

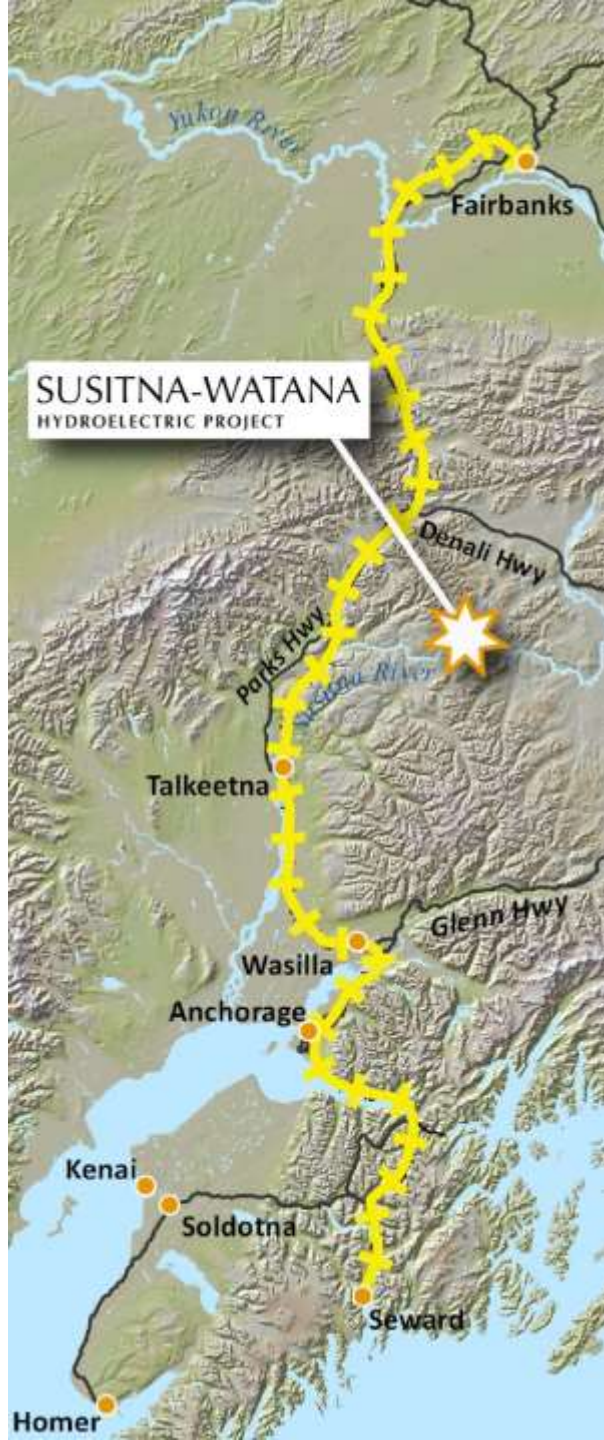


# SUSITNA-WATANA HYDROELECTRIC PROJECT

## Recreation Resources Study Agency Consultation Meeting

May 1, 2014

Prepared by URS Corp.



# Overview of Recreation Plans for Second Study Year

Subject	Plans for Second Study Year
Regional Rec. Analysis	Continue review of plans as identified
Trails	Complete mapping of trails at 1:24,000 ; collect secondary data; finalize 2015
Rec. Use Areas	Develop ROS/NRRS framework; conduct analysis for existing conditions; finalize 2015
Rec. Supply, Demand, Use	Survey results will provide use and demand; complete analysis in 2015
Rec. Facilities	Collect existing recreation facility data from managing agencies; finalize 2015
Dispersed Rec. Areas	Determine known “well-used” sites/areas; finalize 2015
Carrying Capacity	Develop carrying capacity framework for existing recreation; finalize 2015
Existing Survey Data Collection	Assessed data; complete in 2014
Secondary Data	Continue review of data as identified
Incidental Obs. Survey	Continue review of data as identified
Intercept Surveys/Tallies	Cleaning and processing data/analysis (modeling); complete in 2014
Mail Survey	Cleaning and processing data/analysis (modeling); complete in 2014
Executive Interviews	Complete remaining interviews; complete in 2014

# Regional Recreation Analysis

*No modification of RSP Methods proposed*

## During 2013

- Collected and analyzed exiting and proposed plans related to recreation in Recreation Use Study Area
- Documented the following information in ISR:
  - Recreation goals
  - Objectives
  - Standards
  - Management principles
  - Recommendations
  - Public Safety
  - Recreation facilities
  - Recreation trends and challenges
  - Upcoming changes
  - Land uses

## Second Study Year

- Continued review of plans identified
  - Delta River Special Recreation Management Area Plan
  - Gulkana National Wild River: ROD and Final EA River Management Plan
  - State General Allowable Uses (GAU)

