

PART A - APPENDIX G: FACILITIES FIGURES

PART A - APPENDIX H: DISPERSED RECREATION INVENTORY

PART A - APPENDIX I: ACCESS INVENTORY

PART A - APPENDIX J: ACCESS FIGURES

**Susitna-Watana Hydroelectric Project
(FERC No. 14241)**

Recreation Resources Study (12.5)

**Part A - Appendix G
Facility Figures**

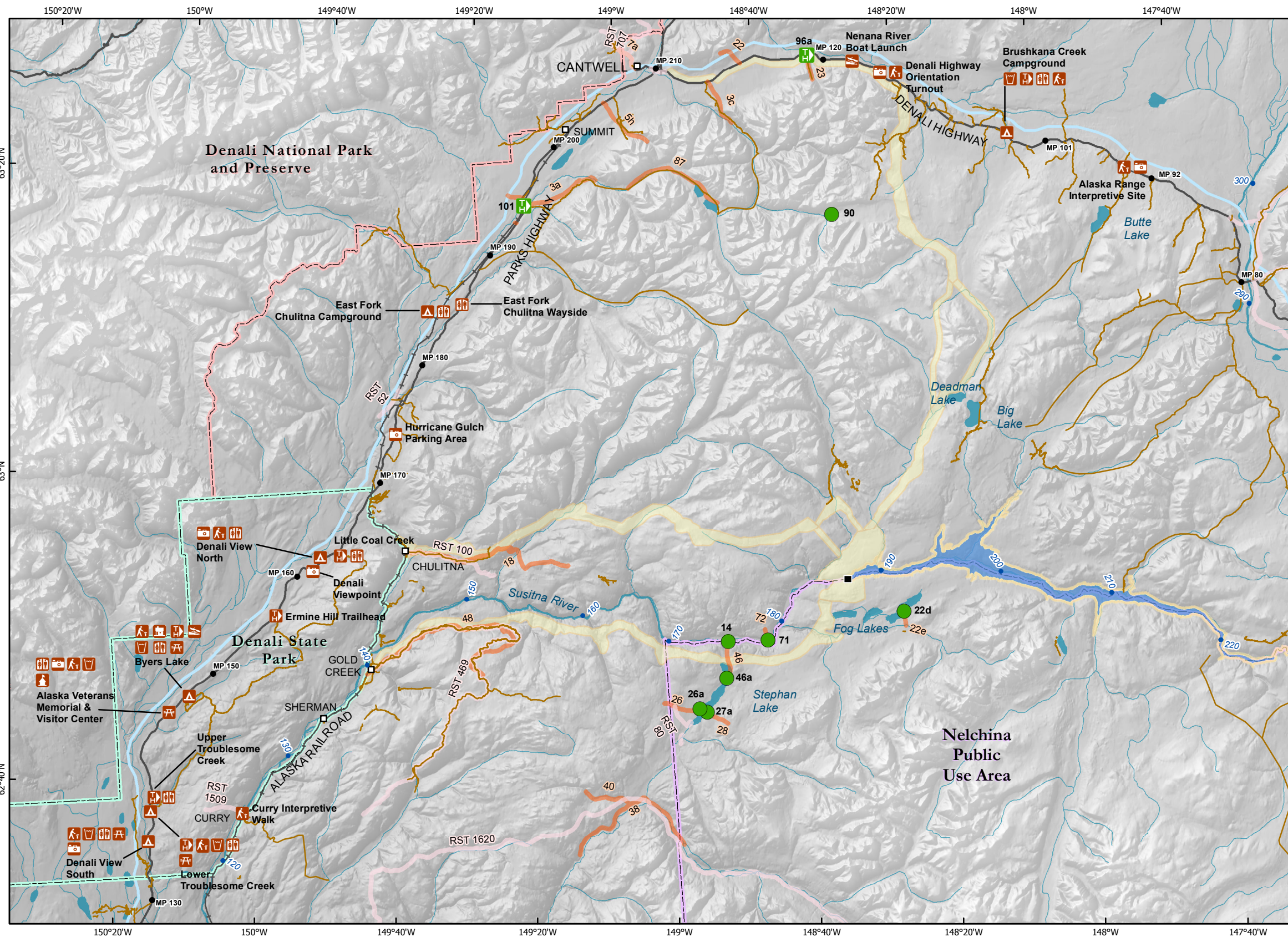
Initial Study Report

Prepared for
Alaska Energy Authority



Prepared by
URS Corporation

June 2014



ALASKA ENERGY AUTHORITY

Legend

• Project River Miles	Summer Trails
● Road Milepost	RS 2477
● Site Easement	17b Easements
Trailhead Easement	Proposed Watana Dam Site
Boat Launch	Proposed Watana Reservoir
Campground	Proposed Project Area
Picnic Area	Denali State Park
Public Use Cabins	Denali National Park & Preserve
Drinking Water	Nelchina Public Use Area
Scenic Viewpoint	Tangle Lakes Archaeological District
Trailhead	Delta National Wild Scenic and Recreational River
Restrooms	Gulkana National Wild River
Visitor Center	Facilities Study Area
Interpretive Displays	

Disclaimer: Some map attributes may be located on private lands; this study report is not intended to suggest that the recreating public is authorized to access these lands for recreation purposes.

West Denali Highway

Overview Map

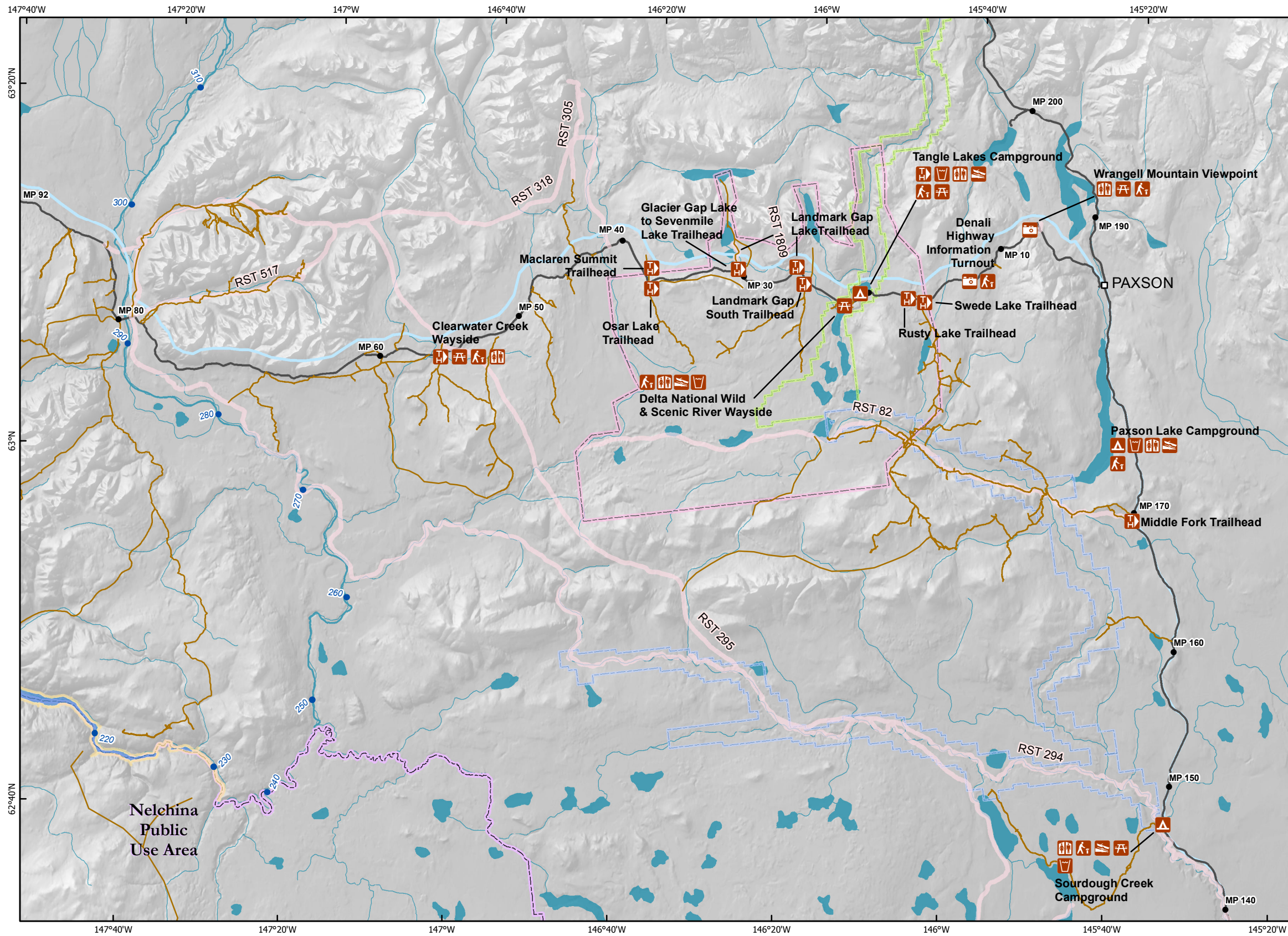
The overview map shows the regional context, including the West Denali Highway, East Denali Highway, Talkeetna, Lake Louise, and Glenn Highway. A red box highlights the area covered by the main map.

0 5 10 mi

0 5 10 15 km

Data Sources: See Map References

Projection: Alaska Albers NAD 1983
 Date Created: 12/17/2013
 Map Author: URS Alaska, Courtney Smith
 File: Facilities_ISR.mxd

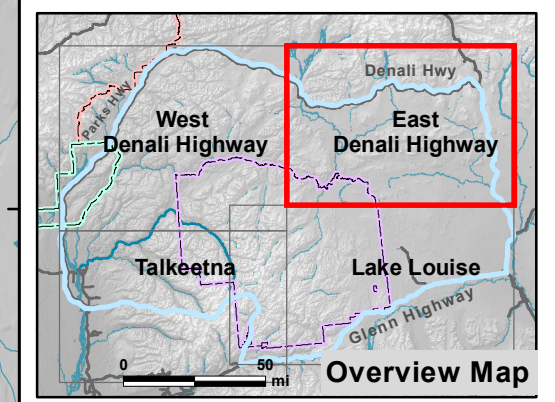


Legend

- Project River Miles
- Road Milepost
- Site Easement
- Trailhead Easement
- Boat Launch
- Campground
- Picnic Area
- Public Use Cabins
- Drinking Water
- Scenic Viewpoint
- Trailhead
- Restrooms
- Visitor Center
- Interpretive Displays
- Summer Trails
- RS 2477
- 17b Easements
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- Proposed Watana Reservoir
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- Denali National Park & Preserve
- Nelchina Public Use Area
- Tangle Lakes Archaeological District
- Delta National Wild Scenic and Recreational River
- Gulkana National Wild River
- Facilities Study Area

