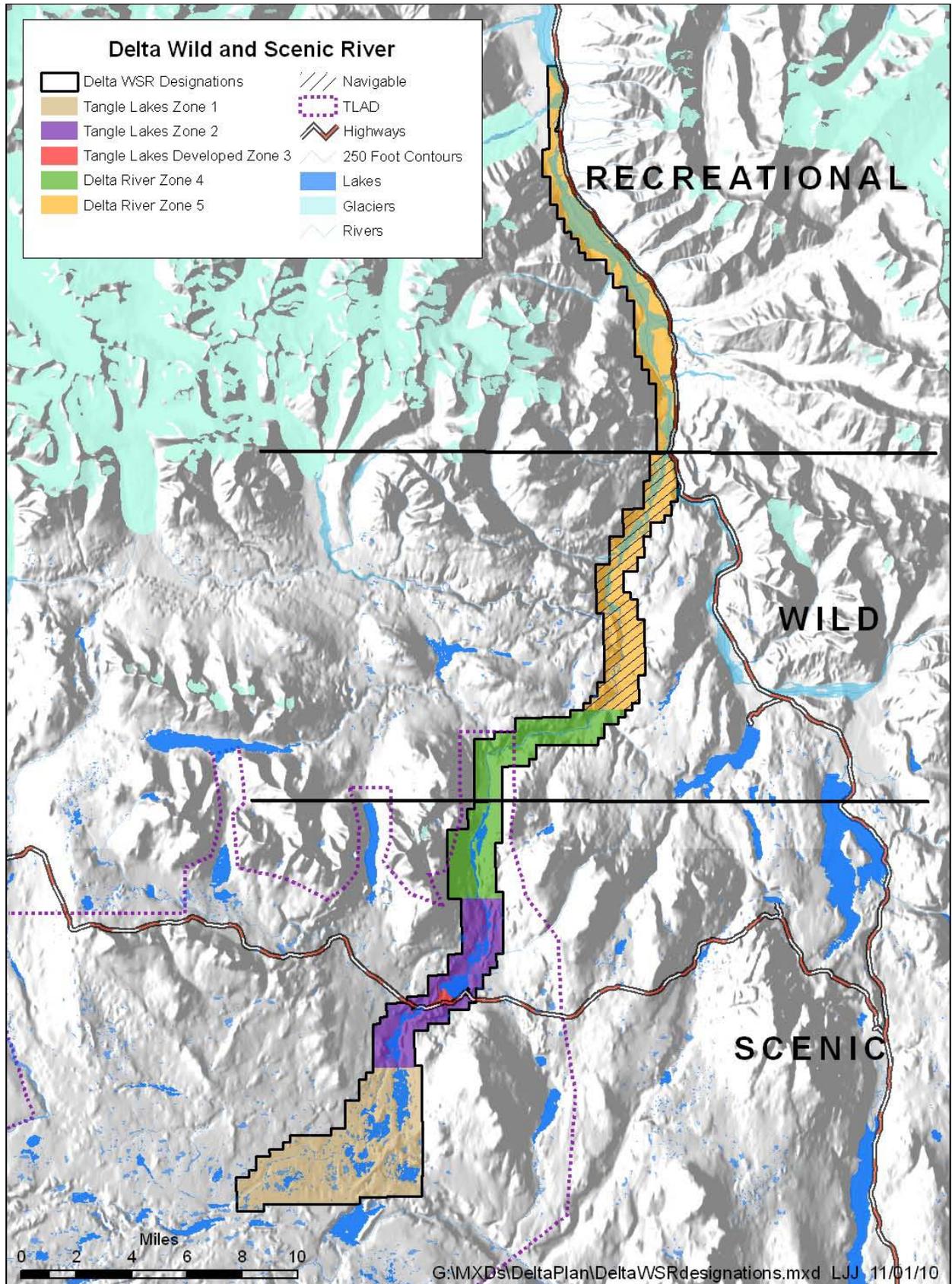
Proposed Recreation Management Zone (RMZ)	Acrees	River Miles (approx.)
Tangle Lakes Zone 1	13362	12
Tangle Lakes Zone 2	6603	8
Tangle Lakes Developed Zone 3	248	1
Delta River Zone 4	8309	11
Delta River Zone 5*	16065	30

\* The State Of Alaska owns the submerged lands of the Delta River below the ordinary high water line where the river has been determined navigable.

**Table 4: Alternative 2 - ROS Experiences by Proposed RMZ**

Recreation Management Zone	ROS Experience to be Managed For	Definition of Experience
Tangle Lakes Zone 1	Semiprimitive nonmotorized	Area is characterized by a high degree of naturalness. Concentration of users is low to moderate, but solitude is still possible. Area is free of motorized roads and trails, but some motorized boating use is present, limited by physical terrain features. Vegetation and soils are predominantly natural, but some impacts exist at campsites. Management presence is subtle and limited, absent of any facilities.
Tangle Lakes Zone 2	Semiprimitive motorized	Area is characterized by a predominantly naturally appearing environment. Concentration of users is moderate, and solitude is sometimes difficult to find. Motorized uses are common. Sights and sounds of the road system may or may not be dominant, but all portions are near motorized activities. Vegetation and soils are predominantly natural, but some impacts exist at campsites.
Tangle Lakes Developed Zone 3	Roaded Natural	Area is characterized by a moderate degree of naturalness, within sight and sounds of humans. User concentrations may be high in popular recreational sites, such as waysides, campgrounds, and water access points. Basic facilities exist for user convenience and safety, with a moderate level of management presence. Area is accessible by paved or gravel roads to conventional motorized vehicles.
Delta River Zone 4	Primitive	Area is characterized by an essentially unmodified natural environment, managed for primitive attributes and solitude. Concentration of users is very low and evidence of use is minimal. Sights and sounds of the road system are nonexistent and area is remote. Facilities are rustic and built for resource protection only. There is little or no evidence of motorized use, including OHV trails.
Delta River Zone 5	Semiprimitive motorized	See description for Tangle Lakes Zone 2.

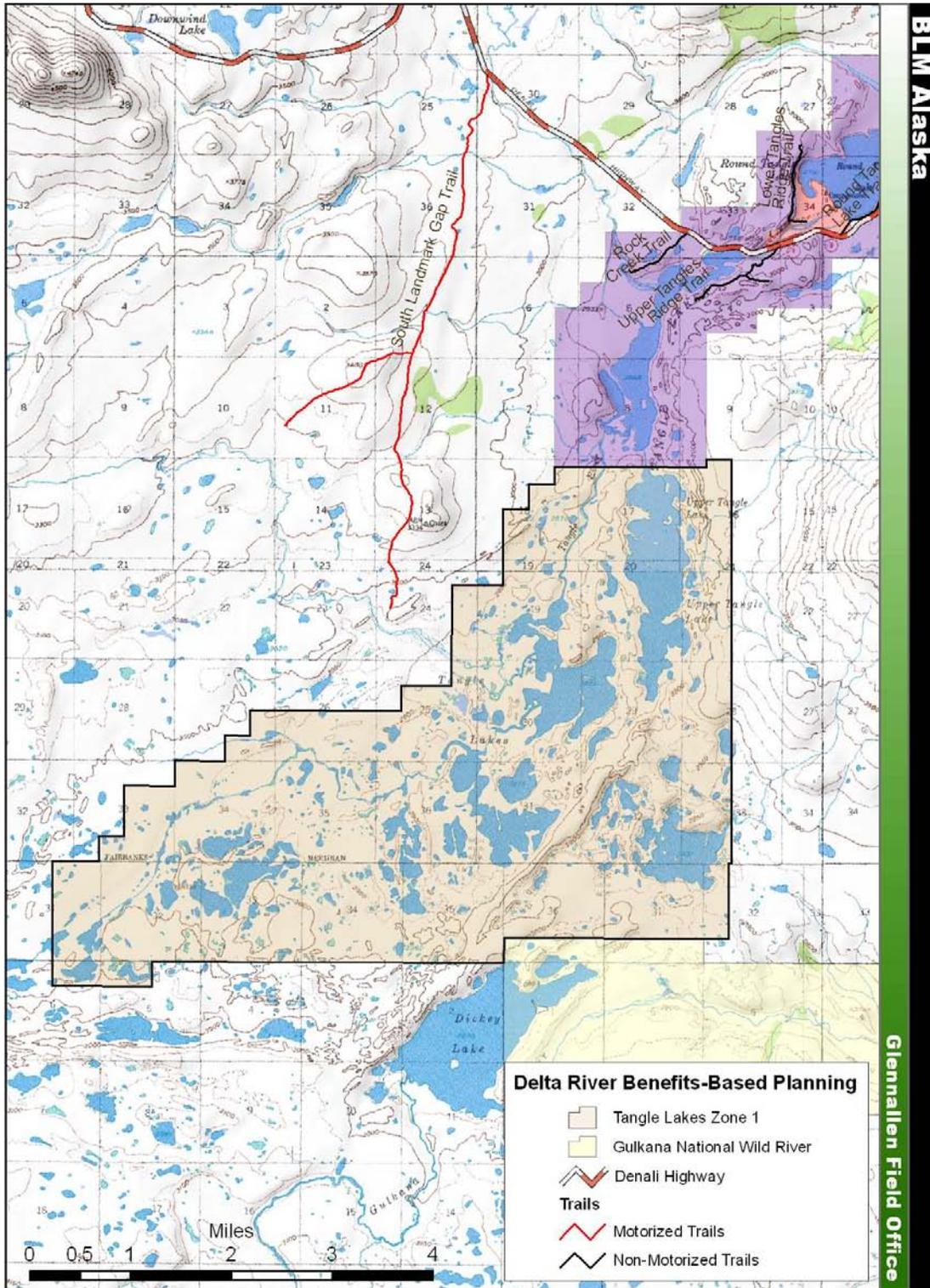
**Map 2: Alternative 2 - Delta River SRMA Proposed Recreation Management Zones and WSR Designations**



### 2.4.1.1 Alternative 2 -- Tangle Lakes Zone 1

Tangle Lakes Zone 1 is accessed from the DWSR Wayside and includes the southern portion of the Upper Tangle Lakes system to the extent of the river corridor boundary (this zone does not include the first lake and portage of the Upper Tangles, which is located in Tangle Lakes Zone 2). The zone is located entirely within the TLAD and contains approximately 13,362 acres of BLM lands.

Map 3: Tangle Lakes Zone 1



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**Alternative 2 – Tangle Lakes Zone 1**

<b>EARMP AMENDMENT LAND USE PLANNING DECISIONS</b>		
<b>PRIMARY MARKET STRATEGY</b>	<b>PRIMARY MARKET</b>	
Destination	Nonmotorized boaters and hikers from Alaska	
<b>NICHE DECISION</b>		
The unique features of this zone allow for visitors to engage in diverse recreational activities in a semiprimitive environment that becomes more primitive as you travel further from the Denali Highway, while remaining relatively close to facilities that provide easy access to the zone.		
<b>MANAGEMENT OBJECTIVE DECISION</b>		
The primary focus within the zone will be to manage and provide opportunities for nonmotorized lake boating, dispersed hiking and wildlife viewing activities. Recreational emphasis will be on providing a semiprimitive nonmotorized experience in an easily accessible, naturally appearing landscape.		
<b>PRIMARY TARGETED OUTCOMES</b>		
<b>Activities</b>	<b>Experiences</b>	<b>Benefits</b>
<ul style="list-style-type: none"> <li>• nonmotorized lake boating</li> <li>• dispersed hiking</li> <li>• wildlife viewing</li> </ul>	<ul style="list-style-type: none"> <li>• enjoying solitude, natural quiet and natural sounds</li> <li>• learning about nature and wildlife</li> </ul>	<ul style="list-style-type: none"> <li>• greater self-reliance and confidence</li> <li>• closer relationship with the natural world</li> </ul>
<b>OUTCOMES TO BE AVOIDED</b>		
<b>Activities</b>	<b>Experiences</b>	<b>Negative Benefits</b>
<ul style="list-style-type: none"> <li>• Unauthorized OHV use</li> <li>• Motorized boating</li> <li>• Airplane landings</li> </ul>	<ul style="list-style-type: none"> <li>• loss of solitude and ability to view wildlife</li> <li>• loss of cultural history caused by resource damage</li> <li>• reduced natural quiet and natural sounds</li> </ul>	<ul style="list-style-type: none"> <li>• increased mental tension and stress with loss of solitude</li> <li>• decreased relationship with the natural world</li> <li>• loss of naturalness and increased disturbance to area resources</li> </ul>
<b>SETTING CHARACTER DECISION -- SEMIPRIMITIVE NONMOTORIZED</b>		
<b>Physical</b>	<b>Social</b>	<b>Administrative</b>
<p><b>Remoteness:</b> The zone will be managed for a semiprimitive nonmotorized experience, with opportunities for a more primitive experience as you travel further from the Denali Highway.</p> <p><b>Naturalness:</b> The zone is natural in appearance, but may be within site of the Denali Highway and developed facilities. Conditions become more primitive as you progress further south.</p> <p><b>Facilities:</b> 15 primitive campsites will be designated for overnight use. Portage trails between the lakes will remain unimproved.</p>	<p><b>Contacts:</b> Manage for 4-6 encounters per day on the weekend and 2-4 encounters per day during the week.</p> <p><b>Group Size:</b> Manage for an average group size of 3-5 people.</p> <p><b>Evidence of Use:</b> Minor evidence of use, including slight vegetation trampling at campsites and on portage routes will be expected.</p>	<p><b>Mechanized Use:</b> Decisions regarding mechanized use are described below under <i>Travel Management</i>.</p> <p><b>Management Controls:</b> Agency personnel will conduct field patrols approximately three times per season.</p> <p><b>Visitor Services:</b> River patrol crews will make contact with lake and river users.</p>