# Trails

*No modification of RSP Methods proposed*

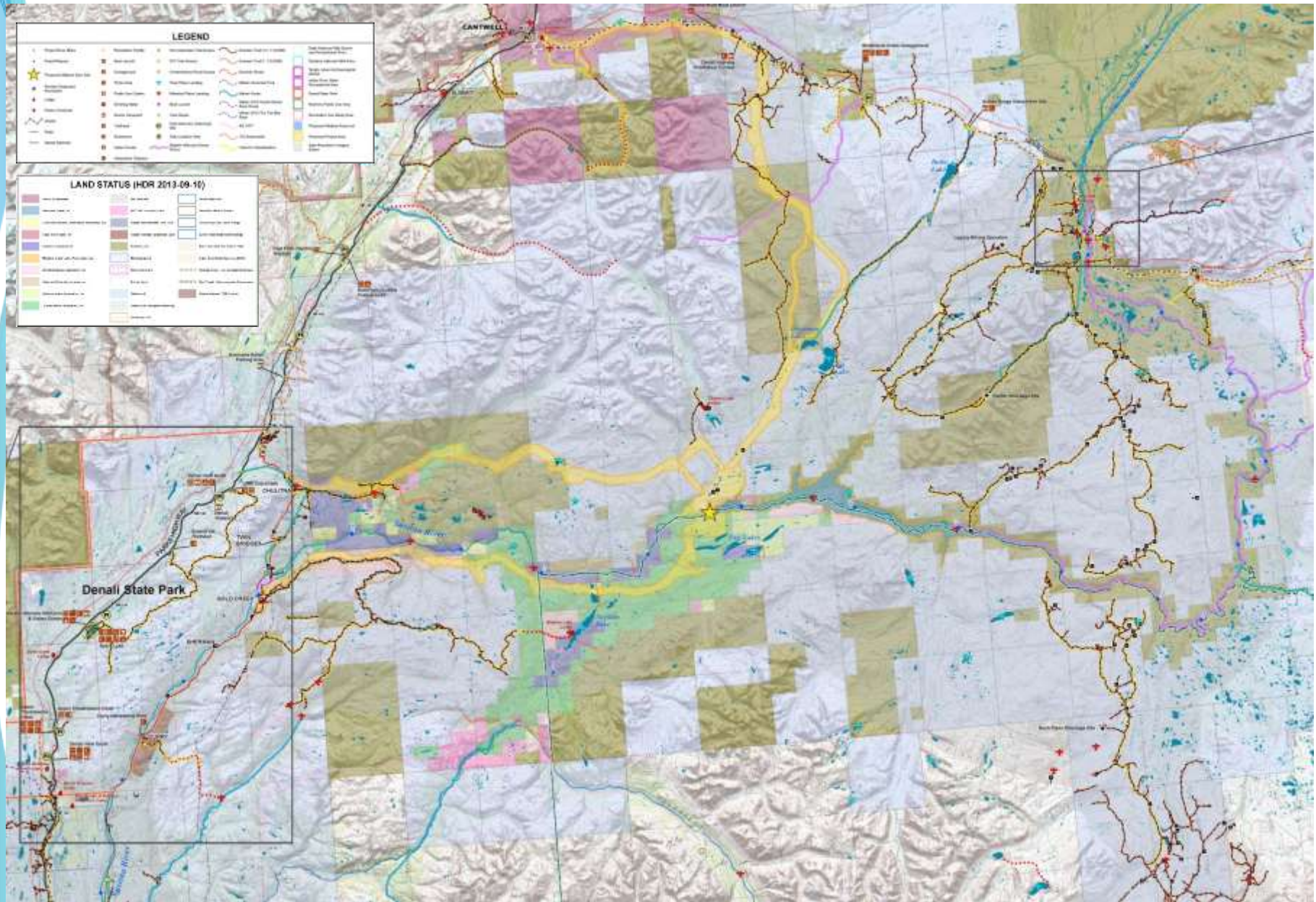
## During 2013

- Collected trail/route data from variety of sources
- Identified 17(b) easements and RS2477 trails
- Categorized trails by formal/informal use and seasonality
- Began digitizing trails using imagery, >1:24,000 scale

## Second Study Year

- Complete digital mapping of trails (>1:24,000)
- Complete collection of secondary trail data from agencies
- Begin trail classification (USFS / informal ATV)
- Field verification and complete classification