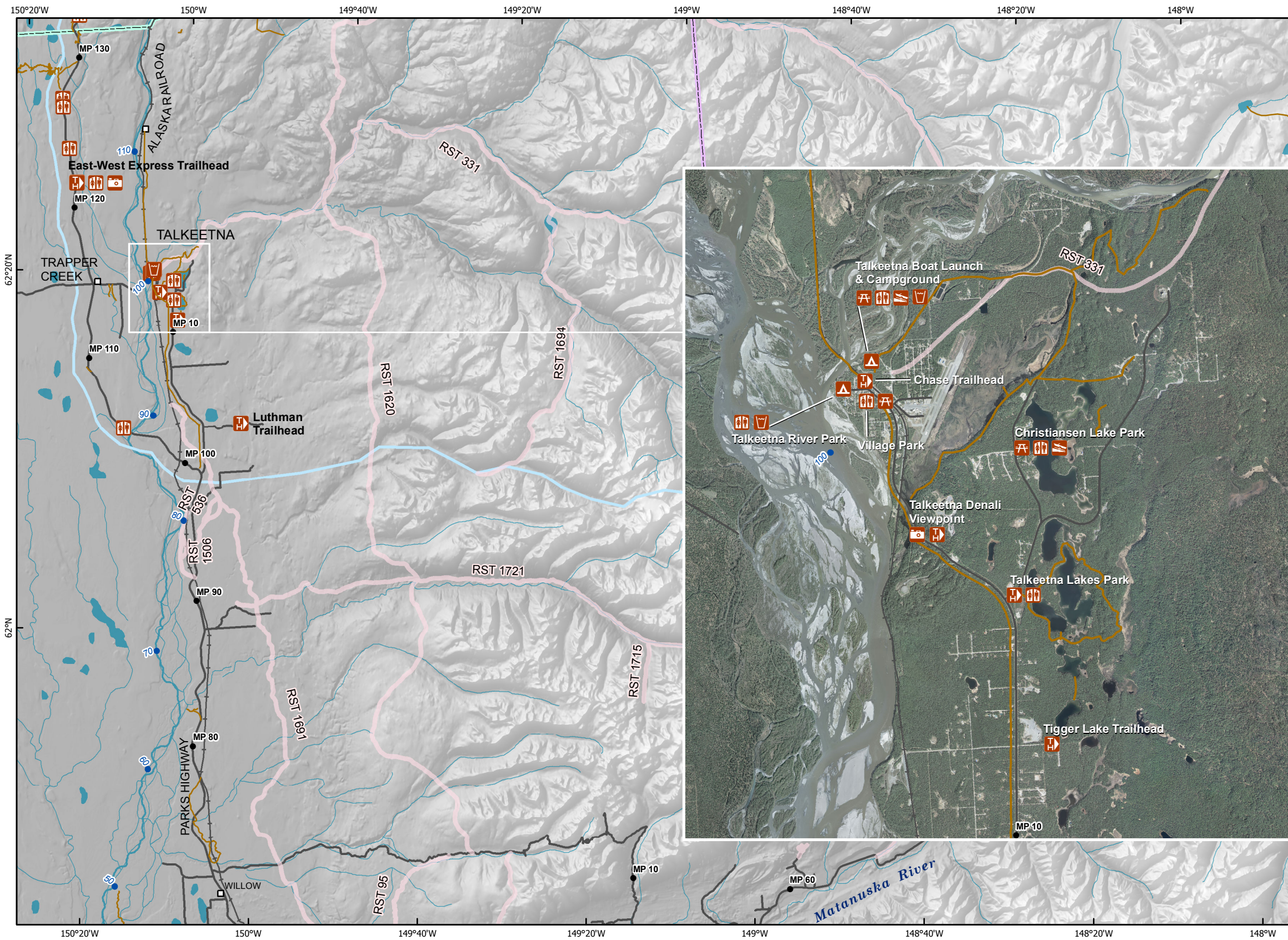
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East Denali Highway



Data Sources: See Map References

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 Map Author: URS Alaska, Courtney Smith
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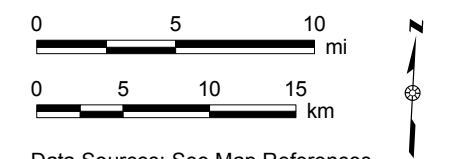
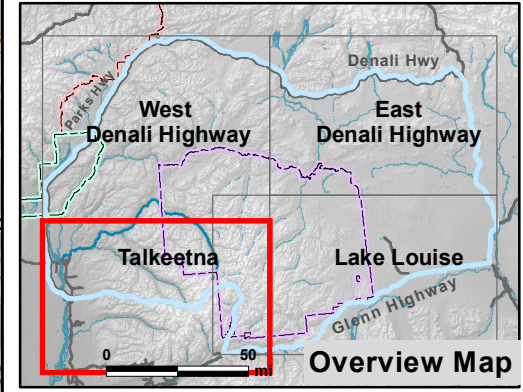


Legend

- Project River Miles
- Road Milepost
- Site Easement
- Trailhead Easement
- Boat Launch
- Campground
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- Gulkana National Wild River
- Facilities Study Area

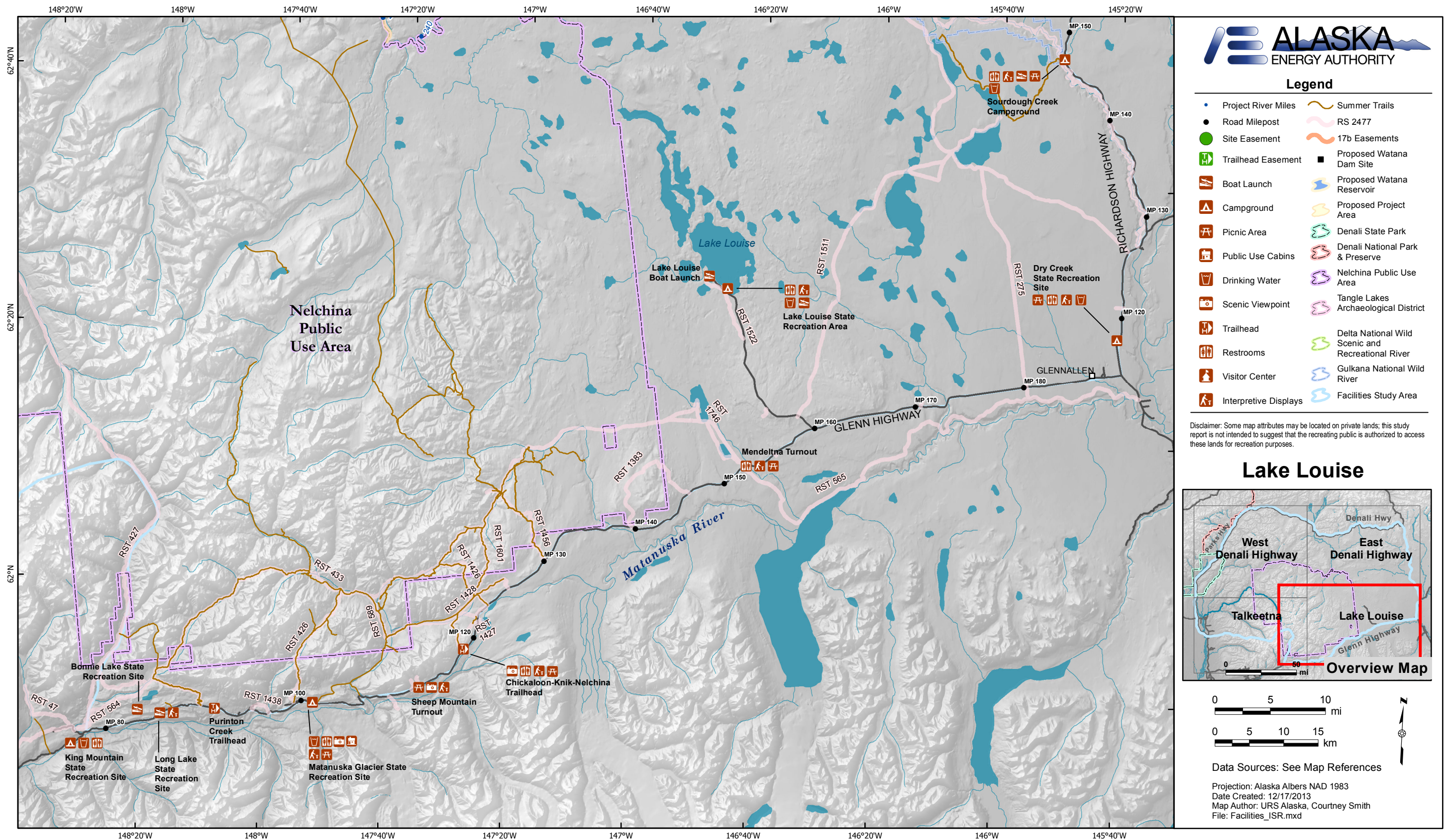
Disclaimer: Some map attributes may be located on private lands; this study report is not intended to suggest that the recreating public is authorized to access these lands for recreation purposes.

Talkeetna



Data Sources: See Map References

Projection: Alaska Albers NAD 1983
 Date Created: 12/17/2013
 Map Author: URS Alaska, Courtney Smith
 File: Facilities_ISR_Talkeetna.mxd



Map References:

Data Source	Date	File Name and Description
URS Corporation	11/18/2013	REC_Facilities: Recreation facilities including campgrounds, trailheads, boat launches, and day use areas.
URS Corporation	11/22/2013	Rec_Facilities_Index: Index page for ESRI Data Driven Pages for Facilities figures.
URS Corporation	11/19/2013	REC_RS2477: Easements with a State of Alaska RS 2477 designation.
URS Corporation	6/4/013	REC_17b_Easements: Easements with an ANCSA 17(b) designation.
URS Corporation	11/19/2013	REC_17b_Site_Easements: 17b site easements relevant to recreation and the Study Area.
URS Corporation	11/20/2013	REC_Summer_Trails: Trail compilation for the Study Area. From URS digitized trails, ADNRS USGS 63,360 Trailset, BLM trails, MSB trails, and executive interviews.
URS Corporation	6/4/013	REC_StudyArea_Facilities: The spatial extent of the study area for existing public recreation facilities and carrying capacity analysis.
BLM	5/24/2005	BLM_WSRP: Corridors representing rivers of Wild and Scenic Designation.

**Susitna-Watana Hydroelectric Project
(FERC No. 14241)**

Recreation Resources Study (12.5)

**Part A - Appendix H
Dispersed Recreation Inventory**

Initial Study Report

Prepared for

Alaska Energy Authority



SUSITNA-WATANA HYDRO

Clean, reliable energy for the next 100 years.

Prepared by

URS Corporation

June 2014

1. DISPERSED RECREATION SITES: INVENTORY RESULTS

Data on dispersed recreation sites within the Recreation Facilities Area were collected along the Denali Highway during the 2013 summer field season. During this effort, overnight dispersed recreation sites were tallied and inventoried by category according to the sampling methods described in Section 4.5. Characteristics of each category (Occasional Use Sites and Well-used Sites) are shown in Table H-1. In total, 170 sites were tallied, and 40 sites were inventoried in detail. Seventeen percent of Occasional Use Sites (25 of 151), and 79 percent of Well-used Sites (15 of 19) were inventoried (Table H-2). Evidence of camping at a site, typically identified by a fire ring, was used as an indicator of overnight dispersed recreation use; many sites also had evidence of off-trail ATV use. Table H-3 shows the proximity of inventoried sites to features such as a trail, river, lake, or the Denali Highway. All inventoried sites were within 1000 feet of the Denali Highway; 96 percent of Occasional Use Sites and 80 percent of Well-used Sites were within 10 feet of the highway. Twenty-four percent of Occasional Use Sites and fifty-three percent of Well-used Sites were within 100 feet of a trail. Twenty-eight percent of Occasional Use Sites and 13 percent of Well-used Sites were within 1,000 feet of a river or lake.

Figure H-1 shows the size of the disturbed camping area, the estimated area for primary camping activities, at inventoried sites. As shown, the relationship between the size of the disturbed camping area and the class is consistent with expectations. For Occasional Use Sites, 60 percent (15 sites) were found to be less than 50 square feet in area. Only one site was greater than 500 square feet in area; however, this site was a large gravel pit, and the camping took place on only a small portion of the disturbed camping area. Conversely, for Well-used Sites, those with the greatest amount of impact, 100 percent (3 sites) were found to have disturbed camp areas greater than 50 square feet in area.