<b>DELTA SRMA IMPLEMENTATION DECISIONS</b>	
<b>Management</b>	<p><b>Adaptive Management Actions:</b></p> <p>Actions described in Chapter 2.4.2 for the management of litter, human waste, fire rings, campsite impacts, and private/commercial user capacity will be adopted. Impact levels will be monitored; if standards are exceeded, management actions will be implemented as described.</p> <p><b>Special Recreation Permits (SRP):</b></p> <p>Commercial group sizes will be limited to 10 people per campsite. Commercial guides will be required to use designated campsites and portable toilets. Competitive events may be authorized based on compatibility with specified ORVs for the zone.</p> <p><b>Travel Management:</b></p> <p>Tangle Lakes Zone 1 is located entirely within the TLAD. Special Rules for the TLAD limit OHV travel to designated OHV trails from May 16 - October 15, or until such time that adequate snow cover or ground frost is present to protect archeological resources. There are no existing designated OHV trails within the zone. Unauthorized OHV routes will be closed and rehabilitated. Signs that identify OHV use limitations will be used to reinforce TLAD trail restrictions. The BLM will monitor visitor use to ensure the protection of resources and compliance with TLAD trail restrictions. Education and enforcement will be used to help limit the proliferation of unauthorized trails.</p> <p>Portage trails between the lakes will remain unimproved and trail maintenance will only be used to prevent resource damage and trail proliferation, using native materials (e.g. rocks, spruce) and primitive trail construction methods. Trail reroutes or closure of spur trails within the portage areas may be used to prevent the proliferation of redundant trails. If trail proliferation does occur, rock cairns or unobtrusive signage may be used to mark the portage routes.</p> <p>Public use of pack animals, mechanized travel (e.g. mountain bikes) and dog mushing will be allowed throughout the zone. The BLM will recommend the use of certified weed-free forage and bedding for pack animals and dog mushing.</p> <p>Motorized boating and airplane landings will be discouraged, but not prohibited, unless monitoring shows that adverse impacts are occurring to recreational, wildlife, riparian and/or water quality resource values within the management zone. Upon a finding that any of these resource values are being adversely affected as a result of motorized boating or airplane landings, an ANILCA closure process would be considered in compliance with the procedures outlined in 43 CFR 36.11(h). New airstrips will not be authorized within the management zone.</p> <p><b>Facilities:</b></p> <p>There will be no developed facilities within the zone. Public use cabins will not be considered for development. The absence of facilities is a characteristic that makes this zone unique, providing solitude in a natural, primitive setting.</p> <p><b>Education and Interpretation:</b></p> <p>Information will be developed to inform and educate visitors about current river resource conditions, rules and regulations, recreational opportunities, and Leave No Trace low impact camping techniques. River crews will make contact with users to educate low impact camping and river ethics. The primary goal within this zone is to provide interpretation of area resources through self discovery.</p>
<b>Marketing</b>	<p>Recreational opportunities within the zone will be marketed by providing information on the BLM website and in BLM brochures.</p> <p>User groups, communities, volunteers, and other interested parties may help to monitor and maintain river resources through partnerships and special events.</p>

<p><b>Monitoring</b></p>	<p>The BLM will assure that BBM outcomes and objectives are being met and setting prescriptions are being maintained through the administration of BBM visitor satisfaction surveys.</p> <p>Monitoring and periodic assessments for impacts to recreational, wildlife, riparian and/or water quality resource values will be conducted within the management zone using the following guidelines to establish baseline information with which to quantify possible adverse impacts during the life of the plan:</p> <p><b>Recreational Resources:</b></p> <p>Recreational monitoring will be conducted to determine the level of motorized boating and airplane landings. Monitoring will be conducted through the administration of river user surveys, river overflights, and river patrols to determine if motorized boating use or airplane landings are occurring, and to quantify the level of use.</p> <p><b>Wildlife Resources:</b></p> <p>Periodic assessments of wildlife habitat will be performed to ensure a diversity and abundance of waterfowl and migratory birds. The effects of human disturbances on breeding, nesting, and productivity of trumpeter swans and other migratory birds will be considered, and breeding bird surveys will be conducted periodically to assess occupancy and productivity. The BLM will also develop and participate in research partnership efforts to gain a better understanding of the effects of human disturbance to sensitive status birds and their habitat.</p> <p><b>Riparian Resources:</b></p> <p>Habitat assessments will be completed to evaluate the physical condition of the riparian and wetland areas. Using established BLM protocols, proper functioning condition (PFC) assessments will be performed to determine if riparian and/or wetland vegetation is being adversely affected by motorized boating and airplane landings. The desired condition for riparian and wetland vegetation is to maintain diverse age-class distribution and composition, presence of species that indicate the maintenance of riparian/wetland soil moisture characteristics, deep-rooted riparian species, vigorous riparian vegetation, adequate vegetative cover to protect streambanks and dissipate energy during high flows, and communities with an adequate source of coarse and/or large woody material.</p> <p><b>Water Quality:</b></p> <p>Water quality baseline data will be periodically collected to assess possible adverse impacts, including monitoring for petroleum hydrocarbons resulting from motorized boating and/or airplane landings.</p> <p>Using an adaptive management approach, the BLM will monitor and evaluate whether identified standards are being maintained for litter, human waste, fire rings, private and commercial user capacities and campsite impacts. Monitoring will be conducted using river patrols, river surveys, and visitor registration. Management actions (described in Chapter 2.4.2) will be implemented in response to monitored conditions.</p>
<p><b>Administrative</b></p>	<p>Special Rules for the river corridor will be developed in accordance with 43 CFR 8351.2-1 to codify the following administrative restrictions:</p> <p><b>Travel Management:</b></p> <p>The use of snowmachines and OHVs will only be allowed during periods of adequate snow cover (at least 6" of ground frost or 12" of snow cover).</p> <p><b>Group Size:</b></p> <p>Group sizes will be limited to a maximum of 10 people per campsite. Groups in excess of 10 people per campsite must obtain written authorization with special stipulations from the BLM.</p>

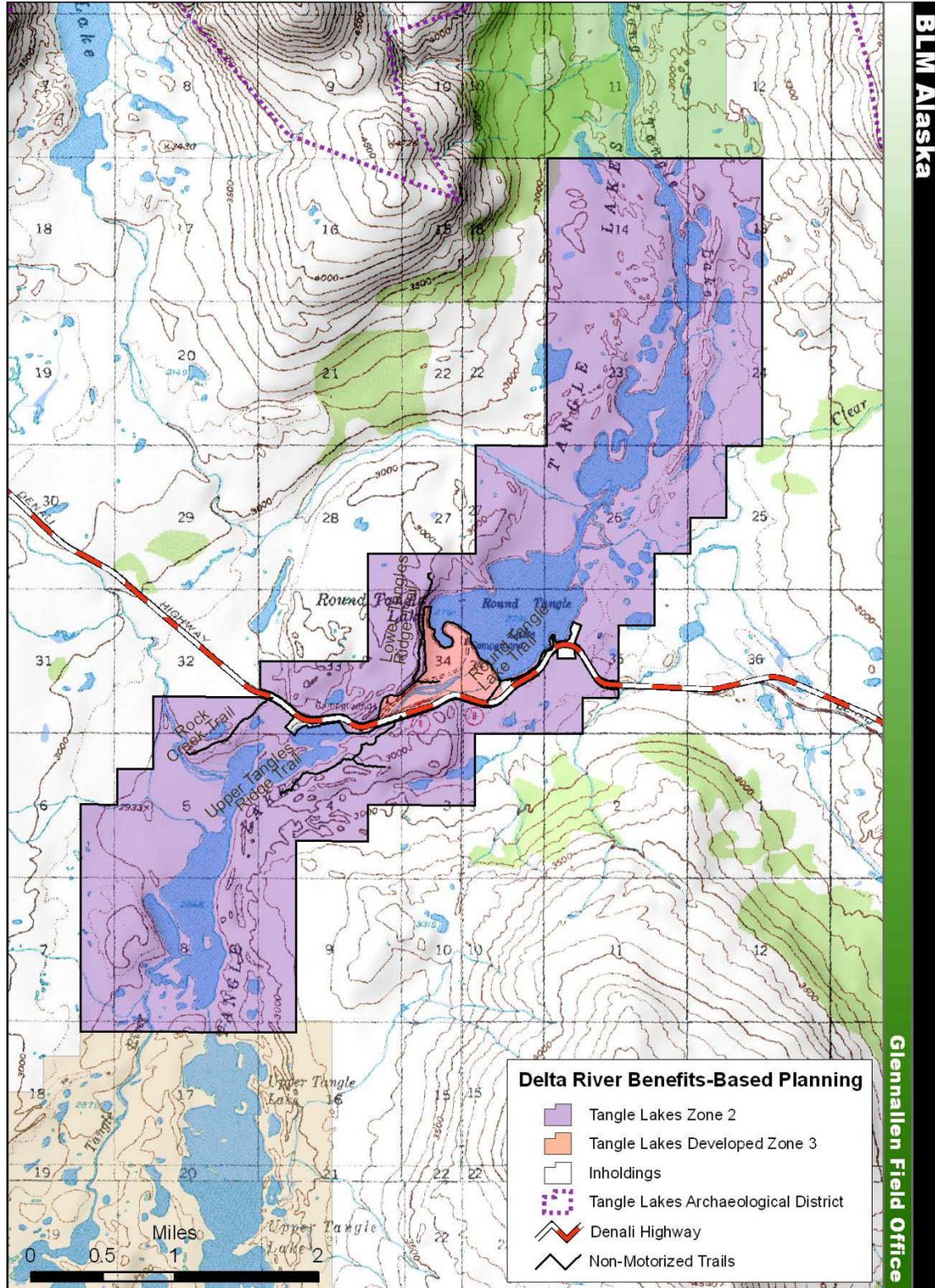
<b>Administrative</b>	<p><b>Occupancy and Use:</b></p> <p>Camping will be limited to 14 consecutive days within the river corridor within any 60 day period. Designated campsites must be used when camping within 200 feet of the river or lake shoreline. Dispersed camping (more than 200 feet from the shoreline) will be allowed when using Leave No Trace low impact camping methods.</p> <p><b>Chainsaw Use and Firewood Gathering:</b></p> <p>The use of chainsaws for campsite firewood will be prohibited. Only dead and down wood may be used for campfires. The cutting of green trees and vegetation will not be allowed.</p> <p><b>Recreational Shooting:</b></p> <p>The recreational discharge of weapons (i.e. target shooting or “plinking”) will be prohibited. It is prohibited to discharge a firearm or any other implement capable of taking human life, causing injury, or damaging property at any time within 150 yards of a residence, building, developed or undeveloped recreation sites, or occupied area; or at any time across or on any public road, or across or on any trail or body of water whereby any person or property is exposed to injury or damage as a result of such discharge. The use and discharge of a weapon will be allowed for the purposes of lawful hunting or trapping, defense of life and property, or for a signaling device in emergencies. Enforcement of violations of this prohibition will depend upon the discretion used by authorized law enforcement personnel.</p> <p><b>Fireworks:</b></p> <p>The use of fireworks will be prohibited.</p> <p><b>Supply Caching:</b></p> <p>The caching of supplies will only be allowed through written authorization with special stipulations from the BLM.</p> <p><b>Disposal of Human Waste:</b></p> <p>Proper disposal of human wastes per Alaska Department of Environmental Conservation (ADEC) regulation 18 AAC 72.020 will be required<sup>2</sup>. Commercial guides will be required to use portable toilets.</p>
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<sup>2</sup> Human waste shall not be disposed of on state-owned shorelands (such as gravel bars and sand bars), in accordance with AS 46.03.800 - 810. On all lands including state, federal and private, human waste may be disposed of in a cathole at least 100 feet away from the ordinary high water mark of streams, rivers, or lakes in accordance with Alaska Department of Environmental Conservation (ADEC) regulation 18 AAC 72.020.

### 2.4.1.2 Alternative 2 -- Tangle Lakes Zone 2

Tangle Lakes Zone 2 includes the first lake and portage area of the Upper Tangle Lakes (accessed from the DWSR Wayside), Round Tangle Lake, and portions of Long Tangle Lake. The zone is located entirely within the TLAD and contains approximately 6,603 acres of BLM lands.

Map 4: Tangle Lakes Zone 2



**Alternative 2 – Tangle Lakes Zone 2**

<b>EARMP AMENDMENT LAND USE PLANNING DECISIONS</b>		
<b>PRIMARY MARKET STRATEGY</b>	<b>PRIMARY MARKET</b>	
Destination	Motorized and nonmotorized boaters and hikers from Alaska National and international visitors traveling the Denali Highway	
<b>NICHE DECISION</b>		
The zone provides opportunities for visitors to engage in easily accessible, water-based recreational experiences on the lake system, and developed trail hiking opportunities in the surrounding uplands, while located relatively close to campground and wayside facilities.		
<b>MANAGEMENT OBJECTIVE DECISION</b>		
The primary focus within the zone will be to manage and provide opportunities for motorized and nonmotorized lake boating and developed trail hiking activities. Recreational emphasis will be on providing a semiprimitive motorized experience offering social group and family affiliation opportunities in an easily accessible, naturally appearing landscape.		
<b>PRIMARY TARGETED OUTCOMES</b>		
<b>Activities</b>	<b>Experiences</b>	<b>Benefits</b>
<ul style="list-style-type: none"> <li>• hiking</li> <li>• motorized lake boating</li> <li>• nonmotorized lake boating</li> </ul>	<ul style="list-style-type: none"> <li>• learning about nature</li> <li>• physical exercise</li> </ul>	<ul style="list-style-type: none"> <li>• improved health/fitness</li> <li>• closer relationship with the natural world</li> </ul>
<b>OUTCOMES TO BE AVOIDED</b>		
<b>Activities</b>	<b>Experiences</b>	<b>Negative Benefits</b>
<ul style="list-style-type: none"> <li>• Unauthorized OHV use</li> </ul>	<ul style="list-style-type: none"> <li>• loss of cultural history caused by resource damage</li> <li>• negative impacts to scenery and natural landscapes</li> </ul>	<ul style="list-style-type: none"> <li>• increased levels of use from easier access</li> <li>• loss of naturalness and increased disturbance to the area resources</li> </ul>
<b>SETTING CHARACTER DECISION – SEMIPRIMITIVE MOTORIZED</b>		
<b>Physical</b>	<b>Social</b>	<b>Administrative</b>
<p><b>Remoteness:</b> The zone will be managed for a semiprimitive motorized experience with a low to moderate concentration of users.</p> <p><b>Naturalness:</b> The zone is natural in appearance, but within site of the highway and developed facilities.</p> <p><b>Facilities:</b> 25 primitive campsites will be designated for overnight use. There will be one unimproved portage trail located between the first and second lakes of the Upper Tangles. Four nonmotorized hiking trails will be designated and developed within the zone.</p>	<p><b>Contacts:</b> Manage for 6-10 encounters per day on the weekend and 4-6 encounters per day during the week.</p> <p><b>Group Size:</b> Manage for an average group size of 4-6 people.</p> <p><b>Evidence of Use:</b> Minor evidence of use, including slight vegetation trampling at campsites and on hiking trails will be expected.</p>	<p><b>Mechanized Use:</b> Decisions regarding mechanized use are described below under <i>Travel Management</i>.</p> <p><b>Management Controls:</b> Agency personnel will conduct field patrols approximately three times per season.</p> <p><b>Visitor Services:</b> River patrol crews will make contact with lake and river users. Brochures will be available and interpretive information will be provided at the boat launches.</p>

## DELTA SRMA IMPLEMENTATION DECISIONS

### Management

#### **Adaptive Management Actions:**

Actions described in Chapter 2.4.2 for the management of litter, human waste, fire rings, campsite impacts, and private/commercial user capacity will be adopted. Impact levels will be monitored; if standards are exceeded, management actions will be implemented as described.