# Trails Mapping



# Recreation Use Areas

*No modification of RSP Methods proposed*

## During 2013

- Identified and described special resource use designations
  - Generally Allowed Uses (GAUs)
  - Denali State Park
  - Delta NWS Recreation River
  - Gulkana National Wild River
  - Nelchina Public Use Area
  - Tangle Lakes Archaeological District
  - George Parks Highway Scenic Byway
- Developed draft of NRRS/ROS criteria for Recreation Use Study Area

## Second Study Year

- Conduct NRRS/ROS analysis for existing conditions and post-project conditions

# Recreation Supply, Demand, and Use

## *Proposed Modification of RSP Methods*

- *State-issued Tier I and Tier II subsistence permits included in analysis of hunting and trapping effort*
  - *Users predominantly from urban areas and not covered by Subsistence (14.5) household surveys*
  - *Captures recreation value of Tier I and Tier II hunting*

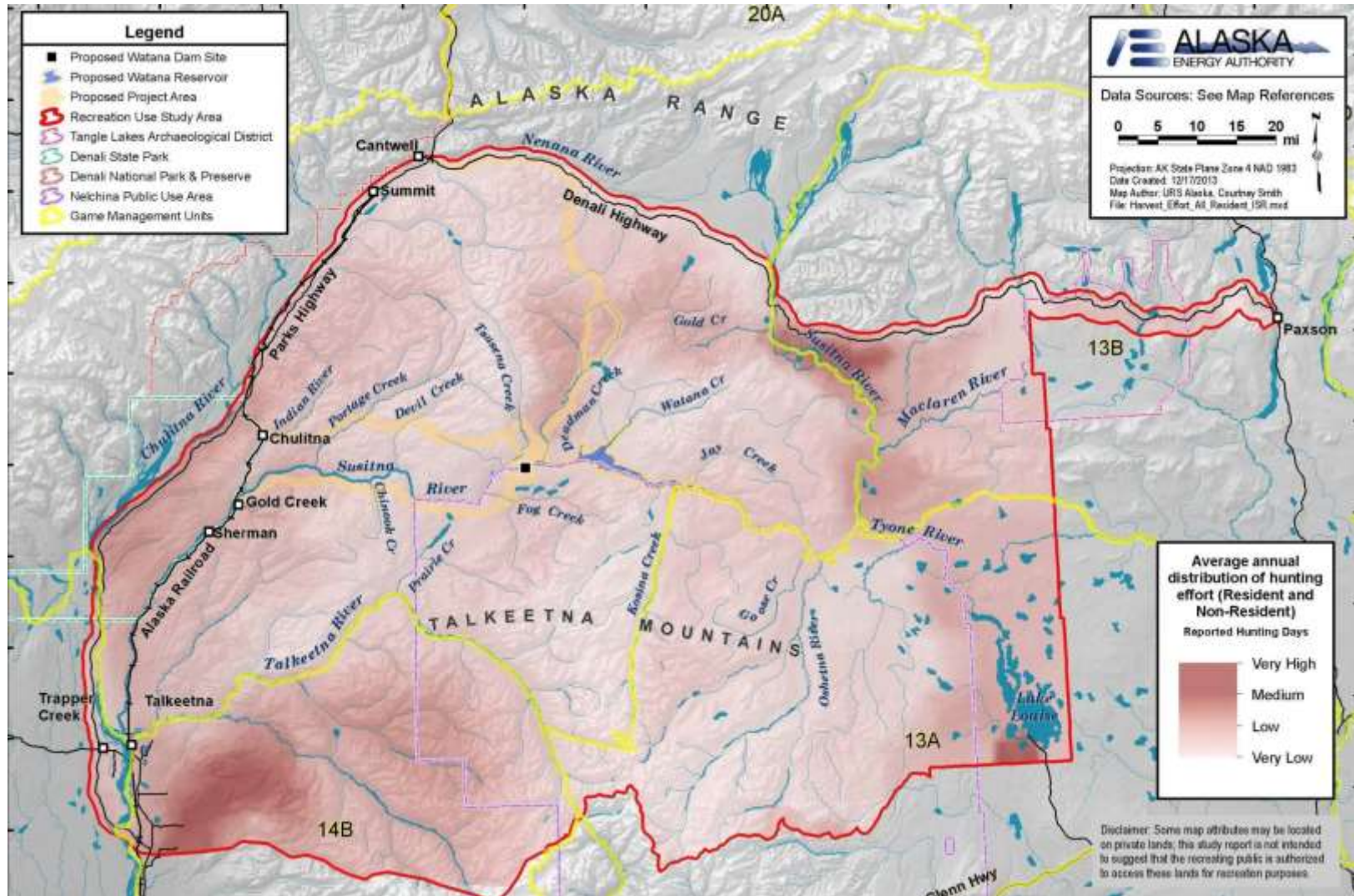
## During 2013

- Reviewed BLM, ADF&G, and ADNR data on campgrounds, boat launches, trails and observed recreation activities
- Analyzed ADF&G wildlife harvest report data (2003-11)
- Analyzed ADF&G sport fishing survey database (2003-11)
- South Denali Visitor Center Market Analysis
- Alaska Railroad Ridership
- Descriptions of non-consumptive uses (i.e., snowmachining, Nordic Skiing, camping, etc.)