Figure H-2 shows the percent of mineral exposure at inventoried sites. Mineral soil exposure refers to the percentage of the camping area with bare ground and without vegetation or organic soil layers. Overall, Occasional Use Sites were found to have less mineral soil exposure with 44 percent of sites (11 sites) having less than 50 percent mineral soil exposure. However, a significant portion, 40 percent of sites (10 sites), had between 76 and 95 percent mineral soil exposure. These were primarily in gravel pullouts without vegetation. The Well-used Sites inventoried had between medium (26 to 75 percent) to high (76 to 95 percent) mineral soil exposure.

Surrounding vegetation type was collected at each inventoried site (Figure H-3). Nearly half of Occasional Use Sites (48 percent) and the majority of Well-used Sites (73 percent) were found to be in a shrub/scrub vegetation type. The remaining sites were scattered between riparian, forest, tundra and bare rock vegetation types.

To assess trampling and/or vegetation damage, both the Frissell Classification System (Frissell 1978) and the Cole Classification System (Cole 1989) were utilized. The Frissell system requires that the site be classified into one of five categories: ground vegetation flattened but not permanently damaged (F1); ground vegetation worn away around fire ring or center of activity (F2); ground vegetation lost on most of the site, but humus and litter still present in all but a few areas (F3); bare mineral soil widespread, tree roots exposed (F4); and soil erosion obvious, trees

reduced in vigor or dead (F5). In the Frissell system (Figure H-4), 48 percent (12 sites) of Occasional Use Sites were categorized as F2, 28 percent (seven sites) as F4, and 20 percent (five sites) as F3. The large percent of Occasional Use Sites that were F3 and F4 can be explained by the fact that these sites were on gravel pullouts without vegetation. For Well-used Sites, 80 percent (12 sites) were categorized as either F3 or F4.

The Cole system compares the percent of vegetation cover (divided into five cover classes based on percentage) on the site with a comparable unused site, and then one of three categories is selected: no difference in cover (C0); difference in one cover class (C1); and difference in two or more cover classes (C2). The majority of Occasional Use Sites (52 percent) had a difference in one cover class (C1), while 36 percent had a difference in two cover classes (C2). Well-used Sites had 40 percent with a difference in one cover class (C1), and 47 percent with a difference in two cover classes (C2). Occasional Use Sites with one or two differences in cover class were either in gravel pits, or heavily impacted with little vegetation left (refer to Figure H-5).

Information collected on user-created site modifications include number of fire rings at inventoried sites, number of discernible “social trails” (trails leading to/from the site, between sites, or to water sources), and numbers of user-created structures. Ninety-six percent of Occasional Use Sites inventoried (24 sites) had between one and four fire rings each, with 36 percent (nine sites) only having one fire ring. Well-used Sites were widely distributed, ranging between one to twelve fire rings. Some Well-used Sites were small in area, yet had many fire rings. Two of the three Well-used Sites had three fire rings (refer to Figure H-6). Of all sites inventoried, 59 percent had no “social trails,” and 41 percent had 1-2 discernible “social trails.” Nine percent of sites had other user-created structures: 7 percent of sites had game poles, and one site had a user-built outhouse.

Health and safety information was collected at those sites inventoried including the availability of a water source, observed human or domestic animal waste, or evidence of litter. If a water source, such as a river, stream, lake or pond, was near enough to the site to provide water to purify to use for drinking or washing, it was documented. The majority of Occasional Use Sites (56 percent) and Well-used Sites (73 percent) had no water source, while the remainder of the sites had either a stream, lake, or pond in close proximity (refer to Figure H-7). Human waste was not systematically inventoried, but was estimated by the number of spots that had waste paper immediately apparent during the inventory. The majority of inventoried sites for each class were found to have no evidence of human waste: Occasional Use Sites with 56 percent, and Well-used Sites with 80 percent (refer to Figure H-8). Domestic animal waste from livestock or domestic dogs was not widely observed at any site class (refer to Figure H-9).

As with human waste, litter was not systematically inventoried, but was categorized according to how much litter was immediately apparent. For all sites litter was not widely observed; however, some litter was found at 40 percent of Occasional Use Sites and 33 percent Well-used Sites inventoried (refer to Figure H-10). Additionally, indications of aberrant behavior was documented when evidence deviant behavior was observed; including vegetation damage (e.g. from shooting, chopping, carving), drug paraphernalia, large debris (e.g. refrigerators, sofas, abandoned vehicles), and/or parties/large consumption of alcohol. Four percent of Occasional Use Sites and 20 percent of Well-used Sites bore evidence of aberrant behavior. The Well-used

Sites that were recorded as having abundant human waste also were recorded as having some or abundant litter, and also aberrant behavior.

2. TABLES

Table H-1. Characteristics of Dispersed Recreation Categories

	Characteristics
Occasional Use Sites:	<ul style="list-style-type: none"> • Ground vegetation flattened worn away only around fireplace or center of activity. • Some mineral soil exposure. • Small disturbed camp area (less than 50 ft²) • No user created structures. • None or small amounts of litter. <p><i>Example: Small gravel pullouts and individual camping sites.</i></p>
Well-used Sites	<ul style="list-style-type: none"> • Ground vegetation lost on most of the site, but humus and litter still present in all but a few areas. May be signs of obvious soil erosion. • Large mineral soil exposure. • Size of disturbed camp area is over 500 ft² • several fire rings. • Low to abundant litter and garbage (cans, paper, bottles, etc.). <p><i>Example: Area used for multiple camping sites, or large gravel pull out or quarry used for camping.</i></p>

Table H-2. Number of Dispersed Recreation Sites Tallied and Inventoried

	Number of Sites Tallied	Number of Sites Inventoried	Percent of Sites Inventoried
Occasional Use Sites	151	25	17%
Well-Used Sites	19	15	79%

Table H-3. Number of Inventoried Dispersed Recreation Sites in Proximity to Nearby Features

	Less Than 10 Feet	10-100 Feet	100-1000 Feet	Greater than 1000 Feet
Occasional Use Sites				
Trail	2	4	0	1
River	0	2	2	3
Lake	1	1	1	0
Denali Highway	24	0	0	1
Well-Used Sites				
Trail	2	6	0	1
River	0	1	0	1
Lake	0	0	1	0
Denali Highway	12	1	1	1