#### **Special Recreation Permits (SRP):**

Commercial group sizes will be limited to 10 people per campsite. Commercial guides will be required to use designated campsites and portable toilets. Competitive events may be authorized based on compatibility with specified ORVs for the zone.

#### **Travel Management:**

Tangle Lakes Zone 2 is located entirely within the TLAD. Special Rules for the TLAD limit OHV travel to designated OHV trails from May 16 - October 15, or until such time that adequate snow cover or ground frost is present to protect archeological resources. There are no existing designated OHV trails within the zone. The Round Tangle Lake Trail and a trail at Mile 22 Denali Highway North are unauthorized OHV trails and will be closed to OHV use and rehabilitated. Signs that identify OHV use limitations will be used to reinforce TLAD trail restrictions. The BLM will monitor visitor use to ensure the protection of resources and compliance with TLAD trail restrictions. Education and enforcement will be used to help limit the proliferation of unauthorized trails.

A designated hiking trail system will be developed within the zone. Trails will be designated as nonmotorized, and interpretive panels may be installed to educate users about the archaeological significance and subsistence lifestyles of the area. Designated nonmotorized hiking trails will include the Lower Tangles Ridge Trail, Rock Creek Trail, Upper Tangles Ridge Trail, and the Round Tangle Lake Trail. Public use of pack animals, mechanized travel (e.g. mountain bikes) and dog mushing will be allowed throughout the zone, but not on developed hiking trails. The BLM will recommend the use of certified weed-free forage and bedding for pack animals and dog mushing.

The portage trail located between the first and second lakes of the Upper Tangles will remain unimproved and trail maintenance will only be used to prevent resource damage and trail proliferation, using native materials (e.g. rocks, spruce) and primitive trail construction methods. If trail proliferation does occur, rock cairns and signage may be used to mark the portage route.

There will be no restrictions on motorized boating or airplane landings. New airstrips will not be authorized within the zone. The BLM will monitor water quality (including petroleum hydrocarbons) within the zone. If measured petroleum hydrocarbon levels exceed State water quality standards, the BLM will consider restrictions to meet the standards.

#### **Facilities:**

There will be no developed facilities within the zone. Outhouses will not be constructed along the portage, and public use cabins will not be considered for development.

#### **Property Acquisition:**

The BLM will consider the acquisition of private parcels for sale within the zone for inclusion into the DWSR corridor. In the event that future land acquisition proposals are being considered in the DWSR corridor, a public meeting will be held in the affected area to solicit public comments on the proposal.

#### **Education and Interpretation:**

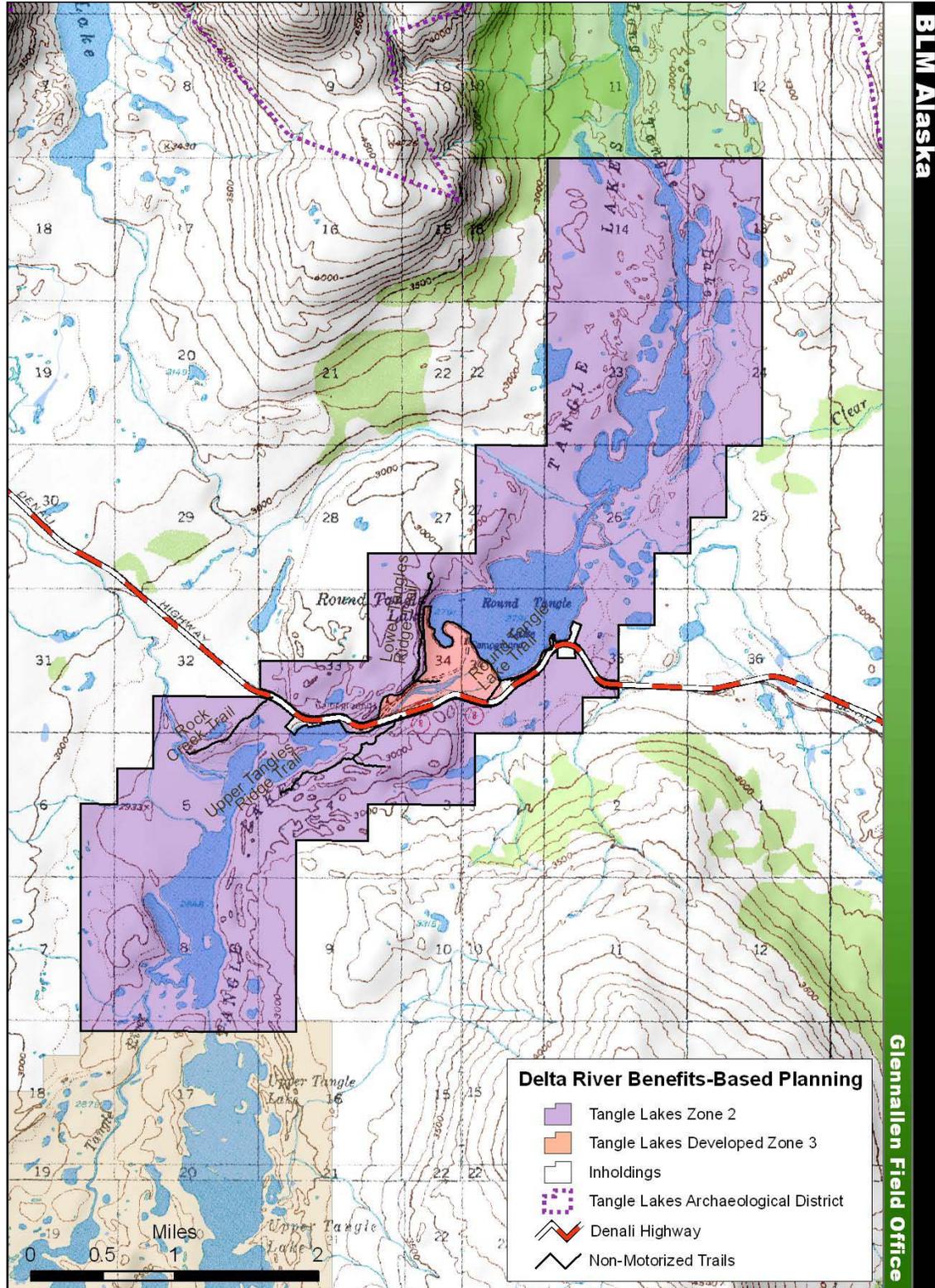
Educational and interpretive materials will be targeted to help develop an understanding of subsistence lifestyles, cultural awareness, natural resource protection, recreational opportunities, and the need for use restrictions. Interpretive panels will be developed for nonmotorized trails to promote a better cultural and natural resource awareness of the area. River crews will make contact with river users to discuss Leave No Trace river ethics.

<p><b>Marketing</b></p>	<p>Recreational opportunities within the zone will be widely marketed and will include information on the BLM website, brochures, and interpretive displays. Marketing of this zone helps to support local area businesses and private enterprises.</p> <p>User groups, communities, volunteers, and other interested parties may help to monitor and maintain river resources through partnerships and special events.</p>
<p><b>Monitoring</b></p>	<p>The BLM will assure that BBM outcomes and objectives are being met and setting prescriptions are being maintained through the administration of BBM visitor satisfaction surveys.</p> <p>Using an adaptive management approach, the BLM will monitor and evaluate whether identified standards are being maintained for litter, human waste, fire rings, private and commercial user capacities and campsite impacts. Monitoring will be conducted using river patrols, river surveys, and visitor registration. Management actions (described in Chapter 2.4.2) will be implemented in response to monitored conditions.</p>
<p><b>Administrative</b></p>	<p>Special Rules for the river corridor will be developed in accordance with 43 CFR 8351.2-1 to codify the following administrative restrictions:</p> <p><b>Travel Management:</b></p> <p>The use of snowmachines and OHVs will only be allowed during periods of adequate snow cover (at least 6" of ground frost or 12" of snow cover). The use of pack animals, mechanized travel (e.g. mountain bikes) and dog mushing will not be allowed on the Lower Tangles Ridge Trail, Rock Creek Trail, Upper Tangles Ridge Trail, and the Round Tangle Lake Trail.</p> <p><b>Group Size:</b></p> <p>Group sizes will be limited to a maximum of 10 people per campsite. Groups in excess of 10 people per campsite must obtain written authorization with special stipulations from the BLM.</p> <p><b>Occupancy and Use:</b></p> <p>Camping will be limited to 14 consecutive days within the river corridor within any 60 day period. Designated campsites must be used when camping within 200 feet of the river or lake shoreline. Dispersed camping (more than 200 feet from the shoreline) will be allowed when using Leave No Trace low impact camping methods.</p> <p><b>Chainsaw Use and Firewood Gathering:</b></p> <p>The use of chainsaws for campsite firewood will be prohibited. Only dead and down wood may be used for campfires. The cutting of green trees and vegetation will not be allowed.</p> <p><b>Recreational Shooting:</b></p> <p>The recreational discharge of weapons (i.e. target shooting or "plinking") will be prohibited. It is prohibited to discharge a firearm or any other implement capable of taking human life, causing injury, or damaging property at any time within 150 yards of a residence, building, developed or undeveloped recreation sites, or occupied area; or at any time across or on any public road, or across or on any trail or body of water whereby any person or property is exposed to injury or damage as a result of such discharge. The use and discharge of a weapon will be allowed for the purposes of lawful hunting or trapping, defense of life and property, or for a signaling device in emergencies. Enforcement of violations of this prohibition will depend upon the discretion used by authorized law enforcement personnel.</p> <p><b>Fireworks:</b></p> <p>The use of fireworks will be prohibited.</p> <p><b>Supply Caching:</b></p> <p>The caching of supplies will only be allowed through written authorization with special stipulations from the BLM.</p> <p><b>Disposal of Human Waste:</b></p> <p>Proper disposal of human wastes per Alaska Department of Environmental Conservation (ADEC) regulation 18 AAC 72.020 will be required. Commercial guides will be required to use portable toilets.</p>

### 2.4.1.3 Alternative 2 -- Tangle Lakes Developed Zone 3

Tangle Lakes Developed Zone 3 includes the Tangle Lakes Campground, DWSR Wayside, and portions of the Tangle River that flow through the developed facility areas. The zone is located entirely within the TLAD and contains approximately 248 acres of BLM lands.

Map 5: Tangle Lakes Developed Zone 3



**Alternative 2 -- Tangle Lakes Developed Zone 3**

<b>EARMP AMENDMENT LAND USE PLANNING DECISIONS</b>		
<b>PRIMARY MARKET STRATEGY</b>	<b>PRIMARY MARKET</b>	
Destination	National and international visitors traveling the Denali Highway	
<b>NICHE DECISION</b>		
The zone provides opportunities for visitors to engage in day use activities and overnight camping in an easily accessible, developed recreation setting with a moderate level of BLM management presence. Close proximity to the Denali Highway and commercial services provides limited amenities and assistance if needed.		
<b>MANAGEMENT OBJECTIVE DECISION</b>		
The primary focus within the zone will be to manage and provide opportunities for developed overnight camping and fishing activities in BLM facilities that are easily accessible from the Denali Highway. Recreational emphasis will be on providing a roaded natural experience offering social group and family affiliation opportunities within a partially modified, naturally appearing landscape.		
<b>PRIMARY TARGETED OUTCOMES</b>		
<b>Activities</b>	<b>Experiences</b>	<b>Benefits</b>
<ul style="list-style-type: none"> <li>developed camping</li> <li>fishing</li> </ul>	<ul style="list-style-type: none"> <li>spending time with family and friends</li> <li>experiencing cultural history</li> </ul>	<ul style="list-style-type: none"> <li>social interaction with other visitors</li> <li>stronger ties with family and friends</li> </ul>
<b>OUTCOMES TO BE AVOIDED</b>		
<b>Activities</b>	<b>Experiences</b>	<b>Negative Benefits</b>
<ul style="list-style-type: none"> <li>Unauthorized OHV use in the Tangle River and developed facilities</li> </ul>	<ul style="list-style-type: none"> <li>reduced natural quiet and natural sounds</li> <li>loss of cultural history caused by resource damage</li> <li>negative impacts to scenery and natural landscapes</li> </ul>	<ul style="list-style-type: none"> <li>decreased relationship with the natural world</li> <li>loss of naturalness and increased disturbance to the area resources</li> </ul>
<b>SETTING CHARACTER DECISION – ROADED NATURAL</b>		
<b>Physical</b>	<b>Social</b>	<b>Administrative</b>
<p><b>Remoteness:</b> The zone will be managed for a roaded natural experience, where other users are routinely expected, but privacy is still possible within designated campsites.</p> <p><b>Naturalness:</b> The zone is partially modified by gravel roads, recreation facilities, and evidence of adjacent private property, but this does not overpower the natural features of the surrounding landscape.</p> <p><b>Facilities:</b> Facilities within the zone will include the campground, wayside, two boat launches, and interpretive sites.</p>	<p><b>Contacts:</b> Manage for a high level of encounters with other visitors within the developed facilities. People are generally present at campsites, but distant enough to prevent interactions.</p> <p><b>Group Size:</b> Manage for group sizes not to exceed 10 people per designated campsite.</p> <p><b>Evidence of Use:</b> Most areas are gravel surfaced for erosion control. Worn soils and trampled vegetation may be present in isolated locations along the banks of the Tangle River, and in some areas throughout the developed facilities.</p>	<p><b>Mechanized Use:</b> Decisions regarding mechanized use are described below under <i>Travel Management</i>.</p> <p><b>Management Controls:</b> Volunteer campground hosts will be present at the Tangle Lakes Campground and DWSR Wayside. Agency and law enforcement personnel will be periodically present within the campground and wayside.</p> <p><b>Visitor Services:</b> Brochures will be available and interpretive information will be posted throughout the developed facilities.</p>

## DELTA SRMA IMPLEMENTATION DECISIONS

### Management

#### **Litter:**

Litter receptacles will be provided in the developed facility areas. Campground hosts will provide education regarding proper litter disposal.