## Second Study Year

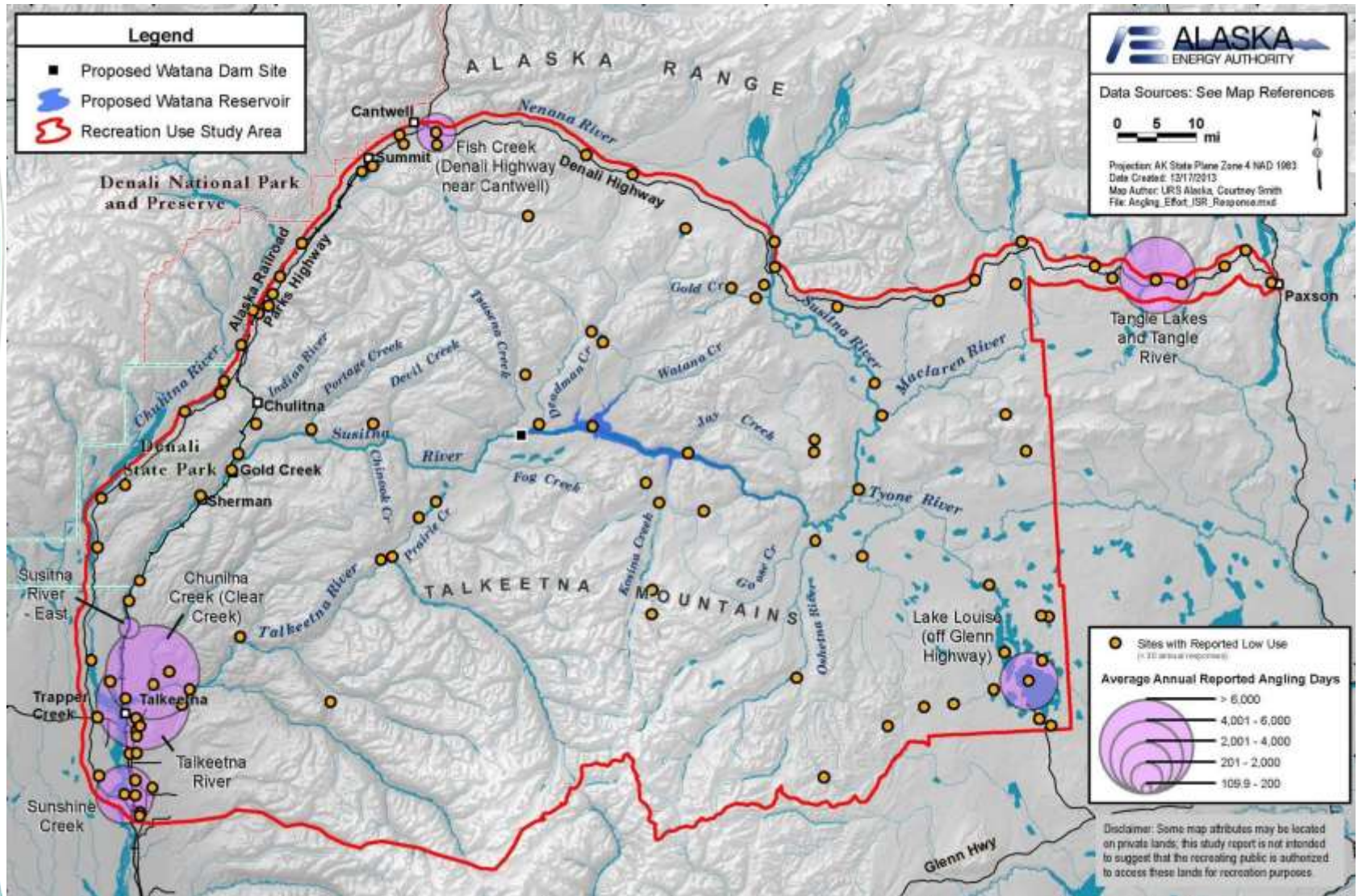
- Update to include new ADF&G and other agency data as available
- Incorporate recreation survey and tally data into analysis