3. FIGURES

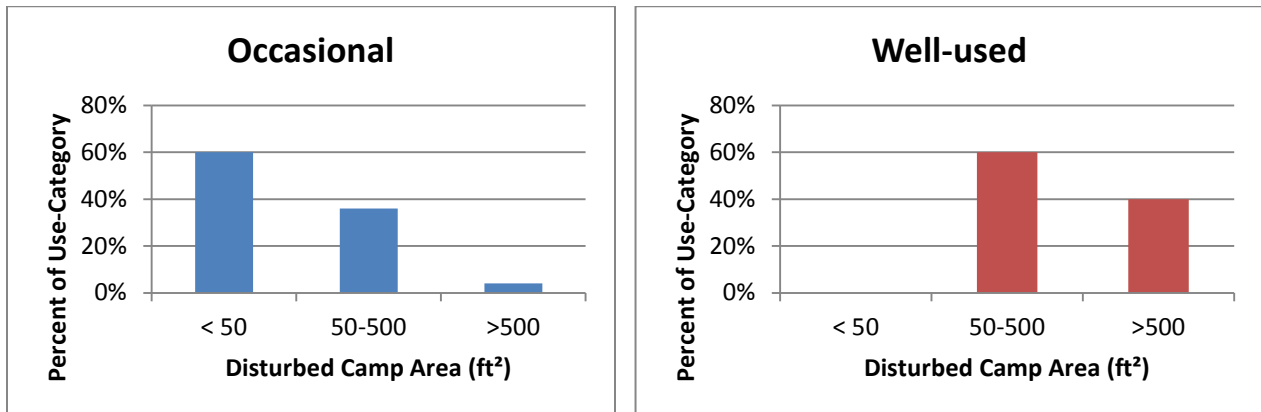


Figure H-1. Size of Disturbed Camp Area

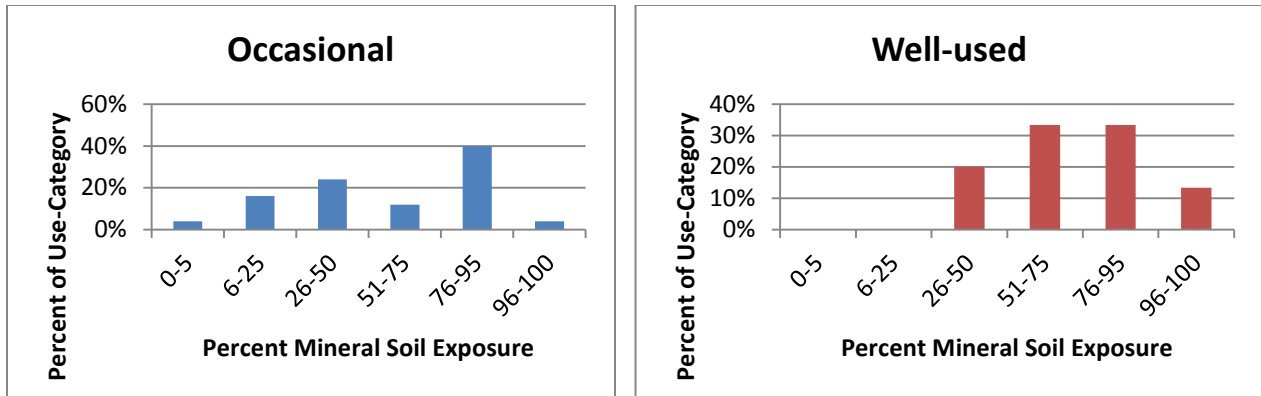


Figure H-2. Mineral Soil Exposure

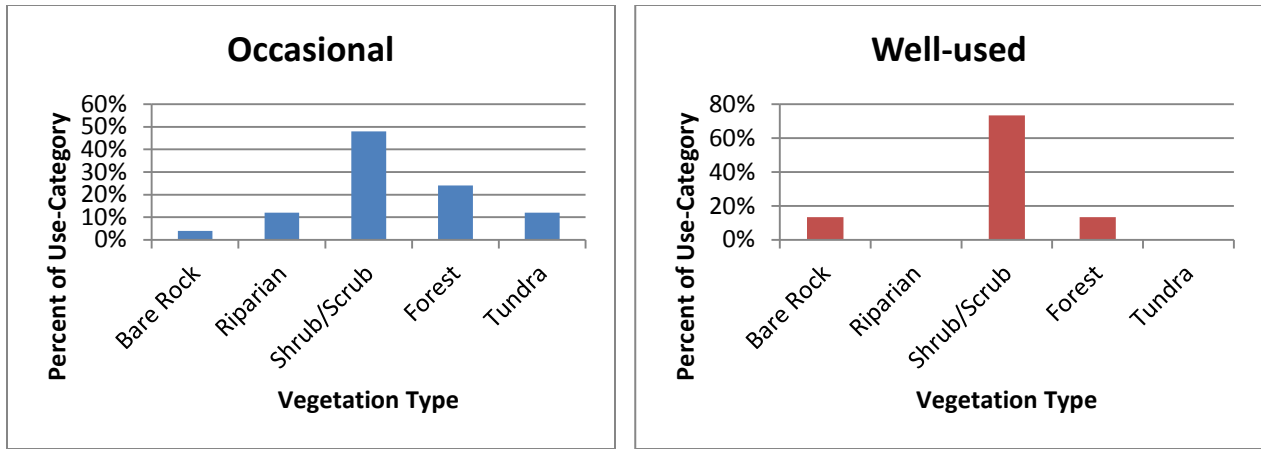


Figure H-3. Vegetation Type

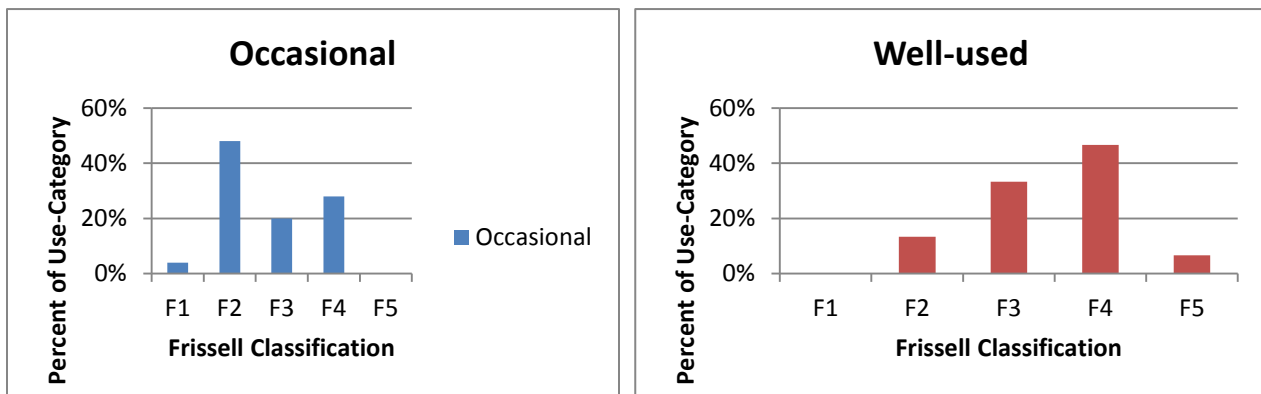


Figure H-4. Frissell Classification System

F1= ground vegetation flattened but not permanently damaged; F2=ground vegetation worn away around fire ring or center of activity; F3=ground vegetation lost on most of the site, but humus and litter still present in all but a few areas; F4=bare mineral soil widespread, tree roots exposed; F5=soil erosion obvious, trees reduced in vigor or dead

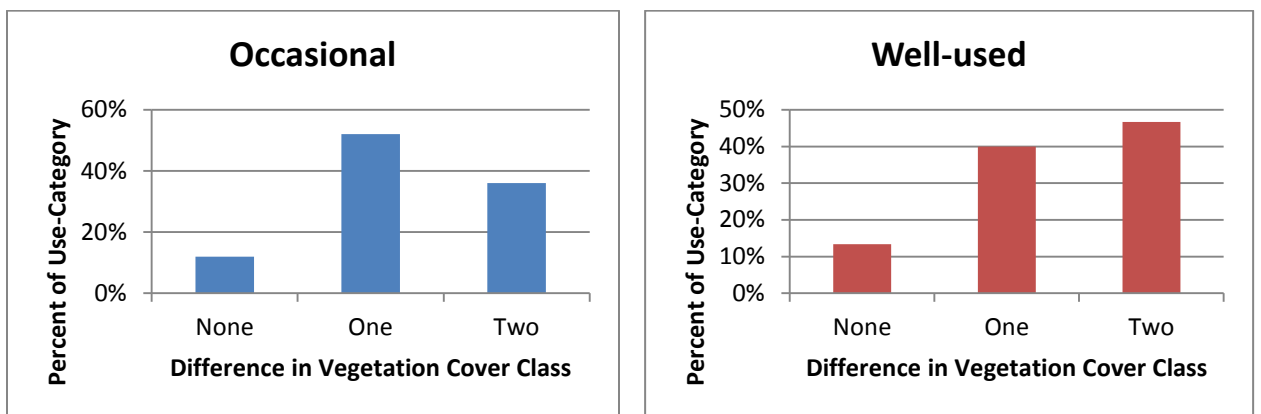


Figure H-5. Cole Classification System

C0= No difference in cover; C1=Difference in one cover class; C2=Difference in two or more cover classes

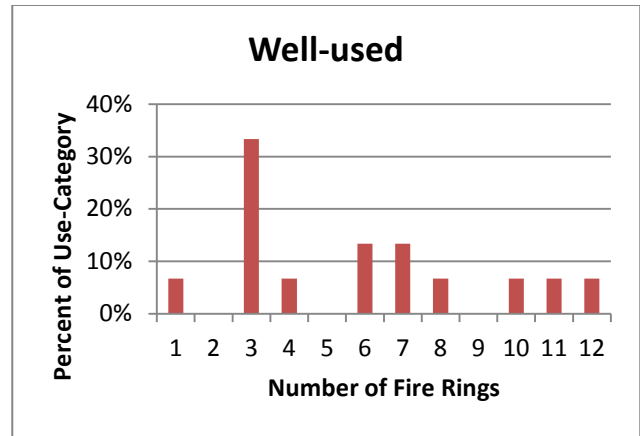
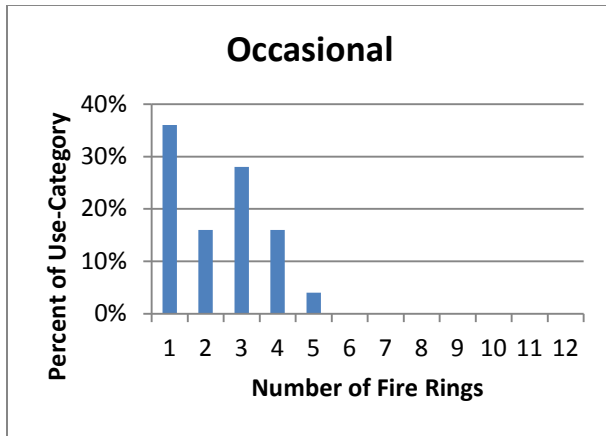


Figure H-6. Number of Fire Rings

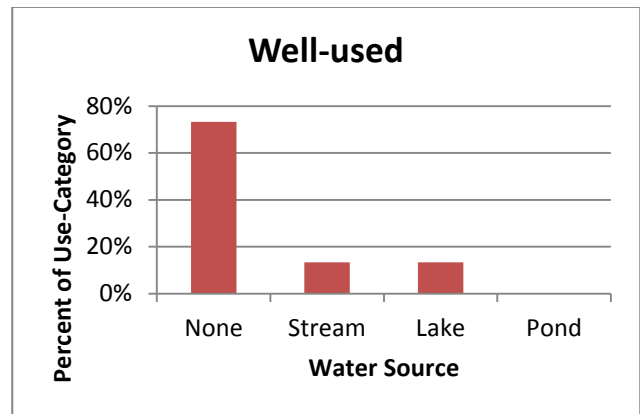
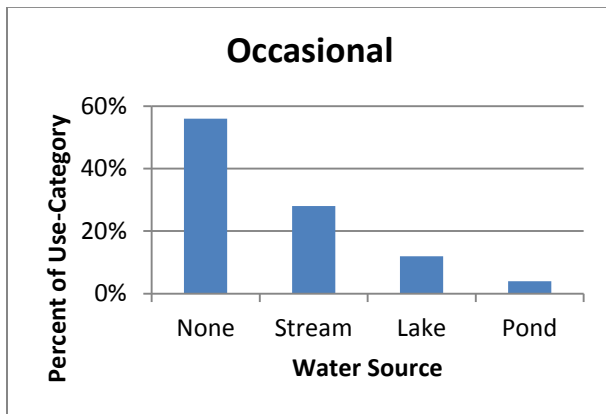


Figure H-7. Water Source

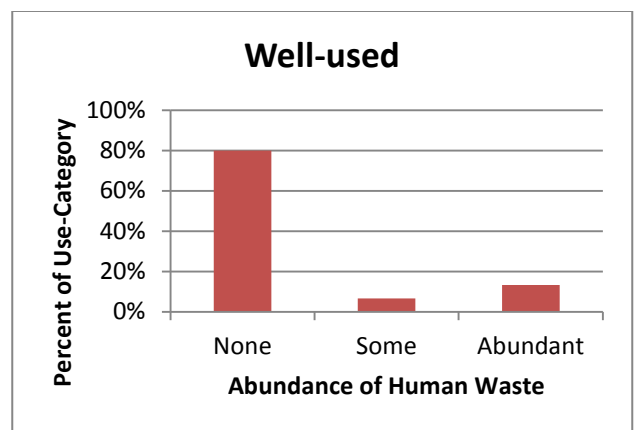
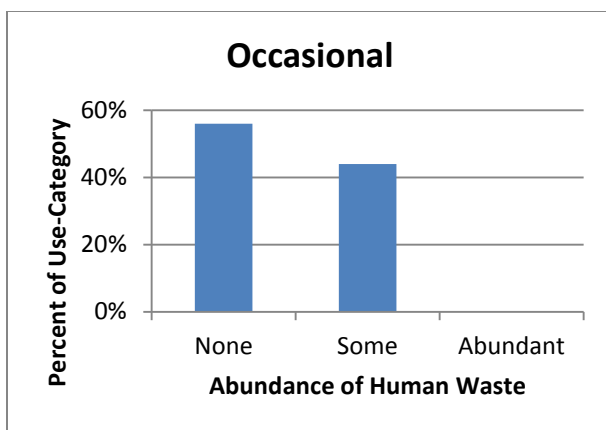


Figure H-8. Evidence of Human Waste

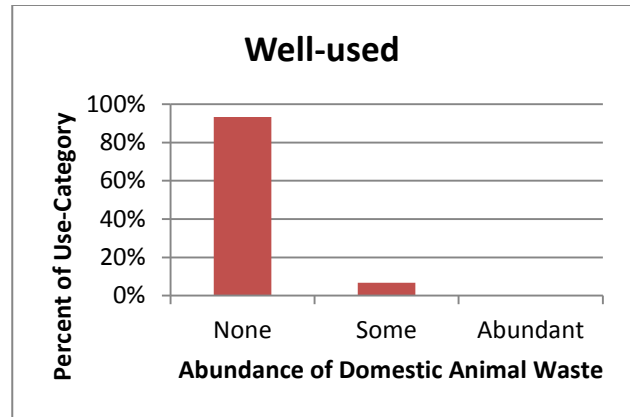
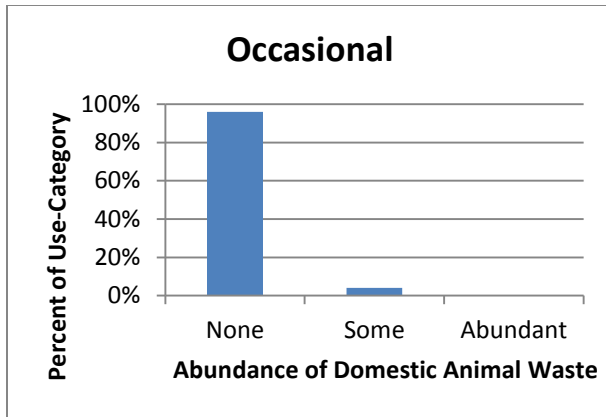


Figure H-9. Evidence of Animal Waste

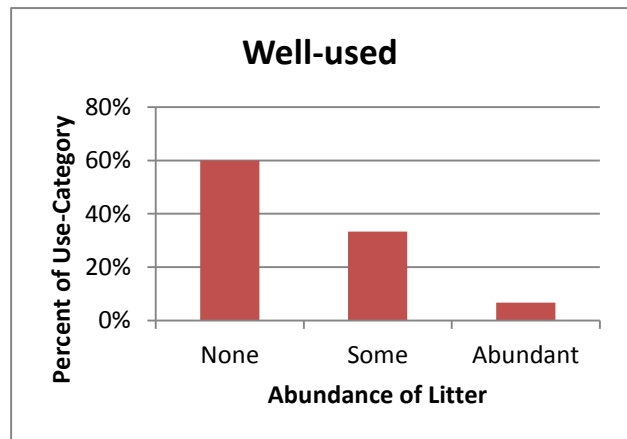
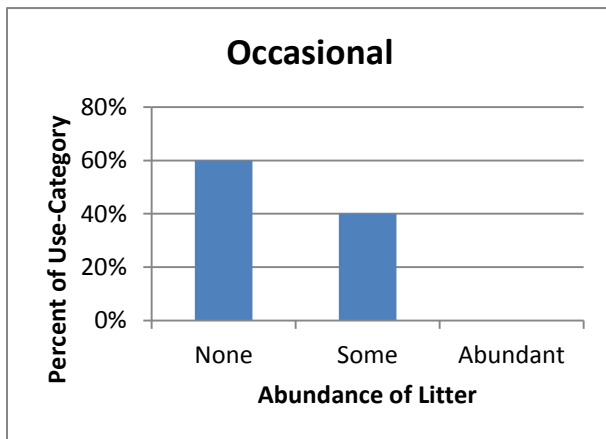


Figure H-10. Evidence of Litter

**Susitna-Watana Hydroelectric Project
(FERC No. 14241)**

Recreation Resources Study (12.5)

**Part A - Appendix I
Access Inventory**

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SUSITNA-WATANA HYDRO

Clean, reliable energy for the next 100 years.