#### **Human and Pet Waste:**

The BLM will require the proper disposal of human and pet wastes per ADEC and CFR 8365 regulations that address litter and solid waste disposal, water pumping restrictions, and other sanitation issues.

#### **Fire Rings:**

Metal fire rings will be provided in designated campsites and picnic areas in the developed facilities.

#### **Campsite Impacts:**

A planned redesign of the Tangle Lakes Campground will develop and designate campsites to limit the unauthorized creation of campsites that is causing vegetation damage. A separate EA will analyze site-specific considerations related to the campground redesign. Campsites that are not designated will be closed and rehabilitated. Walk-in campsites from the campground to locations along Round Tangle Lake and the Tangle River may be considered for development.

#### **Private and Commercial User Capacity:**

Campground use will be self-limiting due to restrictions on the number of people and vehicles per site. A campsite map will be developed that will display 45 designated campsites that are available on a first-come, first-serve basis to the public.

#### **Special Recreation Permits (SRP):**

Commercial group sizes will be limited to 10 people per campsite. Competitive events may be authorized based on compatibility with specified ORVs for the zone.

#### **Travel Management:**

Tangle Lakes Developed Zone 3 is located entirely within the TLAD. Special Rules for the TLAD limit OHV travel to designated OHV trails from May 16 - October 15, or until such time that adequate snow cover or ground frost is present to protect archeological resources. There are no existing designated OHV trails within the zone. Unauthorized OHV routes will be closed and rehabilitated. Signs that identify OHV use limitations will be used to reinforce TLAD trail restrictions. The BLM will monitor trails to ensure the protection of resources and compliance with TLAD trail restrictions. Education and enforcement will be used to help limit the proliferation of unauthorized trails. Public use of pack animals, mechanized travel (e.g. mountain bikes) and dog mushing will be allowed throughout the zone. The BLM will recommend the use of certified weed-free forage and bedding for pack animals and dog mushing.

Motorized boating has never been observed, nor is it practical in the Tangle River; being naturally restricted by very shallow river conditions and river width. Airplane landings are not practical in the developed facilities due to the lack of suitable airstrips. There will be no formal restrictions on motorized boating or airplane landings, although they will be monitored and highly discouraged for safety reasons. Restrictions would be considered in the future if needed to prohibit these uses in the Tangle River and developed facilities within the management zone. New airstrips will not be authorized within the zone.

#### **Facilities:**

Future facility developments may include the construction of a wayside at the campground entrance that would provide day use services with parking facilities, outhouses, picnicking facilities, interpretive panels, and walking trails along the Tangle River. After the redesign of the campground, user fees will be implemented for overnight use. Public use cabins will not be

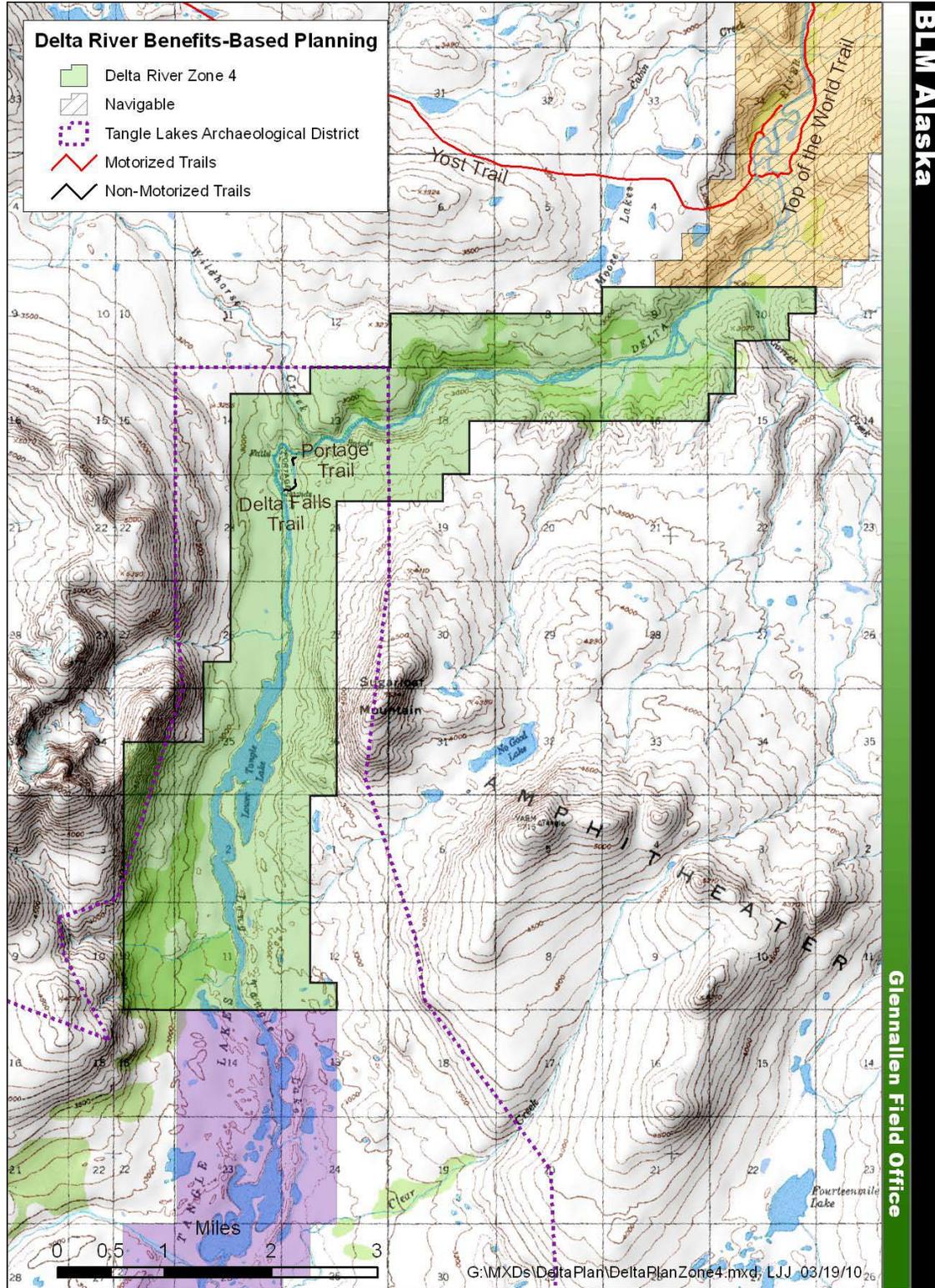
<p><b>Management</b></p>	<p>considered for development. Boat launch facilities will include boater registration kiosks, river survey boxes, and interpretive panels. The installation of an educational river portal facility or portable toilet cleanout facility would be considered if a permit system is implemented and if portable toilets are required by river and lake users in the future.</p> <p><b>Property Acquisition:</b></p> <p>The BLM will consider acquisition of private parcels for sale within the zone for inclusion into the DWSR corridor. In the event that future land acquisition proposals are being considered in the DWSR corridor, a public meeting will be held in the affected area to solicit public comments on the proposal.</p> <p><b>Education and Interpretation:</b></p> <p>Educational and interpretive panels will be provided to promote a better cultural and natural resource awareness of the area. Materials will be targeted to help develop an understanding of subsistence lifestyles, cultural awareness, natural resource protection, recreational opportunities, and the need for use restrictions. Leave No Trace education will be emphasized with presentations at the boat launches and by providing interpretive materials throughout the developed facilities.</p>
<p><b>Marketing</b></p>	<p>Recreational opportunities within the zone will be widely marketed and will include information on the BLM website, brochures, and interpretive displays. Marketing of this zone helps to support local area businesses and private enterprises.</p> <p>User groups, communities, volunteers, and other interested parties may help to maintain river resources through partnerships and special events.</p>
<p><b>Monitoring</b></p>	<p>The BLM will assure that BBM outcomes and objectives are being met and setting prescriptions are being maintained through the administration of BBM visitor satisfaction surveys.</p> <p>Volunteer campground hosts will provide information and education and provide a point of contact for user input and suggestions. Registration and comment cards will be provided for visitors to express their concerns or appreciation.</p> <p>Law enforcement staff will periodically patrol the facilities to provide enforcement of rules and regulations, and will assure that measures are in place to enforce administrative restrictions.</p> <p>Maintenance and management oversight will be provided on a routine basis. Periodic and annual safety inspections will be conducted for all developed facilities.</p>
<p><b>Administrative</b></p>	<p>Supplemental Rules for the developed facilities will be developed in accordance with 43 CFR 8365 to codify the following administrative restrictions:</p> <p><b>Travel Management:</b></p> <p>The use of snowmachines and OHVs to travel cross country will only be allowed during periods of adequate snow cover (at least 6" of ground frost or 12" of snow cover). The use of OHVs within the Tangle River will be prohibited. OHV use will only be allowed for ingress and egress to the developed facilities on gravel travel routes designated for motorized travel. The use of OHVs within the developed facilities, other than for ingress or egress, will be prohibited.</p> <p><b>Group Size:</b></p> <p>Group sizes will be limited to a maximum of 10 people and 2 vehicles per designated campsite (one of which may be a recreational vehicle). Groups in excess of 10 people may camp in the designated group camping areas.</p> <p><b>Occupancy and Use:</b></p> <p>Camping will be limited to 14 consecutive days within the river corridor within any 60 day period. Designated campsites must be used within the campground. Overnight camping will be prohibited at the DWSR wayside day use facility. Unoccupied, overnight parking of vehicles will be allowed at the wayside to preserve overnight access to the Upper Tangle Lakes.</p>

<p><b>Administrative</b></p>	<p><b>Chainsaw Use and Firewood Gathering:</b></p> <p>Firewood collecting will be prohibited within the developed facilities or along the Tangle River. Firewood must be brought from outside the river corridor. The use of chainsaws for cutting campsite firewood will be allowed in the developed facilities.</p> <p><b>Recreational Shooting:</b></p> <p>The recreational discharge of weapons (i.e. target shooting or “plinking”) will be prohibited. It is prohibited to discharge a firearm or any other implement capable of taking human life, causing injury, or damaging property at any time within 150 yards of a residence, building, developed or undeveloped recreation sites, or occupied area; or at any time across or on any public road, or across or on any trail or body of water whereby any person or property is exposed to injury or damage as a result of such discharge. The use and discharge of a weapon will be allowed for the purposes of lawful hunting or trapping, defense of life and property, or for a signaling device in emergencies. Enforcement of violations of this prohibition will depend upon the discretion used by authorized law enforcement personnel.</p> <p><b>Fireworks:</b></p> <p>The use of fireworks will be prohibited.</p> <p><b>Disposal of Human and Pet Waste:</b></p> <p>Proper disposal of human wastes per ADEC regulations will be required. Pet waste, including pack animal wastes, must be properly disposed of and any campsites cleaned of animal waste prior to vacating the campsite.</p>
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### 2.4.1.4 Alternative 2 -- Delta River Zone 4

Delta River Zone 4 includes the upper Delta River from Long Tangle Lake to the confluence of Garrett Creek, containing approximately 8,309 acres of BLM lands. The southern portion of the zone is located within the TLAD.