# Distribution of Reported Hunting/Trapping Effort





# Average Number of Angler Days per Year, per Stream



# Recreation Facilities

*No modification of RSP Methods proposed*

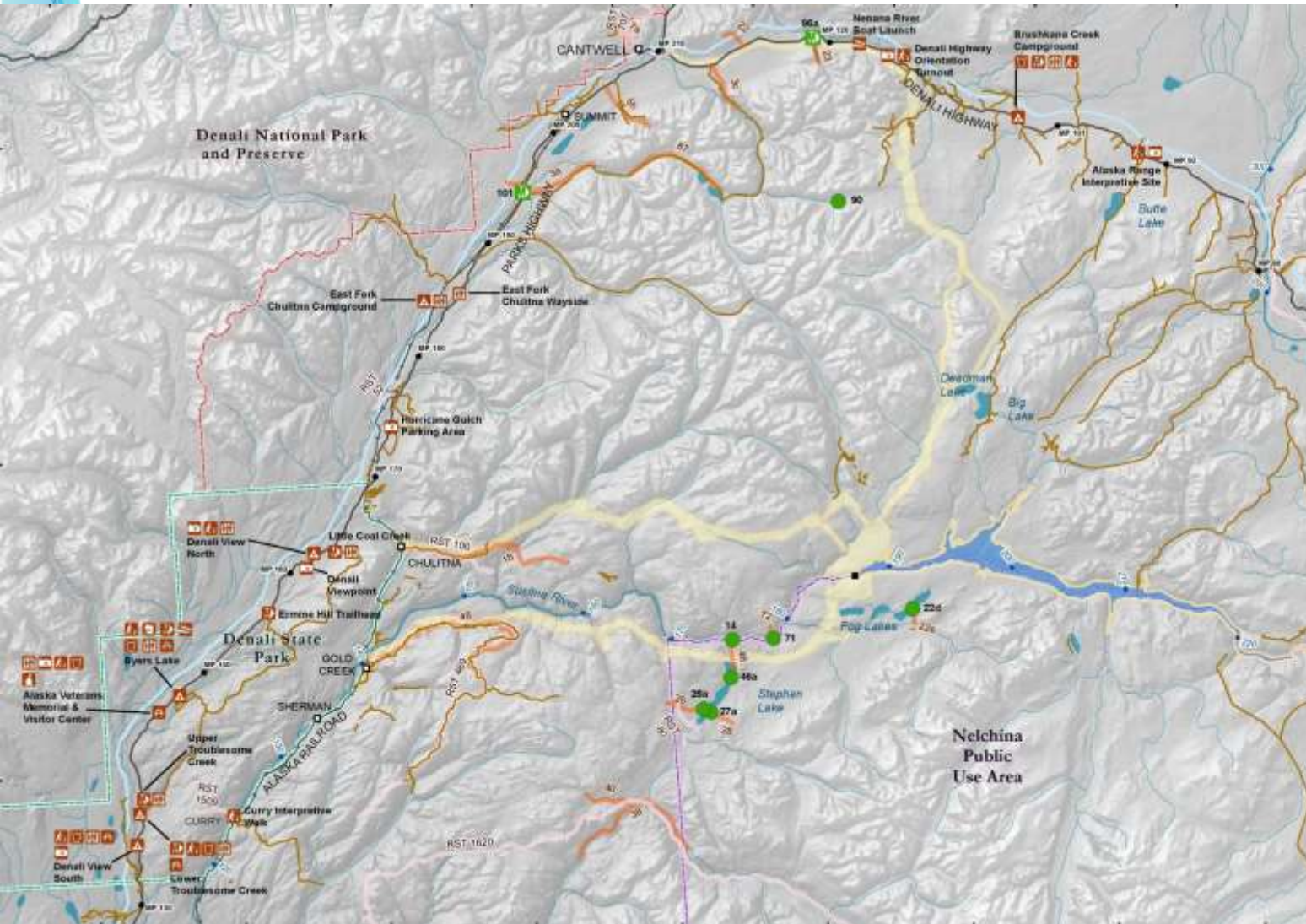
## During 2013

- Mapped and inventoried developed public recreation facilities
- Reviewed published information, agency consultation
- Conducted initial field investigations, collected information on:
  - Facility description
  - signage
  - fees
  - managing agency
  - condition
  - capacity

## Second Study Year

- Complete collection of secondary facilities data from agencies
  - Operating costs
  - seasonality
  - snow removal
  - ADA
  - proposed facilities
- Inventory of relevant private facilities
- Complete field inventory of facilities
- Develop carrying capacity framework

# Recreation Facilities – W. Denali Hwy

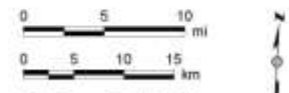


### Legend

- 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
- Proposed Wetans Dam Site
- Proposed Wetans Reservoir
- Proposed Project Area
- Denali State Park
- 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

Disclaimer: This map identifies sites to be located on private lands; this study report is not intended to suggest that the remaining public is authorized to access those lands for recreation purposes.