Prepared by

URS Corporation

June 2014

Table I-1. Inventory of Access Points: The Road Network and Railroad

Access ID	Map	Name	Ownership	Maintained/Unmaintained ¹	ADA Accessible Features ^{2,3}	Number of Parking Spaces ⁴	Highway ⁵	Milepost	Direction from Highway	Designated Use ⁶	Destination (If Known)	Associated Recreation Facilities
Non-Motorized Use												
A7	Talkeetna/DSP/AKRR	Berry Picking access	ADNR	Unmaintained	No	8	PH	165.5	E	Undesignated	Berry picking, creek, dispersed recreation campsite.	
A8	Talkeetna/DSP/AKRR	Little Coal Creek access	ADNR	Maintained	Yes	39	PH	163.8	W	Hiking Trail	Kesugi Ridge from Little Coal Creek Trailhead.	Little Coal Creek Trailhead
A9	Talkeetna/DSP/AKRR	Ermine Hill Trailhead	ADNR	Maintained	No	9	PH	156.5	E	Undesignated	Kesugi Ridge from Ermine Hill Trailhead	Ermine Hill Trailhead
A10	Talkeetna/DSP/AKRR	Byers Lake Trail access	ADNR	Maintained	No	43	PH	147.0	E	Hiking Trail	Byers Lake and Kesugi Ridge	Byers Lake
A12	Talkeetna/DSP/AKRR	XY Trail	ADNR	Unmaintained	No	6	TS	12.0	E	Undesignated		
A13	Talkeetna/DSP/AKRR	Talkeetna Lakes access	MSB	Maintained	No	25	TS	12.0	E	Undesignated	X and Y Lakes greater trail system.	Talkeetna Lakes Park
A19	Talkeetna/DSP/AKRR	Tigger Lake Trailhead	Private	Unmaintained	No	0	TS	10.5	E	Undesignated	Talkeetna Lakes and greater trail system	Tigger Lake Trailhead
A23	Talkeetna/DSP/AKRR	Upper Troublesome Creek Trailhead	ADNR	Maintained	No	45	PH	137.7	E	Hiking Trail	Troublesome Creek Trail, connecting to Kesugi Ridge.	Upper Troublesome Creek Trailhead
A71	Denali Hwy East	MP 129.3 Trail	ADNR	Unmaintained	No	2	DH	29.4	S	Undesignated		
A75	Denali Hwy East	Rusty Lake Trail	State Selected	Unmaintained	No	10	DH	17.3	N	ATV Trail	Rusty Lake	Rusty Lake Trailhead
A81	Overview	Mendeltna RS2477	ADNR	Unmaintained	No	25	GH	152.0	N	Hiking Trail	Eureka trails system	Mendeltna Turnout
A88	Overview	Oshetna River access RS2477	Private	Unmaintained	No	20	GH	99.5	N	Undesignated	Oshetna River	
A90	Overview	Chickaloon River (RST 427)	State Selected	Unmaintained	No	0	GH	78.0	N	Undesignated	Chickaloon River	
A101	Talkeetna/DSP/AKRR	White Cabin in the Woods	AKRR	Unmaintained	No	0	AKRR	266.1	E	Undesignated	Private cabins	
A153	Overview	179.5 Pullout	ADNR	Maintained	No	20	PH	179.5	W	Fishing Access	Mile 180 Lake	
ATV Trail												
A3	Overview	Chulitna River access point	ADNR	Unmaintained	No	10	PH	185.0	W	Undesignated	Chulitna River	
A4	Overview	MP 177 access point	ADNR	Unmaintained	No	0	PH	177.0	E	Undesignated		
A5	Talkeetna/DSP/AKRR	Hurricane Gulch access	ADNR	Unmaintained	No	40	PH	174.5	W	Undesignated		
A6	Talkeetna/DSP/AKRR	MP 169.5 access	ADNR	Unmaintained	No	0	PH	169.5	W	Undesignated	Possibly Power Line Trail	
A11	Talkeetna/DSP/AKRR	Larsen Creek Trail access	Private	Unmaintained	No	20	TS	12.0	E	Undesignated	Larsen Creek Trail	
A14	Talkeetna/DSP/AKRR	Chase Trail access	ADNR	Maintained	No	45	TS	0.0	N	Undesignated	Chase Trail, Chase Community	Chase Trailhead
A22	Talkeetna/DSP/AKRR	Luthman Trailhead	ADNR	Maintained	No	5	TS	3.0	E	Undesignated	Montana Creek waterfall	Luthman Trailhead
A24	Talkeetna/DSP/AKRR	East West Trailhead	ADNR	Maintained	No	40	PH	121.5	E	Undesignated	East West Express, Chulitna Bluffs.	East-West Express Trailhead
A25	Talkeetna/DSP/AKRR	Rabideax Creek Trailhead	ADNR	Unmaintained	No	4	PH	105.7	W	Undesignated	Rabideax Creek trail	
A27	Denali Hwy West	Powerline Trail	BLM	Maintained	No	30	DH	134.1	S	Undesignated	Powerline Trail south	
A28	Denali Hwy West	Jack River Trail (17b)	Private	Unmaintained	No	8	DH	131.1	S	ATV Trail	Jack River Trail south	
A31	Denali Hwy West	Easement access at Edmonds Creek	BLM	Unmaintained	No	2	DH	122.4	S	Undesignated	Possibly Edmonds Creek	
A34	Denali Hwy West	MP 113.7 Trail	ADNR	Unmaintained	No	1	DH	115.6	S	Undesignated		
A35	Denali Hwy West	Seattle Creek Trail	ADNR	Maintained	No	2	DH	114.2	S	Undesignated	Seattle Creek Trail	
A36	Denali Hwy West	Seattle Creek 1	ADNR	Unmaintained	No	1	DH	112.6	S	Undesignated	Seattle Creek Trail south	
A37	Denali Hwy West	Seattle Creek 2	ADNR	Maintained	No	0	DH	112.2	S	Undesignated	Seattle Creek Trail south/ Deadmans Creek	
A38	Denali Hwy West	Brushkana Creek Trail	ADNR	Unmaintained	No	0	DH	107.2	N	Undesignated	Brushkana Creek Trail / Brushkana Campground	Brushkana Creek Campground
A39	Denali Hwy West	Upper Brushkana Creek Trail	ADNR	Unmaintained	No	0	DH	106.7	S	Undesignated	Unnamed lake and peak	Brushkana Creek Campground
A40	Denali Hwy West	Brushkana Creek Trailhead	BLM	Maintained	No	4	DH	105.2	N	ATV Trail	Brushkana Creek	Brushkana Creek Campground
A41	Denali Hwy West	MP 103.6	BLM	Unmaintained	No	0	DH	104.4	S	Undesignated		
A42	Denali Hwy West	100 Mile Trail South	ADNR	Maintained	No	0	DH	100.2	S	Undesignated		
A43	Denali Hwy West	100 Mile Trail North	ADNR	Unmaintained	No	0	DH	100.0	N	Undesignated	Possibly Monahan Flat	
A44	Denali Hwy West	99 Mile Trail	ADNR	Unmaintained	No	0	DH	99.6	S	Undesignated	Possibly Butte Lake	
A45	Denali Hwy West	Monahan Flat Trail	ADNR	Maintained	No	50	DH	94.5	N	ATV Trail	Monahan Flats	Alaska Range Interpretive Site