Map 6: Delta River Zone 4



**Alternative 2 -- Delta River Zone 4**

<b>EARMP AMENDMENT LAND USE PLANNING DECISIONS</b>		
<b>PRIMARY MARKET STRATEGY</b>	<b>PRIMARY MARKET</b>	
Destination	Nonmotorized boaters and hikers from Alaska	
<b>NICHE DECISION</b>		
The zone provides opportunities for visitors to engage in primitive recreational experiences that are characterized by solitude, self reliance, and tranquility in an undisturbed natural environment.		
<b>MANAGEMENT OBJECTIVE DECISION</b>		
The primary focus within the zone will be to manage and provide opportunities for nonmotorized river boating and fishing activities. The zone will be managed to protect and enhance the qualities and characteristics that are found within a primitive environment. Recreational emphasis will be on providing for a primitive nonmotorized experience in an undisturbed, naturally appearing landscape.		
<b>PRIMARY TARGETED OUTCOMES</b>		
<b>Activities</b>	<b>Experiences</b>	<b>Benefits</b>
<ul style="list-style-type: none"> <li>• nonmotorized river boating</li> <li>• fishing</li> </ul>	<ul style="list-style-type: none"> <li>• enjoying solitude</li> <li>• escaping everyday responsibilities and social pressures</li> <li>• having time to reflect</li> </ul>	<ul style="list-style-type: none"> <li>• relief of mental tension and stress</li> <li>• closer relationship with the natural world</li> </ul>
<b>OUTCOMES TO BE AVOIDED</b>		
<b>Activities</b>	<b>Experiences</b>	<b>Negative Benefits</b>
<ul style="list-style-type: none"> <li>• Unauthorized OHV use</li> <li>• Motorized boating</li> <li>• Airplane landings</li> </ul>	<ul style="list-style-type: none"> <li>• loss of solitude</li> <li>• reduced natural quiet and natural sounds</li> </ul>	<ul style="list-style-type: none"> <li>• increased mental tension and stress with loss of solitude</li> <li>• loss of naturalness and increased disturbance to area resources</li> <li>• decreased relationship with the natural world</li> </ul>
<b>SETTING CHARACTER DECISION – PRIMITIVE NONMOTORIZED</b>		
<b>Physical</b>	<b>Social</b>	<b>Administrative</b>
<p><b>Remoteness:</b> The zone will be managed for a primitive nonmotorized experience with a very low concentration of users.</p> <p><b>Naturalness:</b> The zone is extremely natural in appearance and sights or sounds of the road system are nonexistent.</p> <p><b>Facilities:</b> 20 primitive campsites will be designated for overnight use. At the river portage, two trails and one outhouse will be maintained. Warning signs will be limited to those necessary to ensure user safety. The boater registration kiosk and survey box will be removed, and the outhouse will be removed if portable toilets are required in the future.</p>	<p><b>Contacts:</b> Manage for 2-3 encounters per day on the weekend and 0-2 encounters per day during the week.</p> <p><b>Group Size:</b> Manage for an average group size of 2-4 people.</p> <p><b>Evidence of Use:</b> Minor evidence of use, including slight vegetation trampling at campsites and on portage routes will be expected.</p>	<p><b>Mechanized Use:</b> Decisions regarding mechanized use are described below under <i>Travel Management</i>.</p> <p><b>Management Controls:</b> Agency personnel will conduct field patrols approximately three times per season.</p> <p><b>Visitor Services:</b> River patrol crews will make contact with river users.</p>

**DELTA SRMA IMPLEMENTATION DECISIONS**

<p><b>Management</b></p>	<p><b>Adaptive Management Actions:</b></p> <p>Actions described in Chapter 2.4.2 for the management of litter, human waste, fire rings, campsite impacts, and private/commercial user capacity will be adopted. Impact levels will be monitored; if standards are exceeded, management actions will be implemented as described.</p> <p><b>Special Recreation Permits (SRP):</b></p> <p>Commercial group sizes will be limited to 10 people per campsite. Commercial guides will be required to use designated campsites and portable toilets. Competitive events may be authorized based on compatibility with specified ORVs for the zone.</p> <p><b>Travel Management:</b></p> <p>Portions of Delta River Zone 4 are located within the TLAD. Special Rules for the TLAD limit OHV travel to designated OHV trails from May 16 - October 15, or until such time that adequate snow cover or ground frost is present to protect archeological resources. There are no existing designated OHV trails within the zone. Unauthorized OHV routes will be closed and rehabilitated. Signs that identify OHV use limitations will be used to reinforce TLAD trail restrictions. The BLM will monitor visitor use to ensure the protection of resources and compliance with TLAD trail restrictions. Education and enforcement will be used to help limit the proliferation of unauthorized trails.</p> <p>Portage trails will be maintained to prevent resource damage and trail proliferation, using native materials (e.g. rocks, spruce) and primitive trail construction methods. Trail reroutes or closure of spur trails within the portage areas may be used to prevent the proliferation of redundant trails. If trail proliferation does occur, rock cairns and signage may be used to mark the portage routes. Additional nonmotorized trails may be designated and developed in the future in the Garrett Creek drainage. Public use of pack animals, mechanized travel (e.g. mountain bikes) and dog mushing will be allowed throughout the zone. The BLM will recommend the use of certified weed-free forage and bedding for pack animals and dog mushing.</p> <p>Motorized boating and airplane landings will be discouraged, but not prohibited, unless monitoring shows that adverse impacts are occurring to recreational, fisheries, riparian and/or water quality resource values within the management zone. Upon a finding that any of these resource values are being adversely affected as a result of motorized boating or airplane landings, an ANILCA closure process would be considered in compliance with the procedures outlined in 43 CFR 36.11(h). New airstrips will not be authorized within the management zone.</p> <p><b>Facilities:</b></p> <p>Facilities will include one outhouse and two portage warning signs. Portage warning signs will remain discrete, but noticeable. The existing boater registration kiosk and survey box will be removed, and the outhouse will be removed if portable toilets are required in the future and a portable toilet cleanout facility is developed. Public use cabins will not be considered for development. The absence of facilities is a characteristic that makes this zone unique, providing solitude in a natural, primitive setting.</p> <p><b>Education and Interpretation:</b></p> <p>Information will be developed to inform and educate visitors about current river resource conditions, rules and regulations, recreational opportunities, and Leave No Trace low impact camping techniques. River crews will make contact with users to educate low impact camping and river ethics. The primary goal within this zone is to provide interpretation of area resources through self discovery.</p>
<p><b>Marketing</b></p>	<p>Recreational opportunities within the zone will be marketed by providing information on the BLM website and in BLM brochures.</p> <p>User groups, communities, volunteers, and other interested parties may help to monitor and maintain river resources through partnerships and special events.</p>

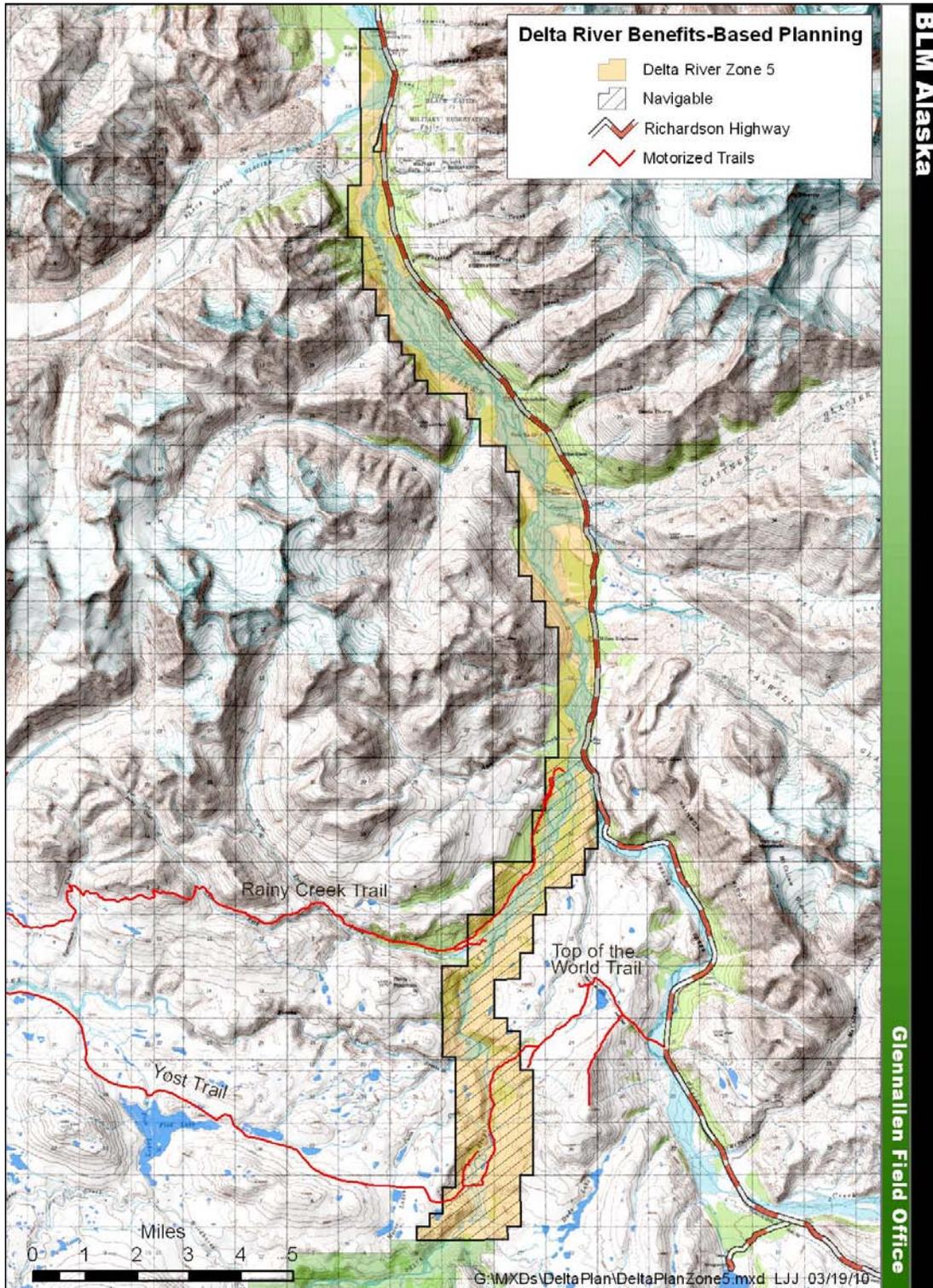
<p><b>Monitoring</b></p>	<p>The BLM will assure that BBM outcomes and objectives are being met and setting prescriptions are being maintained through the administration of BBM visitor satisfaction surveys.</p> <p>Monitoring and periodic assessments for impacts to recreational, fisheries, riparian and/or water quality resource values will be conducted within the management zone using the following guidelines to establish baseline information with which to quantify possible adverse impacts during the life of the plan:</p> <p><b>Recreational Resources:</b></p> <p>Recreational monitoring will be conducted to determine the level of motorized boating and airplane landings. Monitoring will be conducted through the administration of river user surveys, river overflights, and river patrols to determine if motorized boating use or airplane landings are occurring, and to quantify the level of use.</p> <p><b>Fisheries Resources:</b></p> <p>Stock assessment monitoring of Arctic Grayling will be considered based on risk analysis and future adaptive management practices to ensure that motorized boating and/or airplane landings do not adversely affect the high Arctic grayling population densities. Stock assessment will include distribution and population abundance of Arctic grayling in the watershed. Fish inventories and distribution of other fishery resources will be performed for future land use activities in the watershed on an as-needed basis. The BLM will also develop and participate in research partnership efforts to gain a better understanding of the Delta River ecology and hydrology.</p> <p><b>Riparian Resources:</b></p> <p>Habitat assessments will be completed to evaluate the physical condition of riparian and wetland areas. Using established BLM protocols, proper functioning condition (PFC) assessments will be performed to determine if riparian and/or wetland vegetation is being adversely affected by motorized boating and airplane landings. The desired condition for riparian and wetland vegetation is to maintain diverse age-class distribution and composition, presence of species that indicate the maintenance of riparian/wetland soil moisture characteristics, deep-rooted riparian species, vigorous riparian vegetation, adequate vegetative cover to protect streambanks and dissipate energy during high flows, and communities with an adequate source of coarse and/or large woody material.</p> <p><b>Water Quality:</b></p> <p>Water quality baseline data will be periodically collected to assess possible adverse impacts, including monitoring for petroleum hydrocarbons resulting from motorized boating and/or airplane landings.</p> <p>Using an adaptive management approach, the BLM will monitor and evaluate whether identified standards are being maintained for litter, human waste, fire rings, private and commercial user capacities, and campsite impacts. Monitoring will be conducted using river patrols, river surveys, and visitor registration. Management actions (described in Chapter 2.4.2) will be implemented in response to monitored conditions.</p>
<p><b>Administrative</b></p>	<p>Special Rules for the river corridor will be developed in accordance with 43 CFR 8351.2-1 to codify the following administrative restrictions:</p> <p><b>Travel Management:</b></p> <p>The use of snowmachines and OHVs will only be allowed during periods of adequate snow cover (at least 6" of ground frost or 12" of snow cover).</p> <p><b>Group Size:</b></p> <p>Group sizes will be limited to a maximum of 10 people per campsite. Groups in excess of 10 people per campsite must obtain written authorization with special stipulations from the BLM.</p>

<p><b>Administrative</b></p>	<p><b>Occupancy and Use:</b></p> <p>Camping will be limited to 14 consecutive days within the river corridor within any 60 day period. Designated campsites must be used when camping within 200 feet of the river or lake shoreline. Dispersed camping (more than 200 feet from the shoreline) will be allowed when using Leave No Trace low impact camping methods.</p> <p><b>Chainsaw Use and Firewood Gathering:</b></p> <p>The use of chainsaws for campsite firewood will be prohibited. Only dead and down wood may be used for campfires. The cutting of green trees and vegetation will not be allowed.</p> <p><b>Recreational Shooting:</b></p> <p>The recreational discharge of weapons<sup>1</sup> (i.e. target shooting or “plinking”) will be prohibited. It is prohibited to discharge a firearm or any other implement capable of taking human life, causing injury, or damaging property at any time within 150 yards of a residence, building, developed or undeveloped recreation sites, or occupied area; or at any time across or on any public road, or across or on any trail or body of water whereby any person or property is exposed to injury or damage as a result of such discharge. The use and discharge of a weapon will be allowed for the purposes of lawful hunting or trapping, defense of life and property, or for a signaling device in emergencies. Enforcement of violations of this prohibition will depend upon the discretion used by authorized law enforcement personnel.</p> <p><b>Fireworks:</b></p> <p>The use of fireworks will be prohibited.</p> <p><b>Supply Caching:</b></p> <p>The caching of supplies will only be allowed through written authorization with special stipulations from the BLM.</p> <p><b>Disposal of Human Waste:</b></p> <p>Proper disposal of human wastes per Alaska Department of Environmental Conservation (ADEC) regulation 18 AAC 72.020 will be required. Commercial guides will be required to use portable toilets.</p>
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### 2.4.1.5 Alternative 2 -- Delta River Zone 5

Delta River Zone 5 includes the lower Delta River, downstream of the Garrett Creek confluence to the end of the river corridor at Black Rapids. The zone contains approximately 16,065 acres of BLM lands. The navigable portion of the lower river corridor, located between the confluences of Garrett Creek and Phelan Creek, is owned by the State of Alaska below the ordinary high water marks.