### West Denali Highway



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



# Dispersed Recreation

*No modification of RSP Methods proposed*

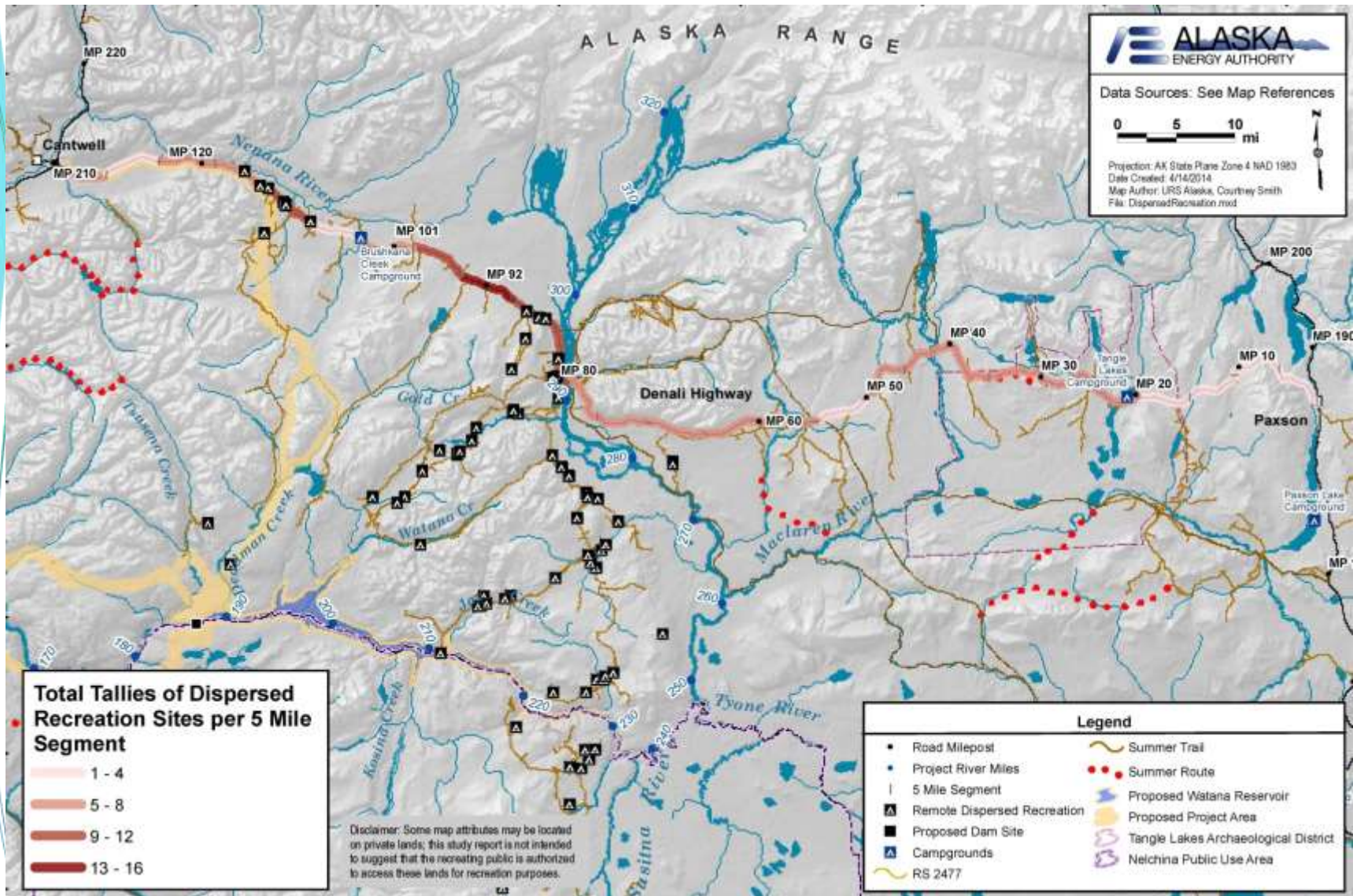
## During 2013

- Mapped and inventoried dispersed recreation use area and sites
  - Intensive inventory on Denali Highway for dispersed camping sites
  - Inventoried access points throughout the Recreation Facilities Study Area (includes formal and informal)
- Inventoried disturbed camp area, soil exposure, surrounding vegetation type, impacts to vegetation, fire rings, water source, liter/waste
- Utilized the Frissel and Cole classification systems