Access ID	Map	Name	Ownership	Maintained/Unmaintained ¹	ADA Accessible Features ^{2,3}	Number of Parking Spaces ⁴	Highway ⁵	Milepost	Direction from Highway	Designated Use ⁶	Destination (If Known)	Associated Recreation Facilities
A46	Denali Hwy West	Butte Lake Trail 1	ADNR	Unmaintained	No	0	DH	94.8	S	Undesignated	Butte Lake, Butte Creek	
A47	Denali Hwy West	Butte Lake Trail 2	ADNR	Unmaintained	No	40	DH	94.4	S	Undesignated	Butte Lake, Butte Creek	
A48	Denali Hwy West	MP 91.7 South Trailhead	ADNR	Unmaintained	No	0	DH	92.3	S	Undesignated		
A49	Denali Hwy West	MP 87.8 Trailhead	ADNR	Maintained	No	6	DH	88.3	S	Undesignated		
A50	Denali Hwy West	MP 87.6 South Trailhead	ADNR	Maintained	No	6	DH	88.1	S	Undesignated	Wickersham Creek	
A51	Denali Hwy East	RS2477 Trailhead	BLM	Unmaintained	No	4	DH	85.8	E	Undesignated	Susitna River	
A52	Denali Hwy East	Little Gorge Trail	BLM	Unmaintained	No	0	DH	83.2	W	Undesignated	East Fork Chulitna Creek.	
A53	Denali Hwy East	MP 80.7 South Trail	BLM	Unmaintained	No	5	DH	81.2	W	Undesignated	Wickersham Creek Trail, Butte Creek Trail	
A55	Denali Hwy East	Susitna South and Wickerham Creek Trailheads	BLM	Unmaintained	No	10	DH	80.5	S	Undesignated	Wickersham Creek and Susitna South trails	
A57	Denali Hwy East	Windy Creek Trail 2	BLM	Unmaintained	No	40	DH	78.6	N	Undesignated	Windy Creek Valley	
A58	Denali Hwy East	Windy Creek Trail 1	BLM	Unmaintained	No	0	DH	78.8	N	Undesignated	Windy Creek Valley	
A60	Denali Hwy East	Hatchet Lake	ADNR	Unmaintained	No	4	DH	68.2	S	Undesignated	Hatchet Lake	
A61	Denali Hwy East	Access to Parallel Trail and on to 60 Mile Trail	ADNR	Unmaintained	No	1	DH	62.1	S	Undesignated	Parallel Trail to 60-Mile Trail and Clearwater Creek	
A62	Denali Hwy East	Toilet Trailhead/Parallel Trail	ADNR	Unmaintained	No	30	DH	60.2	S	Undesignated	Parallel Trail to 60-Mile Trail and Clearwater Creek	
A63	Denali Hwy East	Parallel Trail East access	Private	Unmaintained	No	0	DH	57.8	S	Undesignated	Parallel Trail to 60-Mile Trail and Clearwater Creek	
A64	Denali Hwy East	Clearwater Creek Trail	ADNR	Maintained	No	30	DH	56.0	S	Undesignated	Clearwater Creek	Clearwater Creek Wayside
A65	Denali Hwy East	Clearwater Creek South Trail (east)	ADNR	Unmaintained	No	10	DH	0.0	S	Undesignated	Clearwater Creek, Round Top Trail	
A66	Denali Hwy East	48.8 Mile South Trail	ADNR	Unmaintained	No	0	DH	48.8	S	Undesignated		
A69	Denali Hwy East	Osar Lake Trail	ADNR	Maintained	No	10	DH	36.8	S	ATV Trail	Osar Lake	Osar Lake Trailhead
A70	Denali Hwy East	Maclaren Summit Trail	ADNR	Maintained	No	10	DH	36.8	N	ATV Trail	View of Maclaren Summit Valley and Maclaren Glacier	Maclaren Summit Trailhead
A72	Denali Hwy East	Landmark Gap South Trail	ADNR	Maintained	No	30	DH	24.9	S	ATV Trail	Tangle Lakes and Osar Lake	Landmark Gap South Trailhead
A73	Denali Hwy East	Landmark Gap Lake Trailhead	ADNR	Maintained	No	30	DH	24.7	N	ATV Trail		Landmark Gap Lake Trailhead
A76	Denali Hwy East	Swede Lake Trail	State Selected	Maintained	No	50	DH	16.2	S	ATV Trail	Swede Lakes, Alphabet Hills, middle fork of Gulkana River	Swede Lake Trailhead
A77	Overview	Middle Fork Trail	State Selected	Maintained	No	100	RH	169.5	W	ATV Trail	Middle fork of the Gulkana River	Middle Fork Trailhead
A82	Overview	RS2477 Trail Access MP 147	ADNR	Maintained	No	0	GH	147.0	N	ATV Trail	Slide Mountain, Eureka trails system, Lake Louise trails system	
A83	Overview	Slide Mountain MP 140 RS2477	ADNR	Maintained	No	15	GH	140.0	N	ATV Trail	Slide Mountain, Eureka trails system, Lake Louise trails system	
A84	Overview	MP 130	ADNR	Unmaintained	No	100	GH	130.0	N	Undesignated	Eureka trails system, Lake Louise trail system	
A85	Overview	Avedo Oil RS2477 Trail	ADNR	Unmaintained	No	2	GH	126.0	N	Undesignated	Nelchina River, Eureka trails system and Lake Louise trails system	
A87	Overview	Chickaloon-Knik-Nelchina Trailhead	ADNR	Maintained	Yes	18	GH	118.5	N	ATV Trail	Squaw Creek, Eureka trails system, Lake Louise trails system	Chickaloon-Knik-Nelchina Trailhead
A89	Overview	Purinton Creek Trailhead	ADNR	Unmaintained	No	30	GH	90.5	N	Undesignated	Boulder Creek and possibly Talkeetna River	Purinton Creek Trailhead
A91	Denali Hwy East	Glacier Gap Lake to Sevenmile Lake	ADNR	Maintained	No	5	DH	30.7	N	ATV Trail	Glacier Gap and Sevenmile Lake	Glacier Gap Lake to Sevenmile Lake Trailhead
A92	Talkeetna/DSP/AKRR	Chase Trail End	ADNR	Maintained	No	0	AKRR	235.9	E	Undesignated	Talkeetna	
A93	Talkeetna/DSP/AKRR	Chase End RR	AKRR	Maintained	No	0	AKRR	235.9	E	Undesignated	Chase Trail	
A94	Talkeetna/DSP/AKRR	RR MP 278.59	AKRR	Unmaintained	No	0	AKRR	278.6	E	Undesignated	Residential subdivision	
A96	Talkeetna/DSP/AKRR	The Davey's	Private	Maintained	No	0	AKRR	273.9	W	Undesignated	Summit Lake (winter only)	

Access ID	Map	Name	Ownership	Maintained/Unmaintained ¹	ADA Accessible Features ^{2,3}	Number of Parking Spaces ⁴	Highway ⁵	Milepost	Direction from Highway	Designated Use ⁶	Destination (If Known)	Associated Recreation Facilities
A97	Talkeetna/DSP/AKRR	Blue Tarp	AKRR	Maintained	No	0	AKRR	275.1	W	Undesignated	Summit Lake and dispersed recreation site	
A98	Talkeetna/DSP/AKRR	Blue Tarp 2	AKRR	Maintained	No	0	AKRR	275.1	E	Undesignated		
A99	Talkeetna/DSP/AKRR	Butterfly Flag	AKRR	Unmaintained	No	0	AKRR	273.5	E	Undesignated	Private cabins	
A100	Talkeetna/DSP/AKRR	Judy Marie	AKRR	Maintained	No	0	AKRR	268.8	E	Undesignated	Private cabins	
A105	Talkeetna/DSP/AKRR	Curry Airstrip South Trail	AKRR	Unmaintained	No	0	AKRR	0.0	E	Undesignated	Lane Creek, Upper Clear Creek	
Access Road												
A1	Denali Hwy West	Pass Creek	Native Selected	Unmaintained	No	3	PH	206.0	W	Undesignated		
A21	Talkeetna/DSP/AKRR	Birch Creek access point	ADNR	Unmaintained	No	6	TS	7.6	E	Undesignated		
A30	Denali Hwy West	MP 123.7 North Trail	ADNR	Unmaintained	No	5	DH	123.7	N	Undesignated	Possibly Nenana River	
A59	Denali Hwy East	Valdez Creek Road RST 295	ADNR	Maintained	No	10	DH	79.5	N	Vehicle	Valdez Creek road	
A67	Denali Hwy East	Maclaren River Road	ADNR	Maintained	No	4	DH	43.5	N	ATV Trail	Maclaren Glacier	
A86	Overview	MP 123.5 RS2477	ADNR	Unmaintained	No	5	GH	123.5	N	Undesignated	Table Mountain, Syncline Mountain, Eureka trails system, Lake Louise trail system	
A95	Talkeetna/DSP/AKRR	A-Frame, Chulitna	AKRR	Maintained	No	0	AKRR	273.9	E	Undesignated	East to Indian River	
A103	Talkeetna/DSP/AKRR	McWilliams-Gold Creek Trailhead	AKRR	Maintained	No	0	AKRR	263.9	E	Undesignated	Stephan Lake	
A104	Talkeetna/DSP/AKRR	Curry Quarry	AKRR	Maintained	No	0	AKRR	248.5	E	Undesignated	AKRR telecom site, Curry Quartz Quarry, Curry Landing Strip South Trail	
Airstrip												
A2	Denali Hwy West	Summit Airstrip	ADNR	Maintained	No	5	PH	0.0	E	Air Access		
A16	Talkeetna/DSP/AKRR	Talkeetna Airport	ADNR	Maintained	Yes ⁶	30	PH	0.0	E	Air Access		
A54	Denali Hwy East	Wickersham Creek Airstrip	BLM	Maintained	No	4	DH	80.6	W	Undesignated	Denali Highway area	
A79	Overview	Lake Louise Airstrip	ADNR	Maintained	No	10	LL	18.5	W	Airstrip	Lake Louise area	
Float Plane Landing												
A20	Talkeetna/DSP/AKRR	Fish Lake	Private	Unmaintained	No	4	TS	10.5	E	Air Access	Fish Lake	
A29	Denali Hwy West	Float Plane Lake	ADNR	Unmaintained	No	15	DH	126.9	S	Undesignated		
Boat Launch												
A17	Talkeetna/DSP/AKRR	Talkeetna Boat Launch	AKRR	Maintained	No	52	PH	0.0	E	Boat Launch	Talkeetna River	Talkeetna Boat Launch & Campground
A26	Talkeetna/DSP/AKRR	Parks Highway-Susitna River Bridge	ADNR	Unmaintained	No	100	PH	104.2	E	Undesignated	Susitna River	
A56	Denali Hwy East	Susitna River Boat Launch	BLM	Maintained	No	2	DH	79.8	S	Undesignated	Boat launch accesses the Susitna River	
A68	Denali Hwy East	Maclaren River Lodge Boat Launch	Private	Maintained	No	0	DH	42.1	S	Undesignated	Maclaren River	
A74	Denali Hwy East	Delta National Wild and Scenic River Wayside Boat Launch	BLM	Maintained	No	20	DH	21.7	S	ATV Trail	Upper Tangle Lakes and upper Tangle River	Delta National Wild & Scenic River Wayside
A78	Overview	MP 21 Lake Louise Road	Military	Maintained	No	25	LL	21.0	N	Boat Launch	Lake Louise, Tyone River, Tyone Lake	Lake Louise Boat Launch
A80	Overview	Lake Louise State Recreation Area Boat Launch	ADNR	Maintained	No	30	LL	17.5	E	Boat Launch	Lake Louise, Tyone River, Tyone Lake	Lake Louise State Recreation Area
A102	Talkeetna/DSP/AKRR	Gold Creek Trestle	AKRR	Unmaintained	No	0	AKRR	264.2	W	Undesignated	Talkeetna	
Train Stop												
A15	Talkeetna/DSP/AKRR	Train access	ADNR	Maintained	Yes ⁷	0	TS	14.0	E	Train Access	AK Railroad	

Access ID	Map	Name	Ownership	Maintained/Unmaintained ¹	ADA Accessible Features ^{2,3}	Number of Parking Spaces ⁴	Highway ⁵	Milepost	Direction from Highway	Designated Use ⁶	Destination (If Known)	Associated Recreation Facilities
A18	Talkeetna/DSP/AKRR	Train Depot	ADNR	Maintained	Yes ⁷	40	TS	14.0	E	Train Access	AK Railroad train	
A106	Talkeetna/DSP/AKRR	Curry Flag Stop	AKRR	Maintained	Yes ⁷	0	AKRR	248.5	W	Train Access	Curry Interpretive Trail	Curry Interpretive Walk

Note: Some locations may be on private lands; this study report is not intended to suggest that the recreating public is authorized to access these lands for recreation purposes.

1. Maintenance could occur by agency, organizations, and/or private citizens
2. ADA accessible features include toilets and walkways capable of being used by those with disabilities. No other ADA accessible features were encountered during the inventory.
3. Accessibility determined by the Architectural and Transportation Barriers Compliance Board; 36CFR1195 Architectural Barriers Act (ABA) Accessibility Guidelines for Outdoor Developed Areas; Federal Register Vol. 72, No. 118, June 2007
4. Estimated number of cars/trucks/SUVs that could fit into parking area
5. DH=Denali Highway; GH=Glenn Highway; PH=George Parks Highway; RH=Richardson Highway; LL=Lake Louise Road; TS=Talkeetna Spur Road; AKRR=Alaska Railroad
6. Identifies if a trail is managed and designed for a specific recreation use
7. Accessibility available with prior notification

Table I-2. Inventory of Access Points: Remote Plane Landing Sites

Access ID	Map	Name	Ownership
Airstrip			
A108	Overview	Gravel bar plane landing	BLM
A113	Overview	Sheffield's Airstrip	ADNR
A114	Overview	Airstrip	ADNR
A121	Overview	Airstrip	ADNR
A129	Denali Hwy East	Airstrip	Private
A130	Denali Hwy East	Airstrip	BLM
A131	Talkeetna/DSP/AKRR	Aircraft Landing	Private
A132	Overview	Aircraft Landing	BLM
A133	Overview	Aircraft Landing	Private
A135	Denali Hwy West	Golden North Airport	Private
A136	Denali Hwy West	Cantwell Airport	Private
A137	Denali Hwy West	Cantwell Landing Area	Private
A138	Denali Hwy West	Aircraft Landing	ADNR
A146	Overview	Airstrip	ADNR
A150	Denali Hwy East	Aircraft Landing	ADNR
Float Plane Landing			
A107	Denali Hwy East	River float plane landing	BLM
A109	Overview	Gunshot Lake float plane landing	ADNR
A110	Overview	BS Lake float plane landing	ADNR
A111	Overview	Coal Lake float plane landing	BLM
A112	Overview	River float plane landing	BLM
A115	Overview	Goose Bench Lake float plane landing	ADNR
A116	Overview	Clarence Lake float plane landing	Private
A117	Overview	Watana Lake float plane landing	ADNR
A118	Overview	Sally Lake float plane landing	BLM
A119	Overview	Big Lake float plane landing	ADNR
A120	Overview	Terrace Lake float plane landing	BLM
A122	Overview	Float plane landing	ADNR
A126	Overview	Running Bear Lake float plane landing	BLM
A127	Overview	Float plane landing	ADNR
A128	Overview	Caitlin float plane access	ADNR
A139	Overview	Kelly Lake float plane landing	ADNR
A140	Overview	Bear Lake float plane landing	ADNR
A141	Overview	Pork Chop Lake float plane landing	ADNR
A142	Denali Hwy East	Monsoon Lake float plane landing	ADNR
A143	Overview	John Lake float plane landing	ADNR
A144	Overview	Float plane landing	ANDR
A145	Overview	Rock Lake float plane landing	ADNR
A147	Overview	Crater Lake float plane landing	ADNR
A151	Overview	River Landing	BLM
A152	Overview	Lake Access	ADNR