Map 7: Delta River Zone 5



**Alternative 2 -- Delta River Zone 5**

<b>EARMP AMENDMENT LAND USE PLANNING DECISIONS</b>		
<b>PRIMARY MARKET STRATEGY</b>	<b>PRIMARY MARKET</b>	
Destination	Motorized and nonmotorized boaters and OHV users from Alaska	
<b>NICHE DECISION</b>		
The zone provides opportunities for visitors to engage in motorized and nonmotorized recreational experiences within a naturally appearing landscape on the lower Delta River and surrounding uplands within the zone.		
<b>MANAGEMENT OBJECTIVE DECISION</b>		
The primary focus within the zone will be to manage and provide opportunities for visitors to engage in motorized and nonmotorized river boating and motorized OHV use on designated OHV trails. Recreational emphasis will be on providing a semiprimitive motorized experience in a naturally appearing landscape.		
<b>PRIMARY TARGETED OUTCOMES</b>		
<b>Activities</b>	<b>Experiences</b>	<b>Benefits</b>
<ul style="list-style-type: none"> <li>motorized river boating</li> <li>nonmotorized river boating</li> <li>OHV use</li> </ul>	<ul style="list-style-type: none"> <li>spending time with family and friends</li> <li>teaching and developing outdoor skills</li> <li>enjoying scenery and natural landscapes</li> </ul>	<ul style="list-style-type: none"> <li>greater self-reliance and confidence</li> <li>closer relationship with the natural world</li> <li>gaining and developing outdoor skills</li> </ul>
<b>OUTCOMES TO BE AVOIDED</b>		
<b>Activities</b>	<b>Experiences</b>	<b>Negative Benefits</b>
<ul style="list-style-type: none"> <li>OHV use off designated trails</li> <li>OHVs larger than 2000 lbs. GVW</li> </ul>	<ul style="list-style-type: none"> <li>negative impacts to scenery and natural landscapes</li> <li>loss of cultural history caused by resource damage</li> </ul>	<ul style="list-style-type: none"> <li>less self-reliance and confidence</li> <li>decreased relationship with the natural world</li> <li>loss of naturalness and increased disturbance to the area resources</li> </ul>
<b>SETTING CHARACTER DECISION – SEMIPRIMITIVE MOTORIZED</b>		
<b>Physical</b>	<b>Social</b>	<b>Administrative</b>
<p><b>Remoteness:</b> The zone will be managed for a semiprimitive motorized experience, with a low to moderate concentration of users.</p> <p><b>Naturalness:</b> The zone is natural in appearance, but may be within site of the Richardson Highway, OHV trails, or developed facilities that are located along the Richardson Highway.</p> <p><b>Facilities:</b> Six primitive campsites will be designated for overnight use. A river takeout caution sign, boater registration kiosk, and river survey box will be located at the Mile 212.5 takeout on the Richardson Highway.</p>	<p><b>Contacts:</b> Manage for 3-5 encounters per day on the weekend and 1-3 encounters per day during the week.</p> <p><b>Group Size:</b> Manage for an average group size of 4-6 people.</p> <p><b>Evidence of Use:</b> Minor evidence of use, including slight vegetation trampling at campsites, will be expected. OHV trails will be evident from the river in the surrounding viewshed.</p>	<p><b>Mechanized Use:</b> Decisions regarding mechanized use are described below under <i>Travel Management</i>.</p> <p><b>Management Controls:</b> Agency personnel will conduct field patrols approximately three times per season.</p> <p><b>Visitor Services:</b> River patrol crews will make contact with river users and river surveys will be available at the Mile 212.5 Richardson Highway takeout.</p>

**DELTA SRMA IMPLEMENTATION DECISIONS**

<b>Management</b>	<p><b>Adaptive Management Actions:</b></p> <p>Actions described in Chapter 2.4.2 for the management of litter, human waste, fire rings, campsite impacts, and private/commercial user capacity will be adopted. Impact levels will be monitored; if standards are exceeded, management actions will be implemented as described.</p> <p><b>Special Recreation Permits (SRP):</b></p> <p>Commercial group sizes will be limited to 10 people per campsite. Commercial guides will be required to use designated campsites and portable toilets. Competitive events may be authorized based on compatibility with specified ORVs for the zone.</p> <p><b>Travel Management:</b></p> <p>Designated OHV trails include the Top of the World/Yost Trail and the Rainy Creek Trail. Two unauthorized OHV trails at the confluence of Eureka Creek will be closed to OHV use and rehabilitated. Trail maintenance activities, including trail hardening and the creation of trail reroutes, may be used on designated OHV trails to eliminate trail braiding and resource impacts. Signs that identify OHV use limitations will be used to reinforce trail restrictions. The BLM will monitor trails to ensure the protection of resources and compliance with trail restrictions. Education and enforcement will be used to help limit the proliferation of unauthorized trails.</p> <p>Nonmotorized trails may be designated and developed in the future in the Eureka Creek drainage. Public use of pack animals, mechanized travel (e.g. mountain bikes) and dog mushing will be allowed for dispersed use throughout the zone and on the Top of the World/Yost and Rainy Creek Trails. The BLM will recommend the use of certified weed-free forage and bedding for pack animals and dog mushing.</p> <p>There will be no restrictions on motorized boating or airplane landings. New airstrips will not be authorized within the zone. The BLM will monitor water quality (including petroleum hydrocarbons) within the zone. If measured petroleum hydrocarbon levels exceed State water quality standards, the BLM will consider restrictions to meet the standards.</p> <p><b>Facilities:</b></p> <p>Facilities at the Mile 212.5 Richardson Highway takeout will include a boater registration kiosk, river survey box, and takeout warning sign. Access points to the river downstream of Black Rapids will remain unimproved. Public use cabins will not be considered for development.</p> <p><b>Education and Interpretation:</b></p> <p>Information will be developed to inform and educate visitors about current river resource conditions, rules and regulations, recreational opportunities, and Leave No Trace low impact camping techniques. River crews will make contact with users to educate low impact camping and river ethics. The primary goal within this zone is to provide interpretation of area resources through self discovery.</p>
<b>Marketing</b>	<p>Recreational opportunities within the zone will be marketed by providing information on the BLM website and in BLM brochures.</p> <p>User groups, communities, volunteers, and other interested parties may help to monitor and maintain river resources through partnerships and special events.</p>
<b>Monitoring</b>	<p>The BLM will assure that BBM outcomes and objectives are being met and setting prescriptions are being maintained through the administration of BBM visitor satisfaction surveys.</p> <p>Using an adaptive management approach, the BLM will monitor and evaluate whether identified standards are being maintained for litter, human waste, fire rings, private and commercial user capacities, and campsite impacts. Monitoring will be conducted using river patrols, river surveys, and visitor registration. Management actions (described in Chapter 2.4.2) will be implemented in response to monitored conditions.</p>

## DELTA SRMA IMPLEMENTATION DECISIONS

### Administrative

Special Rules for the river corridor will be developed in accordance with 43 CFR 8351.2-1 to codify the following administrative restrictions:

#### **Travel Management:**

OHVs must remain on designated OHV trails, and will not be allowed to operate off designated trails for any purposes (including game retrieval), except during periods of adequate snow cover (at least 6 inches of ground frost or 12 inches of snow cover). All OHVs will be limited to 2000 lbs. Gross Vehicle Weight (GVW). OHV restrictions apply to all users, including rural residents engaged in subsistence uses (defined in ANILCA Section 811). Exceptions to the 2000 lb. GVW limitation may be permitted on a case-by-case basis for access to active mining claims via the Rainy Creek Trail and for rural residents engaged in subsistence uses who obtain prior authorization from the BLM, Glennallen Field Office. Prior authorization may be obtained in person, by mail, and by phone from the BLM Glennallen Field Office.

#### **Group Size:**

Group sizes will be limited to a maximum of 10 people per campsite. Groups in excess of 10 people per campsite must obtain written authorization with special stipulations from the BLM.

#### **Occupancy and Use:**

Camping will be limited to 14 consecutive days within the river corridor within any 60 day period. Designated campsites must be used when camping within 200 feet of the river or lake shoreline. Dispersed camping (more than 200 feet from the shoreline) will be allowed when using Leave No Trace low impact camping methods.

#### **Chainsaw Use and Firewood Gathering:**

Chainsaw use for the cutting of campsite firewood will be allowed, including the cutting of down and standing dead wood at least 200 feet from the river's edge. The cutting of green trees and vegetation will be prohibited. Chainsaws may be used for personal firewood and houselog gathering only through written authorization with special stipulations from the BLM.

#### **Recreational Shooting:**

The recreational discharge of weapons<sup>1</sup> (i.e. target shooting or "plinking") will be prohibited. It is prohibited to discharge a firearm or any other implement capable of taking human life, causing injury, or damaging property at any time within 150 yards of a residence, building, developed or undeveloped recreation sites, or occupied area; or at any time across or on any public road, or across or on any trail or body of water whereby any person or property is exposed to injury or damage as a result of such discharge. The use and discharge of a weapon will be allowed for the purposes of lawful hunting or trapping, defense of life and property, or for a signaling device in emergencies. Enforcement of violations of this prohibition will depend upon the discretion used by authorized law enforcement personnel.

#### **Fireworks:**

The use of fireworks will be prohibited.

#### **Supply Caching:**

The caching of supplies will only be allowed through written authorization with special stipulations from the BLM.

#### **Disposal of Human Waste:**

Proper disposal of human wastes per Alaska Department of Environmental Conservation (ADEC) regulation 18 AAC 72.020 will be required. Commercial guides will be required to use portable toilets.

## 2.4.2 Alternative 2 -- Adaptive Management Actions

An adaptive management approach involves predicting the outcomes of actions based on current knowledge, monitoring to learn about the impacts of management actions, and then using the results to adjust management actions. Adaptive management focuses on learning and adapting, through partnerships of managers, scientists, and other stakeholders to create and maintain sustainable resource systems (Adaptive Management: The US Department of the Interior Technical Guide, Williams, B. K., R. C. Szaro, and C. D. Shapiro, 2007).

Adaptive management is used to prescribe the desired conditions for resources and visitor experiences for a given area by:

- Selecting specific indicators (i.e. qualities that reflect the overall condition) for resource and visitor experiences.
- Setting quantifiable standards against which the indicator is measured.
- Monitoring conditions on-the-ground.
- Management actions are triggered and implemented when standards are not being met.
- Continually improving and adjusting the program based on knowledge gained over time.

In some cases, if a management action fails to address unacceptable impacts; subsequent phases of management actions would be initiated to meet those standards. Between each set of phased management actions, monitoring would occur before moving to the next phase. If conditions improve over time, management actions can be reassessed and adapted to maintain desired conditions.

Adopting standards and management actions corridor-wide, rather than by each recreation management zone, helps to prevent confusion to the river user when specific management actions are implemented, and allows the BLM to standardize educational and outreach efforts targeted at reducing the levels of impact and educating the public about new management actions. (Management actions within Tangle Lakes Developed Zone 3 will not be dependent upon an adaptive management approach of monitoring indicators and standards. Management actions within this zone affect the developed facilities, and will be instituted immediately as part of the developed facility supplemental rules and regulations).

For RMZs 1, 2, 4, and 5, selected indicators, standards, and phased management actions are identified. Phase 1 management actions will be implemented immediately upon plan approval. If monitoring results indicate that the standard is exceeded over the specified timeframe, Phase II management actions will be implemented as described. Monitoring will continue to occur for the specified time period before moving to the next subsequent phase, and management actions from the previous phases may continue, depending on effectiveness. If conditions improve in a particular phase and meet prescribed standards, management actions will continue as prescribed for that phase, and will not revert back to the previous phase. Although the management actions were developed to be mutually exclusive and independent of each other, similar management actions for different impact issues may be triggered by the monitoring results of one impact issue, but not the other. In this case, the prescribed management actions for the affected impact issue would apply to both impact issues.

**The following adaptive management actions will be implemented on a corridor-wide basis within all recreation management zones (except for Tangle Lakes Developed Zone 3).**

### 2.4.2.1 Litter

*Indicator:* Percentage of designated campsites at which litter occurs.

*Standard:* Less than 20% of designated campsites (13 sites) have litter present.

*Monitoring:* The monitoring of litter will be conducted by river patrol crews, recording the number of designated campsites visited and the number of these campsites with litter present, throughout the entire season. Percentages for each trip will be averaged for the season. If the standard is exceeded for two consecutive years (20% or more of campsites monitored have litter present), phased management actions will be implemented.

**Phase I:** Maintain existing BLM cleanup patrols (3 per season) and provide Leave No Trace (LNT) information at the boat launches and on the BLM website. Conduct visitor contacts at the boat launches and on the river, stopping at occupied campsites to educate proper litter

disposal. Develop a volunteer program with commercial guides, local communities and river users to assist with cleanup and monitoring needs. Involve user groups, volunteers, and other interested parties to help maintain resources through partnerships and special events.

- Phase II: Add one additional BLM cleanup patrol (4 per season). Continue volunteer and educational component described under Phase I actions.
- Phase III: Dismantle all fire rings, require all users to use fire pans and remove ash from the river corridor. (This action would address the problem of litter left behind in fire rings, which accounts for almost all of the litter found in the river corridor).

#### 2.4.2.2 Human Waste

*Indicator:* Percentage of designated campsites that human waste (or toilet paper) is present.

*Standard:* Human waste present at less than 10% of designated campsites (7 sites).

*Monitoring:* The monitoring of human waste will be conducted by river patrol crews, recording the number of designated campsites visited and the number of campsites with visible human waste or toilet paper present, throughout the entire season. Percentages for each trip will be averaged for the season. If the standard is exceeded for two consecutive years (10% or more of campsites monitored have human waste or toilet paper present), phased management actions will be implemented.