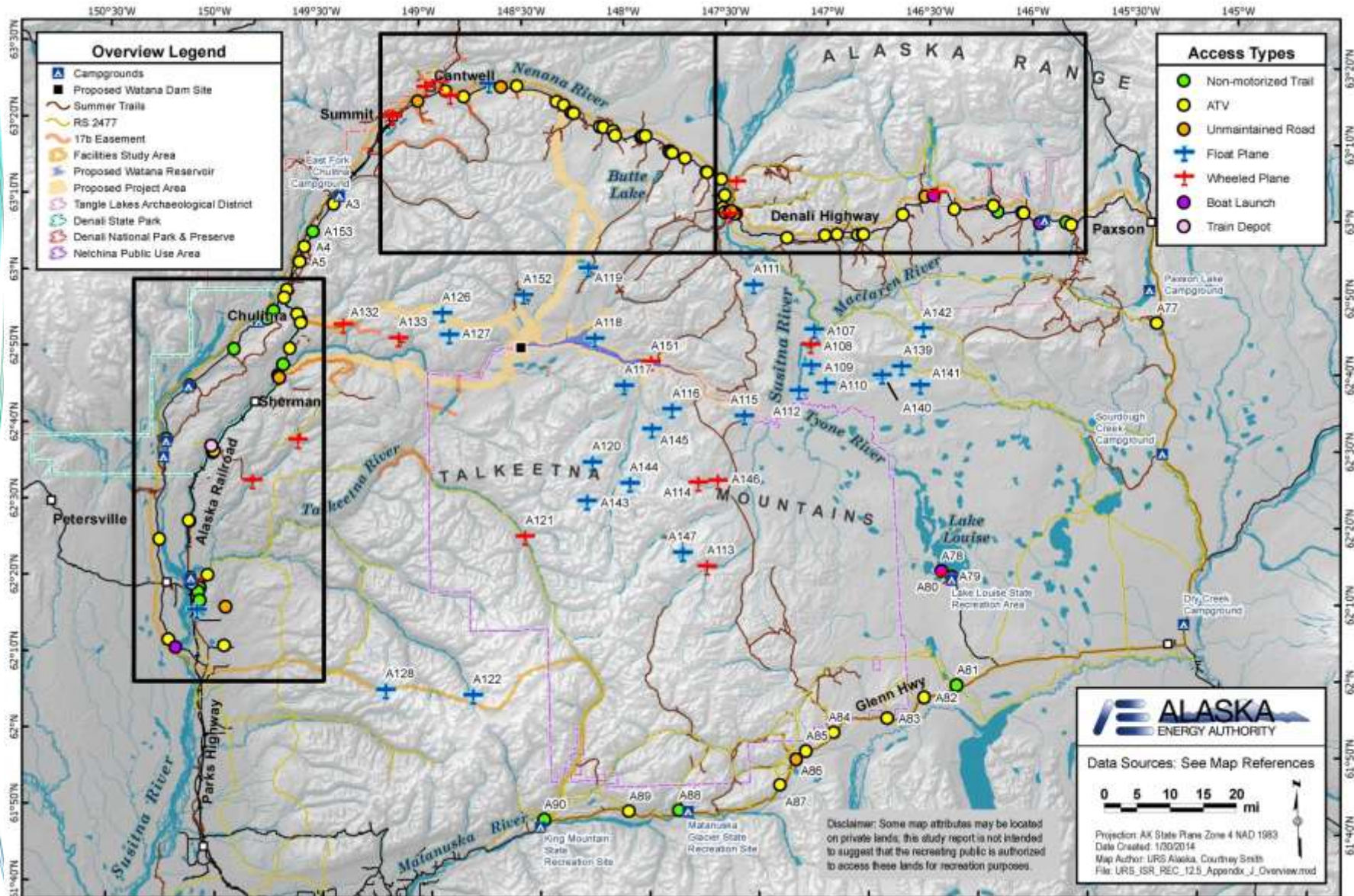
## Second Study Year

- Expand inventory of dispersed recreation use areas and sites to entire Recreation Facilities Study Area, including remote sites
- Inventory newly identified major dispersed use areas
- Inventory major access points identified
- Develop carrying capacity framework