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**Susitna-Watana Hydroelectric Project
(FERC No. 14241)**

Recreation Resources Study (12.5)

**Part A - Appendix J
Access Figures**

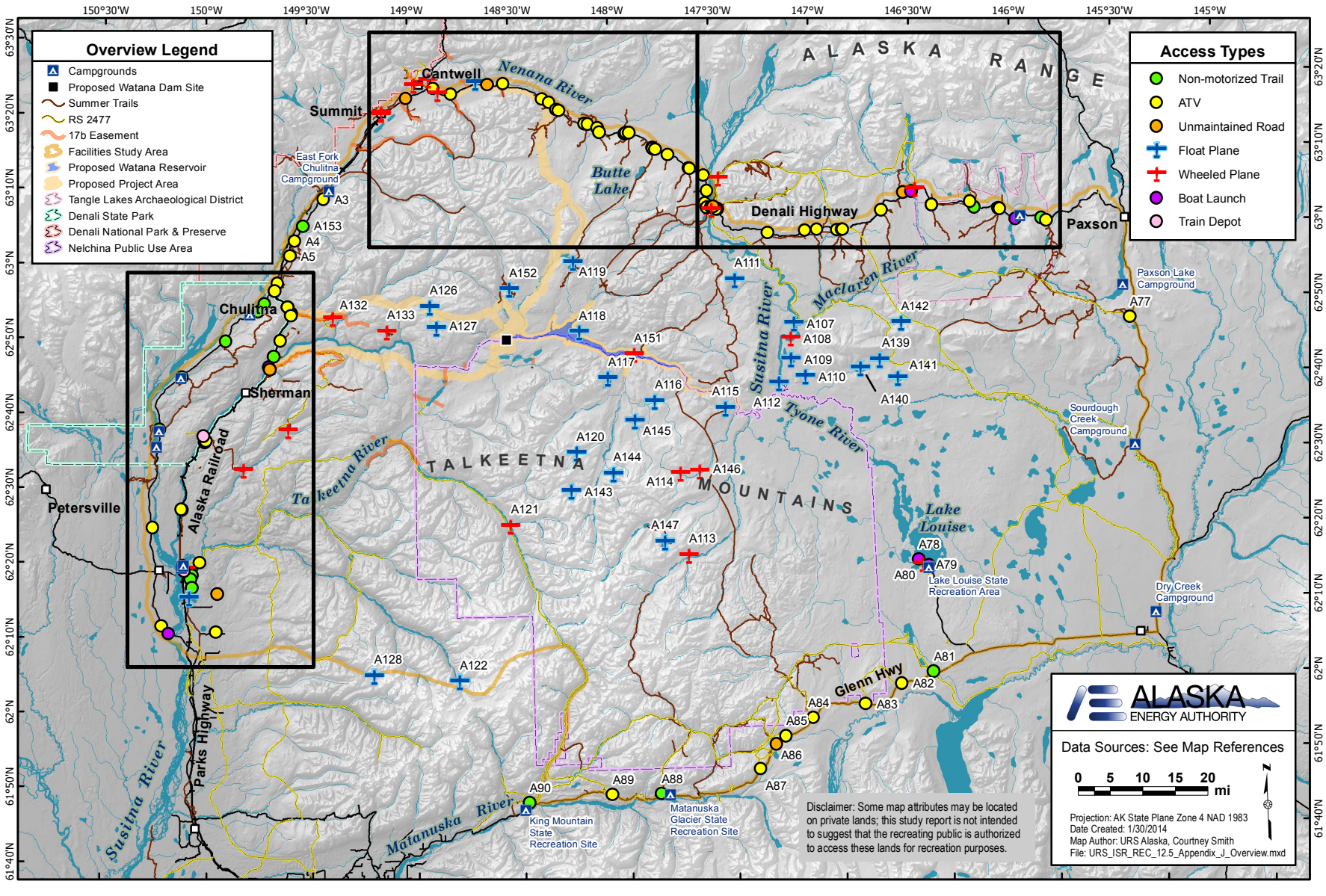
Initial Study Report

Prepared for
Alaska Energy Authority



Prepared by
URS Corporation

June 2014



Overview Legend

- Campgrounds
- Proposed Watana Dam Site
- Summer Trails
- RS 2477
- 17b Easement
- Facilities Study Area
- Proposed Watana Reservoir
- Proposed Project Area
- Tangle Lakes Archaeological District
- Denali State Park
- Denali National Park & Preserve
- Nelchina Public Use Area

Access Types

- Non-motorized Trail
- ATV
- Unmaintained Road
- Float Plane
- Wheeled Plane
- Boat Launch
- Train Depot

Chulitna Area

Map section showing the Chulitna River, Sherman, Chulitna, and Petersville. Features include the Alaska Railroad, Parks Highway, and various access points (A3, A4, A5, A153, A154, A155, A156, A157, A158, A159, A160, A161, A162, A163, A164, A165, A166, A167, A168, A169, A170, A171, A172, A173, A174, A175, A176, A177, A178, A179, A180, A181, A182, A183, A184, A185, A186, A187, A188, A189, A190).

Denali Highway Area

Map section showing the Denali Highway, Summit, Cantwell, and Paxson. Features include the Nenana River, Butte Lake, and various access points (A111, A112, A113, A114, A115, A116, A117, A118, A119, A120, A121, A122, A123, A124, A125, A126, A127, A128, A129, A130, A131, A132, A133, A134, A135, A136, A137, A138, A139, A140, A141, A142, A143, A144, A145, A146, A147, A148, A149, A150).

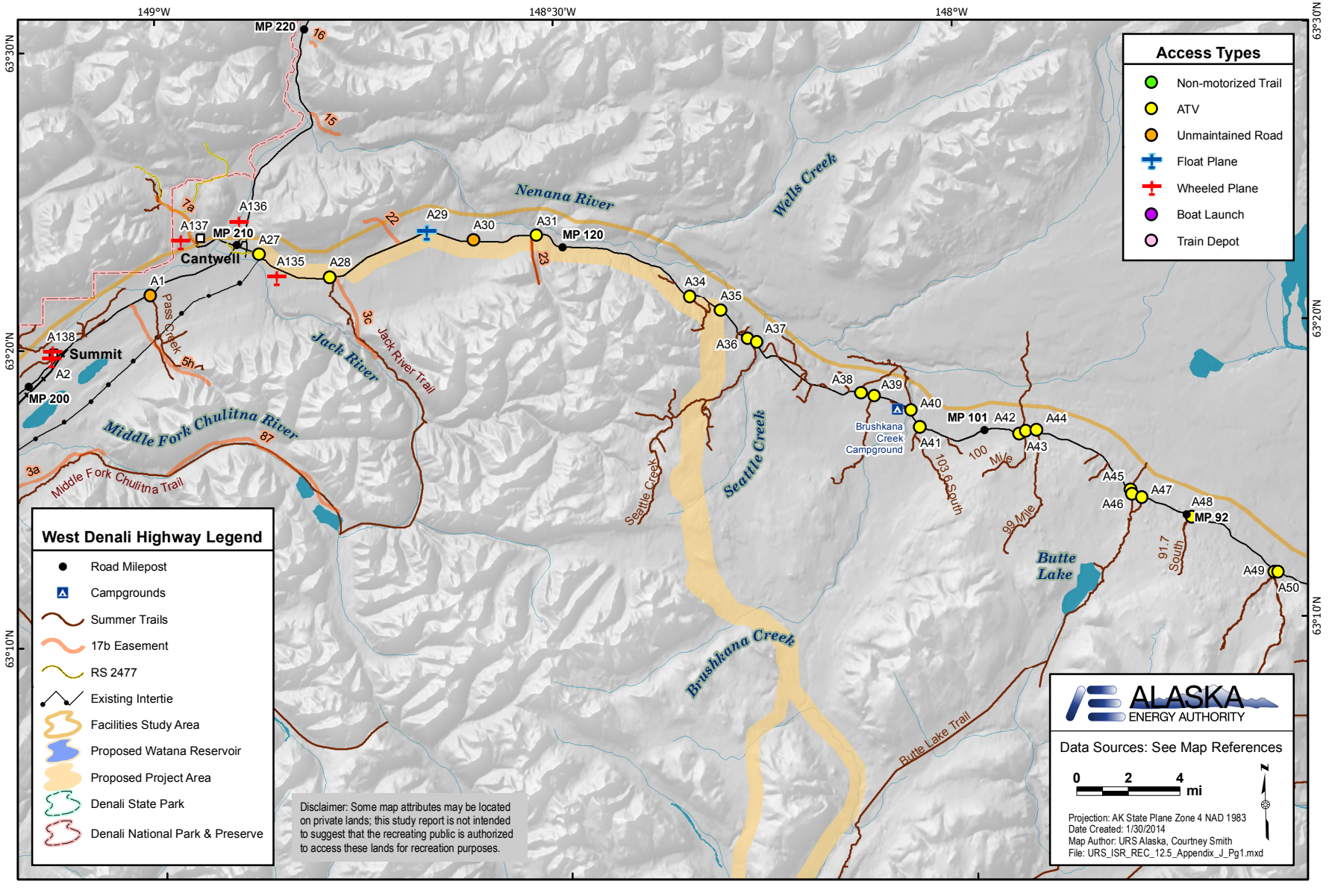
ALASKA ENERGY AUTHORITY

Data Sources: See Map References

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Projection: AK State Plane Zone 4 NAD 1983
 Date Created: 1/30/2014
 Map Author: URS Alaska, Courtney Smith
 File: URS_ISR_REC_12.5_Appendix_J_Overview.mxd

Disclaimer: Some map attributes may be located on private lands; this study report is not intended to suggest that the recreating public is authorized to access these lands for recreation purposes.