- Phase I: Maintain existing BLM cleanup patrols (3 per season) and provide LNT information at the boat launches and on the BLM website. Require commercial guides to use portable toilets. New outhouses will not be constructed. Conduct visitor contacts at the boat launches and on the river, stopping at occupied campsites to educate proper human waste disposal. Develop a volunteer program with commercial guides, local communities and river users to assist with cleanup and monitoring needs. Involve user groups, volunteers, and other interested parties to help maintain resources through partnerships and special events. Increase educational efforts by conducting LNT workshops with groups such as the Boy Scouts of America, Copper River Watershed Project and the Wrangell Institute for Science and Environment. Publicize current state laws and regulations regarding the proper disposal of human waste: *Human waste shall not be disposed of on state-owned shorelands (such as gravel bars and sand bars), in accordance with AS 46.03.800 - 810. On all lands including state, federal and private, human waste may be disposed of in a cathole at least 100 feet away from the ordinary high water mark of streams, rivers, or lakes in accordance with Alaska Department of Environmental Conservation (ADEC) regulation 18 AAC 72.020.*
- Phase II: Add one additional BLM cleanup patrol (4 per season). Continue volunteer and educational component described under Phase I management action.
- Phase III: Require all users to use portable toilet systems and carry out human waste and toilet paper. The outhouse at the Delta River portage will be removed once a portable toilet cleanout facility is developed for waste disposal.

#### 2.4.2.3 Fire Rings

*Indicator:* Number of fire rings per designated campsite.

*Standard:* Less than 20% of designated campsites (13 sites) with more than one fire ring.

*Monitoring:* The monitoring of fire rings will be conducted by river patrol crews, recording the number of designated campsites visited and the number of campsites with greater than one fire ring, throughout the entire season. Percentages for each trip will be averaged for the season. If the standard is exceeded for two consecutive years (20% or more of campsites monitored have greater than one fire ring), phased management actions will be implemented.

- Phase I: River patrol crews would dismantle all but one fire ring per site and encourage the use of portable fire pans. The cutting of standing trees and the use of chainsaws for campsite firewood will be prohibited. Require the use of only dead and down firewood for campfires.
- Phase II: Dismantle all fire rings and require all campers to use fire pans and remove ash from the river corridor. Continue restrictions related to wood cutting and collection.

#### 2.4.2.4 Private and Commercial User Capacity

*Indicator:* Number of **user days** that groups are required camp within sight or sound of other campers (camp encounter), pass up occupied designated campsites (camp competition), or share designated campsites due to campsites being occupied.

*Standard:* Less than 20% of **total user days annually**

*Monitoring:* Monitoring will be conducted through the administration of river surveys, overflights, and field patrols to document evidence of camp encounters, camp competition, and camp sharing. River surveys would be available at the launch sites and distributed during river patrol trips. Questionnaires would define and tally camp encounters, which would then be expressed as a weighted percentage (based on all river users for that season compared to river survey responses). If the standard is exceeded for two consecutive years (20% or more of **total user days** that groups are required to camp within sight or sound of other campers (camp encounter), pass up occupied campsites (camp competition), or share campsites (due to campsites being occupied), phased management actions will be implemented.

*Phase I:* Designate campsites and develop a campsite map that will allow users to select campsites that will minimize camp encounters and camp competition. Prohibit the use of chainsaws for campsite firewood **in RMZs 1, 2, and 4** and recreational shooting **in all RMZs** to reduce noise related camp encounters. Limit group size to 10 people maximum per campsite. Groups in excess of 10 people per site must obtain written authorization that may include special stipulations from the BLM. Monitor number of permitted commercial use permits and designate campsites for commercial groups. Development of additional campsites may be considered to accommodate increased use, especially in high concentration areas to relieve pressure on heavy use sites and to minimize camp encounters. Locations for new campsites would be chosen that would minimize camp encounters based on location and terrain.

*Phase II:* Institute a voluntary registration system for overnight trips. Potential voluntary systems could include a reservation board and a web-based registration system. Users plan their trip by reserving campsites on the board or on the web. Other users would be able to see available campsites and plan their trips accordingly. Use of the campsites would be first come, first served. These measures would enable visitors to avoid high use days and reduce campsite competition.

*Phase III:* Continue the voluntary registration system defined in Phase II, but registration would become mandatory, with no use limits or user fees.

*Phase IV:* Limit the number of overnight trips launching per day by implementing a mandatory permit system. A mandatory permit system would be developed through a public process consistent with existing laws, regulations, and policies.

#### 2.4.2.5 Campsite Impacts

*Indicator:* Percentage of bare ground disturbance and density of social trails and satellite sites at designated campsites. Bare ground is determined using photopoint monitoring techniques and GPS analysis. All designated campsites were inventoried in 2006 and categorized as "heavy", "moderate", and "light" impact sites, depending on the level of bare ground disturbance, social trails, and satellite sites.

*Standard:* **Heavy impact sites:** These sites are heavily impacted (more than 66% of campsite area is impacted down to mineral soil), with more than one satellite site and social trail. Rehabilitation at these sites would be difficult without total rest for years; high use levels in these areas might also result in the creation of new campsites if these were closed.

*Standard:* *no increase in bare ground on the river bank and no increase in satellite sites or social trails from the existing condition.*

**Moderate impact sites:** These are sites where passive rehabilitation or rest could make a large difference. Current area of bare ground is smaller than heavy impact sites, but has the potential to spread (between 34% and 65% of campsite area is impacted down to mineral soil). Moderate impact sites have up to one satellite site and one social trail.

*Standard: less than 66% bare ground disturbance and no more than one satellite site or social trail.*

**Light impact sites:** These are sites that are hard to find, even with a map, and have very little bare ground disturbance (between 0% and 33% of campsite area is impacted down to mineral soil). There are no associated satellite sites or social trails. These sites have the most potential for rehabilitation to their original, natural condition.

*Standard: less than 33% bare ground disturbance and no new satellite sites or social trails.*

**Monitoring:** A complete baseline inventory was conducted on all campsites in 2006, which consists of detailed sketches, measurements, inventory forms and digital photos of all sites. This information is supplemented with GPS data and estimates of bare ground at each campsite using photopoint monitoring techniques. Monitoring for newly developed campsites will occur annually. Measurement of existing designated campsites to determine trend in bare ground, satellite sites, and social trails will occur every five years. Phased actions will occur based on non-compliance with standards for each campsite category or change in site categorization level after five year monitoring period.

**Phase I:** Implement group size limit of 10 people per designated river campsite. Groups in excess of 10 people per site must obtain written authorization that may include special stipulations from the BLM. Designate campsites and develop a campsite map. Development of additional campsites may be considered in high concentration areas to relieve pressure on heavy use campsites and to minimize camp encounters. Campsites will be monitored for distance from active eagle nests. If occupation of a campsite is causing disturbance, (i.e. adults displaced from nest, repeatedly leaving eggs or nestlings) the campsite will be closed.

**Heavy impact sites:** Close developing satellite sites and social trails using natural materials (e.g. trees, rocks, root wads, brush) to discourage use. Increase in bare ground on the riverbank will be minimized using passive rehabilitation, funneling use into one area. Native materials may be used to create natural steps to help prevent riverbank erosion.

**Moderate impact sites:** Use passive rehabilitation to halt expansion of core area and bare ground disturbance. Developing satellite sites and social trails will be discouraged using natural materials and passive rehabilitation.

**Light impact sites:** Same as described for moderate impact sites. If not indicated on the designated campsite map, or if it is newly developed site, close the campsite using passive rehabilitation and natural materials to block site visibility from the river.

**Phase II:** Groups in excess of 10 people will be prohibited in all designated river campsites.

**Heavy impact sites:** If satellite sites or social trails continue to develop, close them to allow for rest and rehabilitation by using physical barriers and signage.

**Moderate impact sites:** Where passive rehabilitation described under Phase I is not effective, temporarily close these campsites until bare ground has revegetated within site categorization standards.

**Light impact sites** Where passive rehabilitation described under Phase I is not effective, close designated campsites. Rehabilitate inactive or newly damaged sites using passive rehabilitation techniques until bare ground has revegetated.

## 2.5 Alternative 3

Alternative 3 provides management for high density experiences, and emphasizes recreation facility development and increased maintenance to address high impact levels. Alternative 3 has been developed to address scoping comments related to the desire for increased access and less use restrictions within the river corridor.

Outstandingly Remarkable Values and associated management objectives would be adopted as described in “*Management Actions Common to Alternatives 2, 3, and 4.*” The RMZ boundaries, market strategy, niche and management objective decisions, primary targeted outcomes, and setting character decisions for each RMZ in Alternative 2 were developed based on information obtained during the BBM planning process meetings described in Chapter 1.9.1. Alternative 3 has been developed to retain these targeted BBM outcomes for each RMZ, but implementation framework decisions have been changed to provide for high density experiences, increased access, and facility development.

### 2.5.1. Alternative 3 -- Tangle Lakes Zone 1

#### **EARMP Land Use Planning Decisions:**

Same as Alternative 2

#### **Delta SRMA Implementation Decisions:**

**Management:** Same as Alternative 2, except:

##### **Special Recreation Permits**

Commercial group sizes will be limited to 12 people per campsite, instead of 10. Commercial groups in excess of 12 people per campsite must obtain written authorization that may include special stipulations from the BLM. Commercial groups will not be required to use portable toilets.

##### **Travel Management**

There will be no restrictions on motorized boating or airplane landings. Portage trails will be marked and identified with signage and improved access will be provided through trail construction and maintenance activities using native materials (e.g. rocks, spruce).

##### **Facilities**

Developed day use facilities with metal fire rings and picnic tables will be installed at heavy use campsites. Public use cabins will be considered for development.

##### **Education and Interpretation**

River crews will focus efforts on cleanup and maintenance of campsites, portages, and facilities rather than educational outreach efforts.

**Marketing:** Same as Alternative 2, except recreational opportunities will be marketed to a wider audience using the BLM website, magazine articles, brochures, and outdoor shows.

**Monitoring:** Same as Alternative 2

**Administrative:** Same as Alternative 2, except:

##### **Travel Management**

There will be no restrictions on motorized boating or airplane landings.

## Group Size

Group sizes will be limited to 12 people per campsite under Phase II campsite and user capacity management actions. Groups in excess of 12 people per campsite must obtain written authorization that may include special stipulations from the BLM.

## Chainsaw Use and Firewood Gathering

Chainsaw use for the cutting of campsite firewood will be allowed, including the cutting of standing dead wood at least 200 feet from the river's edge. The cutting of green trees and vegetation will be prohibited.

## 2.5.2 Alternative 3 -- Tangle Lakes Zone 2

### **EARMP Land Use Planning Decisions:**

Same as Alternative 2

### **Delta SRMA Implementation Decisions:**

**Management:** Same as Alternative 2, except:

#### **Special Recreation Permits**

Commercial group sizes will be limited to 12 people per campsite, instead of 10. Groups in excess of 12 people per site must obtain written authorization that may include special stipulations from the BLM. Commercial groups will not be required to use portable toilets.

#### **Travel Management**

The Round Tangle Lake Trail and Mile 22 Denali Highway North Trail will be open to OHV use and designated as OHV trails. The portage trail will be marked and identified with signage and improved access will be provided through trail construction and maintenance activities using native materials (e.g. rocks, spruce).

#### **Facilities**

One outhouse and a boater registration kiosk will be installed at the first portage of the Upper Tangles. Developed day use facilities with metal fire rings and picnic tables will be installed at heavy use campsites. Public use cabins will be considered for development.

#### **Education and Interpretation**

River crews will focus efforts on cleanup and maintenance of campsites, portages, and facilities rather than educational outreach efforts.

**Marketing:** Same as Alternative 2, except recreational opportunities will be marketed to a wider audience using the BLM website, magazine articles, brochures, and outdoor shows.

**Monitoring:** Same as Alternative 2

**Administrative:** Same as Alternative 2, except:

## Group Size

Group sizes will be limited to 12 people per campsite under Phase II campsite and user capacity management actions. Groups in excess of 12 people per campsite must obtain written authorization that may include special stipulations from the BLM.

### Chainsaw Use and Firewood Gathering

Chainsaw use for the cutting of campsite firewood will be allowed, including the cutting of standing dead wood at least 200 feet from the river's edge. The cutting of green trees and vegetation will be prohibited.

### 2.5.3 Alternative 3 -- Tangle Lakes Developed Zone 3

#### **EARMP Land Use Planning Decisions:**

Same as Alternative 2

#### **Delta SRMA Implementation Decisions:**

**Management:** Same as Alternative 2, except:

##### **Special Recreation Permits**

Commercial group sizes will be limited to 12 people per campsite, instead of 10.

##### **Facilities**

User fees would be implemented for the use of campground, boat launches, and for overnight parking at the DWSR Wayside. Public use cabins will be considered for development. An educational river portal facility or portable toilet cleanout facility will not be considered for development.

**Marketing:** Same as Alternative 2, except recreational opportunities will be marketed to a wider audience using the BLM website, magazine articles, brochures, and outdoor shows.

**Monitoring:** Same as Alternative 2

**Administrative:** Same as Alternative 2, except:

##### **Group Size**

Group sizes will be limited to 12 people per campsite, and 3 vehicles per campsite (one of which may be a recreational vehicle). Groups in excess of 12 people may camp in the designated group camping areas.

### 2.5.4 Alternative 3 -- Delta River Zone 4

#### **EARMP Land Use Planning Decisions:**

Same as Alternative 2

#### **Delta SRMA Implementation Decisions:**

**Management:** Same as Alternative 2, except:

##### **Special Recreation Permits**

Commercial group sizes will be limited to 12 people per campsite, instead of 10. Commercial groups in excess of 12 people per campsite must obtain written authorization that may include special stipulations from the BLM. Commercial groups will not be required to use portable toilets.

##### **Travel Management**

There will be no restrictions on motorized boating or airplane landings. Portage trails will be marked and identified with signage and improved access will be provided through trail construction and maintenance activities using native materials (e.g. rocks, spruce).

**Facilities**

Facility developments will include an outhouse, river survey box, portage warning signs, and boater registration kiosk. Public use cabins will be considered for development.

**Education and Interpretation**

River crews will focus efforts on cleanup and maintenance of campsites, portages, and facilities rather than educational outreach efforts.

**Marketing:** Same as Alternative 2, except recreational opportunities will be marketed to a wider audience using the BLM website, magazine articles, brochures, and outdoor shows.

**Monitoring:** Same as Alternative 2

**Administrative:** Same as Alternative 2, except:

**Travel Management**

There will be no restrictions on motorized boating or airplane landings.

**Group Size**

Group sizes will be limited to 12 people per campsite under Phase II campsite and user capacity management actions. Groups in excess of 12 people per campsite must obtain written authorization that may include special stipulations from the BLM.

**Chainsaw Use and Firewood Gathering**

Chainsaw use for the cutting of campsite firewood will be allowed, including the cutting of standing dead wood at least 200 feet from the river's edge. The cutting of green trees and vegetation will be prohibited.

**2.5.5 Alternative 3 -- Delta River Zone 5****EARMP Land Use Planning Decisions:**

Same as Alternative 2

**Delta SRMA Implementation Decisions:**

**Management:** Same as Alternative 2, except:

**Special Recreation Permits**

Commercial group sizes will be limited to 12 people per campsite, instead of 10. Groups in excess of 12 people per site must obtain written authorization that may include special stipulations from the BLM. Commercial groups will not be required to use portable toilets.

**Travel Management**

OHV trails at the confluence of Eureka Creek will be open to OHV use and designated as OHV trails.

**Facilities**

Metal fire rings and picnic tables would be installed at heavy use campsites. Public use cabins will be considered for development.

## Education and Interpretation

River crews will focus efforts on cleanup and maintenance of campsites, portages, and facilities rather than educational outreach efforts.

**Marketing:** Same as Alternative 2, except recreational opportunities will be marketed to a wider audience using the BLM website, magazine articles, brochures, and outdoor shows.

**Monitoring:** Same as Alternative 2

**Administrative:** Same as Alternative 2, except:

### Travel Management

OHVs will be allowed to travel off designated trails for game retrieval, and there will be no weight limitations for OHV use.

### Group Size

Group sizes will be limited to 12 people per campsite under Phase II campsite and user capacity management actions. Groups in excess of 12 people per campsite must obtain written authorization that may include special stipulations from the BLM.

## 2.5.6 Alternative 3 -- Adaptive Management Actions

### 2.5.6.1 Litter

Standard would not change from Alternative 2. Phase I and II management actions would be the same as Alternative 2. Under Phase III management actions, all users would be encouraged to pack out litter through education, but would not be required to use firepans to reduce litter in firerings.

### 2.5.6.2 Human Waste

Standard would not change from Alternative 2. Phase I management actions would be the same as Alternative 2, except commercial guides would not be required to use portable toilets. Under Phase II management actions, one outhouse would be added in RMZ 2, located at the first portage in the Upper Tangles. The outhouse located at the river portage in RMZ 4 would remain and be maintained for use. River crew would add one additional cleanup patrol and continue educational efforts. Under Phase III management actions, all users would be encouraged to pack out human waste through education, but not required.

### 2.5.6.3 Fire Rings

Standard would not change from Alternative 2. Phase I management actions would be the same as Alternative 2, except that the cutting of standing dead wood and chainsaw use for the cutting of firewood for campsites would be permitted. Under Phase II management actions, metal fire rings would be installed at heavy use sites and sites with multiple fire rings. Firepans would not be required.

### 2.5.6.4 Private and Commercial User Capacity

The encounter standard would be relaxed from "less than 20% of total user days" to "less than 40% of total user days", allowing for higher encounter levels before management actions are initiated. Under Phase I management actions, additional campsites would be developed within the river corridor. Campsites would be designated and a campsite map would be developed. Recreational shooting would be prohibited. Under Phase II management actions, a maximum group size limit of 12 people per campsite would be implemented. Groups in excess of 12 people per site must obtain written authorization that may include special stipulations from the BLM. Under Phase III management actions, a voluntary registration system would be created, and users would be encouraged to register, but not required. Under Phase IV management actions, the voluntary registration system would progress to a

mandatory registration system. There would be no Phase IV management action of implementing a formal mandatory permit system.

#### **2.5.6.5 Campsite Impacts**

Standard would not change from Alternative 2. Under Phase I management actions, existing campsite documentation efforts would continue and campsites would be designated and a campsite map would be developed. Campsites would be developed in new areas and existing moderate and heavy impact campsites would be hardened and expanded to accommodate larger groups and increased use levels. Light impact campsites would be allowed to become moderate impact sites before hardening and expansion. Under Phase II management actions, the maximum group size limit would be 12 people per campsite, instead of 10. Groups in excess of 12 people per site must obtain written authorization that may include special stipulations from the BLM. Under Phase II management actions, campsites would be maintained, and rehabilitation, rest, or closure would only be used if resource damage (i.e. erosion, sedimentation) is occurring at campsites. Campsites would then be rehabilitated using passive rehabilitation and signage to discourage use.

## 2.6 Alternative 4

Alternative 4 was developed to address scoping comments related to the desire to preserve primitive and semiprimitive environments within the river corridor, and to retain and enhance existing wilderness characteristics, natural quiet and natural sounds. Alternative 4 proposes more restrictions on use or types of recreation behavior to provide management options for low density recreational experiences.

Outstandingly Remarkable Values and associated management objectives would be adopted as described in “*Management Actions Common to Alternatives 2, 3, and 4.*” The RMZ boundaries, market strategy, niche and management objective decisions, primary targeted outcomes, and setting character decisions for each RMZ in Alternative 2 were developed based on information obtained during the BBM planning process meetings described in Chapter 1.9.1. Alternative 4 has been developed to retain these targeted BBM outcomes for each RMZ, but implementation framework decisions have been changed to provide for low density experiences with less facility development.

### 2.6.1. Alternative 4 -- Tangle Lakes Zone 1

#### **EARMP Land Use Planning Decisions:**

Same as Alternative 2

#### **Delta SRMA Implementation Decisions:**

**Management:** Same as Alternative 2, except:

##### **Special Recreation Permits**

Commercial group sizes will be limited to 8 people per campsite, instead of 10. Commercial groups in excess of 8 people per campsite must obtain written authorization that may include special stipulations from the BLM. Competitive events will not be authorized.

**Marketing:** Same as Alternative 2

**Monitoring:** Same as Alternative 2

**Administrative:** Same as Alternative 2, except:

##### **Travel Management**

All recreational motorized boating will be prohibited. Motorized boating for subsistence use and access for traditional activities (described in ANILCA Sections 811 and 1110) will be limited to 15 horsepower motors, and airboats and hovercraft will be prohibited. All airplane landings will be prohibited, except for emergency operations.

##### **Group Size**

Group sizes will be limited to 8 people per campsite. Groups in excess of 8 people per campsite must obtain written authorization that may include special stipulations from the BLM.

### 2.6.2 Alternative 4 -- Tangle Lakes Zone 2

#### **EARMP Land Use Planning Decisions:**

Same as Alternative 2

#### **Delta SRMA Implementation Decisions:**

**Management:** Same as Alternative 2, except:

**Special Recreation Permits**

Commercial group sizes will be limited to 8 people per campsite, instead of 10. Commercial groups in excess of 8 people per site must obtain written authorization that may include special stipulations from the BLM. Competitive events will not be authorized.

**Travel Management**

Only the Lower Tangles Ridge Trail will be developed and designated as a nonmotorized trail.

**Education and Interpretation**

Interpretive displays will not be installed on nonmotorized trails.

**Marketing:** Same as Alternative 2

**Monitoring:** Same as Alternative 2

**Administrative:** Same as Alternative 2, except:

**Travel Management**

All motorized boating will be limited to 15 horsepower motors, and airboats, hovercraft and personal watercraft (jetskis) will be prohibited. All airplane landings will be prohibited, except for emergency operations. The use of pack animals and mechanized travel (mountain bikes) will not be allowed on the Lower Tangles Ridge Trail.

**Group Size**

Group sizes will be limited to 8 people per campsite. Groups in excess of 8 people per campsite must obtain written authorization that may include special stipulations from the BLM.

**2.6.3 Alternative 4 -- Tangle Lakes Developed Zone 3****EARMP Land Use Planning Decisions:**

Same as Alternative 2

**Delta SRMA Implementation Decisions:**

**Management:** Same as Alternative 2, except:

**Campsite Impacts**

Walk-in campsites from the campground to locations along Round Tangle Lake and the Tangle River will not be considered for development.

**Special Recreation Permits**

Commercial group sizes will be limited to 8 people per campsite, instead of 10. Competitive events will not be authorized.

**Facilities**

Facility developments will be limited to the campground renovation only. User fees would be implemented for the use of campground only.

**Marketing:** Same as Alternative 2

**Monitoring:** Same as Alternative 2

**Administrative:** Same as Alternative 2, except:

**Travel Management**

All motorized boating on the Tangle River will be prohibited. All airplane landings will be prohibited, except for emergency operations.

**Group Size**

Group sizes will be limited to 8 people per campsite, and 2 vehicles per campsite (one of which may be a recreational vehicle). Groups in excess of 8 people may camp in the designated group camping areas.

**Chainsaw Use and Firewood Gathering**

The use of chainsaws in the developed facilities will be prohibited. Only dead and down wood may be used for campfires. The cutting of green trees and vegetation will be prohibited.

**2.6.4 Alternative 4 -- Delta River Zone 4**

**EARMP Land Use Planning Decisions:**

Same as Alternative 2

**Delta SRMA Implementation Decisions:**

**Management:** Same as Alternative 2, except:

**Special Recreation Permits**

Commercial group sizes will be limited to 8 people per campsite, instead of 10. Commercial groups in excess of 8 people per campsite must obtain written authorization that may include special stipulations from the BLM. Competitive events will not be authorized.

**Travel Management**

Additional nonmotorized trails would not be developed in the future in the Garrett Creek drainage.

**Facilities**

All existing facility developments would be removed. The outhouse will be removed if portable toilets are required in the future and a cleanout facility is developed.

**Marketing:** Same as Alternative 2

**Monitoring:** Same as Alternative 2

**Administrative:** Same as Alternative 2, except:

**Travel Management**

All recreational motorized boating will be prohibited. Motorized boating for subsistence use and access for traditional activities (described in ANILCA Sections 811 and 1110) will be limited to 65 horsepower motors, and airboats and hovercraft will be prohibited. All airplane landings will be prohibited, except for emergency operations.

**Group Size**

Group sizes will be limited to 8 people per campsite. Groups in excess of 8 people per campsite must obtain written authorization that may include special stipulations from the BLM.

## 2.6.5 Alternative 4 -- Delta River Zone 5

### **EARMP Land Use Planning Decisions:**

Same as Alternative 2

### **Delta SRMA Implementation Decisions:**

**Management:** Same as Alternative 2, except:

#### **Special Recreation Permits**

Commercial group sizes will be limited to 8 people per campsite, instead of 10. Groups in excess of 8 people per site must obtain written authorization that may include special stipulations from the BLM. Competitive events will not be authorized.

#### **Travel Management**

Additional nonmotorized trails would not be developed in the future in the Eureka Creek drainage.

#### **Facilities**

No facility developments will be identified. Takeout warning sign would be removed at the Mile 212.5 Richardson Highway takeout.

**Marketing:** Same as Alternative 2

**Monitoring:** Same as Alternative 2

**Administrative:** Same as Alternative 2, except:

#### **Travel Management**

OHVs will be required to park out of sight of the river. All motorized boating will be limited to 65 horsepower motors and airboats and hovercraft will be prohibited. All airplane landings will be prohibited, except for emergency operations.

#### **Group Size**

Group sizes will be limited to 8 people per campsite. Groups in excess of 8 people per campsite must obtain written authorization that may include special stipulations from the BLM.

## 2.6.6 Alternative 4 -- Adaptive Management Actions

### 2.6.6.1 Litter

Standard would not change from Alternative 2. One additional crew patrol would be added under Phase I management actions, instead of Phase II. Firepans would be required as a Phase II management action, instead of Phase III. Educational component described in Alternative 2 would occur in all management phases.

### 2.6.6.2 Human Waste

Standard would not change from Alternative 2. Phase I management actions would be the same as Alternative 2. The use of portable toilets would be required under Phase II management actions, instead of Phase III. The outhouse at the Delta River portage would be removed when the installation of a portable toilet cleanout facility is developed. Educational component described in Alternative 2 would occur in all management phases.

### **2.6.6.3 Fire Rings**

Standard would not change from Alternative 2. Phase I and Phase II management actions would be the same as Alternative 2.

### **2.6.6.4 Private and Commercial User Capacity**

The encounter standard would be changed from “less than 20% of total user days” to “less than 10% of total user days”, allowing for lower encounter levels before management actions are initiated. Phase I management actions would include developing a campsite map, designating campsites, implementing a group size limit of 8 people per campsite, and prohibiting the use of chainsaws and recreational shooting in all RMZs. Groups in excess of 8 people per site must obtain written authorization that may include special stipulations from the BLM. Under Phase II management actions, the voluntary registration system would be eliminated, and would be replaced by a mandatory registration system. A mandatory permit system would be implemented during Phase III, instead of Phase IV. No new campsites would be created within the management zone under any management scenario.

### **2.6.6.5 Campsite Impacts**

Standard would not change from Alternative 2. Phase I management actions would be the same as Alternative 2, except that no new campsites would be created and group size would be limited to 8 people per campsite, instead of 10. Groups in excess of 8 people per site must obtain written authorization that may include special stipulations from the BLM. Under Phase II actions, management actions would be the same as Alternative 2, except groups in excess of 8 people would be prohibited in designated river campsites.