Access Types

- Non-motorized Trail
- ATV
- Unmaintained Road
- + Float Plane
- + Wheeled Plane
- Boat Launch
- Train Depot

West Denali Highway Legend

- Road Milepost
- ▲ Campgrounds
- ~ Summer Trails
- ~ 17b Easement
- ~ RS 2477
- - Existing Intertie
- ~ Facilities Study Area
- ~ Proposed Watana Reservoir
- ~ Proposed Project Area
- ~ Denali State Park
- ~ Denali National Park & Preserve

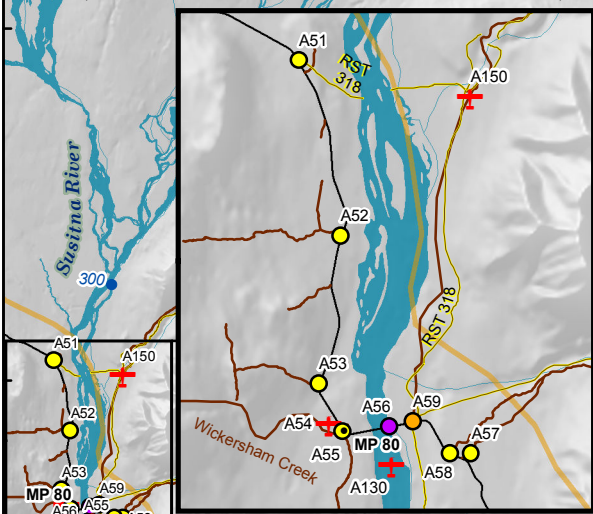
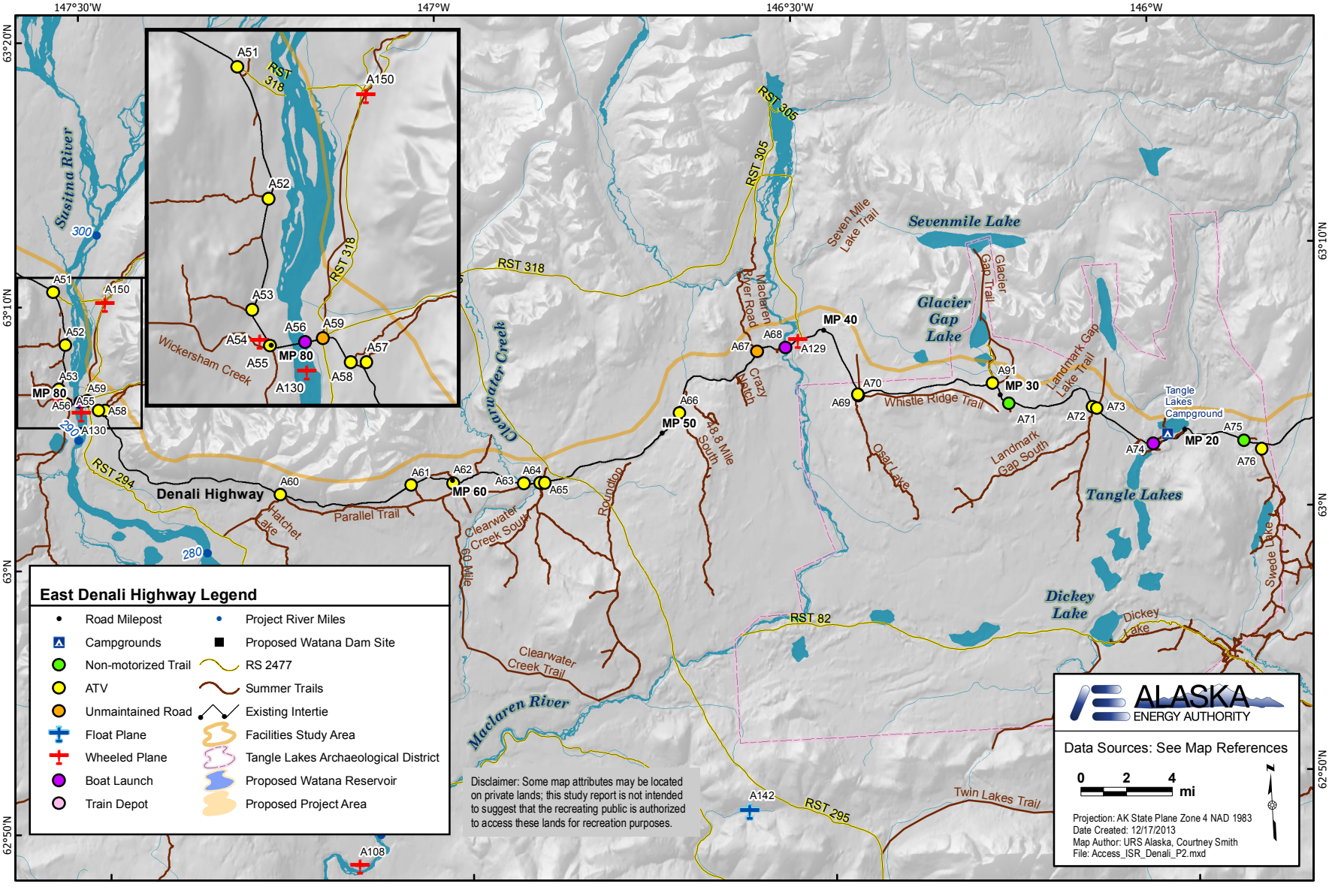
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ALASKA ENERGY AUTHORITY

Data Sources: See Map References

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Projection: AK State Plane Zone 4 NAD 1983
 Date Created: 1/30/2014
 Map Author: URS Alaska, Courtney Smith
 File: URS_ISR_REC_12.5_Appendix_J_Pg1.mxd



East Denali Highway Legend

- Road Milepost
- Project River Miles
- ▲ Campgrounds
- Proposed Watana Dam Site
- Non-motorized Trail
- ATV
- Unmaintained Road
- ✚ Float Plane
- ✚ Wheeled Plane
- Boat Launch
- Train Depot
- RS 2477
- Summer Trails
- Existing Intertie
- Facilities Study Area
- Tangle Lakes Archaeological District
- Proposed Watana Reservoir
- Proposed Project Area

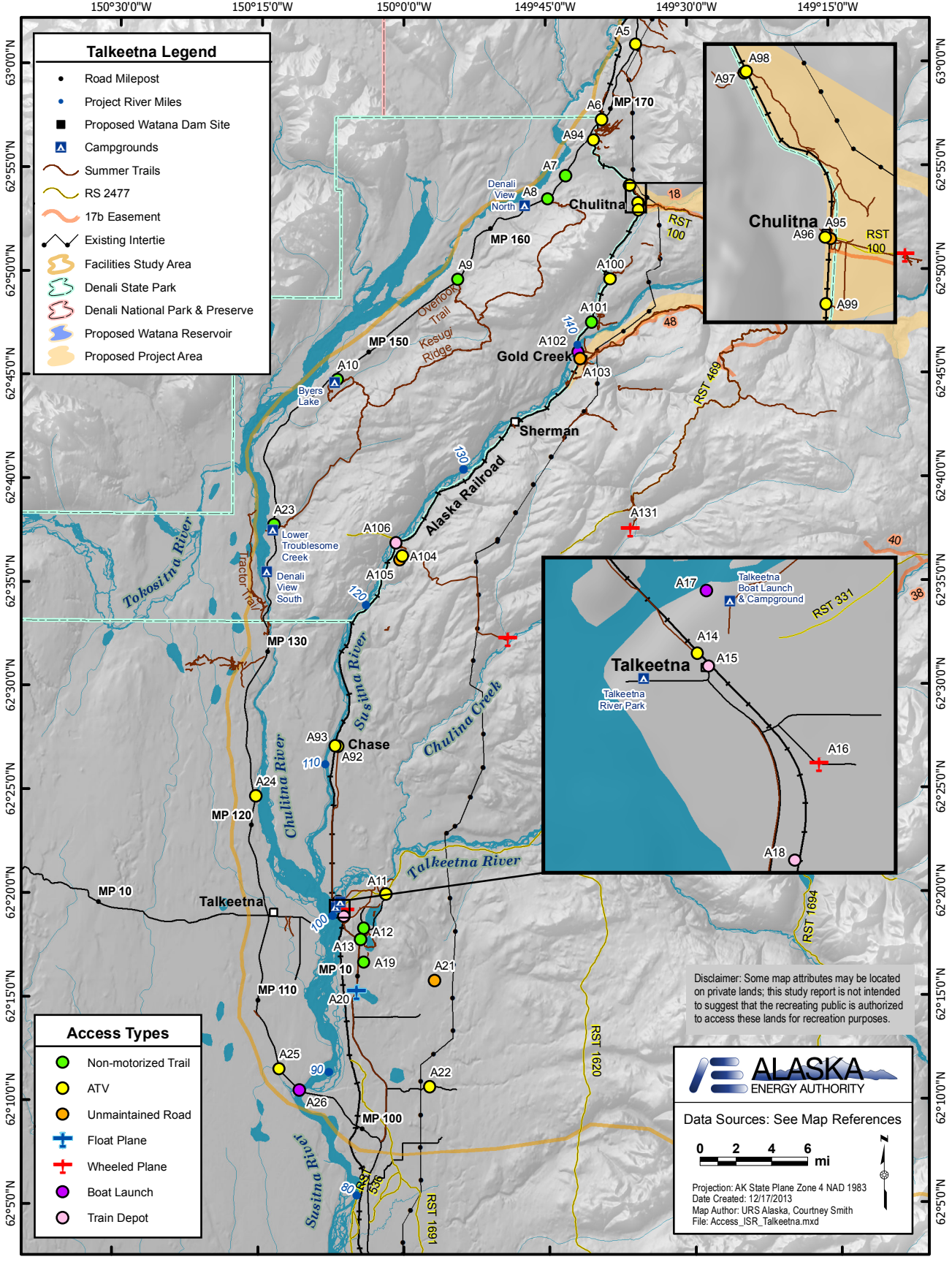
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ALASKA ENERGY AUTHORITY

Data Sources: See Map References

0 2 4 mi

Projection: AK State Plane Zone 4 NAD 1983
 Date Created: 12/17/2013
 Map Author: URS Alaska, Courtney Smith
 File: Access_ISR_Denali_P2.mxd



Talkeetna Legend

- Road Milepost
- Project River Miles
- Proposed Watana Dam Site
- ▲ Campgrounds
- Summer Trails
- RS 2477
- 17b Easement
- Existing Intertie
- Facilities Study Area
- Denali State Park
- Denali National Park & Preserve
- Proposed Watana Reservoir
- Proposed Project Area

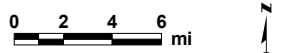
Access Types

- Non-motorized Trail
- ATV
- Unmaintained Road
- ✚ Float Plane
- ✚ Wheeled Plane
- Boat Launch
- Train Depot

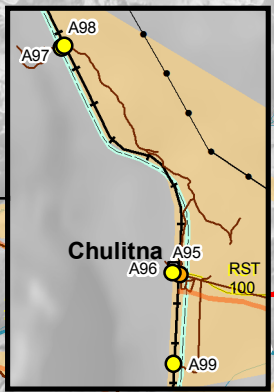
Disclaimer: Some map attributes may be located on private lands; this study report is not intended to suggest that the recreating public is authorized to access these lands for recreation purposes.



Data Sources: See Map References



Projection: AK State Plane Zone 4 NAD 1983
 Date Created: 12/17/2013
 Map Author: URS Alaska, Courtney Smith
 File: Access_ISR_Talkeetna.mxd



Map References:

Data Source	Date	File Name and Description
URS Corporation	11/18/2013	REC_Facilities: Recreation facilities including campgrounds, trailheads, boat launches, and day use areas.
URS Corporation	11/19/2013	REC_Access: Recreation access locations - access to lakes, trails, rivers, etc.
URS Corporation	11/19/2013	REC_RS2477: Easements with a State of Alaska RS 2477 designation.
URS Corporation	6/4/013	REC_17b_Easements: Easements with an ANCSA 17(b) designation.
URS Corporation	11/20/2013	REC_Summer_Trails: Trail compilation for the Study Area. From URS digitized trails, ADNRS USGS 63,360 Trailset, BLM trails, MSB trails, and executive interviews.
URS Corporation	6/4/013	REC_StudyArea_Facilities: The spatial extent of the study area for existing public recreation facilities and carrying capacity analysis.
URS Corporation	11/20/2013	REC_Existing_Intertie: Route of the Alaska Intertie that travels through the study area.
BLM	10\28\2013	BLM_TLAD: Boundary of the Tangle Lakes Archaeological District.