# Dispersed Recreation Use Areas and Sites



# Recreation Access Points



# Existing Survey Data Collection

*No modification of RSP Methods proposed*

During 2013

Source	Key Summary of Analysis
SCORP 2009-2014	Identifies outdoor recreation priorities & preferences throughout Alaska, including the "Railbelt."
Bureau of Land Management (BLM) Visitor Surveys (FY 2011)	Provides visitor satisfaction data for Brushkana Creek and Tangle Lakes campgrounds regarding visitor information, developed facilities, managing recreation use, resource management, BLM staff and customer services, and educational and interpretative materials. Includes respondent primary recreational activities.
Benefits-Based Management Study (Denali Highway) (2008)	Assesses experiences sought and attained, settings and activities that facilitated these experiences, benefits to be managed for, and consistency between expectations and attained outcomes along the Denali Highway recreation corridor.
Alaska Resident Statistics Program (ARSP) (2009)	Statewide mail survey of Alaskans gathering information regarding Alaska residents' travel in Alaska, recreation activities in which they participate, use of facilities, visitation patterns, and factors contributing to the quality of life.
Alaska Visitors Statistics Program (AVSP) VI (2011)	Statewide visitor survey administered to a sample of out-of-state visitors departing Alaska at all major exit points. The survey included questions on trip purpose, transportation modes, length of stay, destinations, lodging, activities, expenditures, satisfaction, trip planning, and demographics.

Second Study Year

- Prepare USR

# Executive Interviews

*No modification of RSP Methods proposed*

## During 2013

- Completed ~75 interviews (by phone and in person) with broad range of recreational users, services and tour businesses, recreational organizations and associations, officials, and residents, regarding utilization, seasonality, observed trends, access, infrastructure, etc.
- Created Access database of interviews

## Next Steps

- Additional local and Alaska Native stakeholder interviews regarding baseline recreational activity
- Prepare USR



# Incidental Observations Surveys

*No modification of RSP Methods proposed*

## During 2013

- Observed at Lane Creek, Indian River, Sunshine Creek, Trapper Creek, Montana Creek, Skull Creek, Curry, and Whiskers Slough
- Activities observed: dogsledding, skiing, snowmachining, camping, jet boating, fishing and hunting
- Party sizes ranged from 1-25

## Next Steps

- Continued collection of IOS from field crews
- Prepare USR

# Recreation Intercept Surveys

## *Proposed Modification of RSP Methods*

- *Sites Additions*
  - *Landmark Gap Trail (Denali Highway), 11 local trailheads around Talkeetna, Mahay's office/parking lot, RV park near Alaska Railroad terminal (Talkeetna), and Dinty Lake*
  - *Added to capture observed activity*
- *Sites Deletions*
  - *Mt. McKinley Princess, Boy Scout High Adventure Scout Base, Joe/Jerry Lakes, Gracious House, Tangle River Inn*
  - *Private business permission not received or other proximal intercept sites available*
- *Sample Plan*
  - *Weather delayed opening of State Park campgrounds along Parks Highway and Denali Highway (Spring 2013)*
    - *Affecting Memorial Day Weekend recreation*
    - *Surveying still occurred at accessible locations*
  - *Talkeetna and Lake Louise survey teams allowed for more and frequent sampling*

# Recreation User Intercept Surveys

During 2013

Sample Days, Field Surveyor Effort, Completed Surveys by Time of Day, Field Sampling  
March-September, 2013, Preliminary Data

Month	Sample Days	Total Surveys Completed	Field Surveyor Hours	Weekend	Weekday	7:00-11:59 am	12:00-4:59 pm	5:00-8:00 pm
March	23	165	937	123	42	33	92	45
April	21	183	830	131	52	45	97	39
May	18	65	578	33	32	19	24	20
June	27	131	607	45	86	40	48	43
July	27	161	580	39	122	38	51	71
August	27	131	584	48	83	41	44	46
September	18	78	407	28	50	23	32	23
<b>Total</b>	161	914	4,522	447	467	239	388	287

# Recreation User Intercept Surveys

2014

- Complete Intercept Survey Fielding (March 2014) ~1,100 surveys
- Intercept Survey Data Analysis
  - Code and clean data
  - Evaluate survey data sets (online/paper) and produce unweighted results
  - Estimate proportional volumes of users
  - Model and estimate number of resident/nonresident recreation users/days
  - Profile characteristics of recreational user
  - Compare intercept profile with mail profile
  - Prepare USR

# Observational Tallies

## *Proposed Modification of RSP Methods*

- *Additions to support carrying capacity analysis*
  - *Landmark Gap Trail (Denali Highway)*
  - *Glenn Highway: Belanger Pass, Old Man Creek, Eureka*
  - *Richardson Highway Sourdough Campground*

## During 2013 (through March 2014)

- ~ 3,045 completed tallies

## Rest of 2014

- Clean and code data
- Summarize/analyze data
- Share data with Recreation Team members
- Prepare USR

# Regional Household Mail Survey

## *Modification of RSP Methods*

- *Regional Household Mail Survey Sample*
  - *Sample increased to 15,774*
  - *Split into 2 mailings to diminish memory recall for seasonal recreational activity*
  - *First mailing delayed to June 2013 (from April)*
  - *Use of \$1 incentive in June (half sample) and October (full sample) mailings*
  - *Post-mailer postcard sent after October mailing*
- *Regional Household Mail Survey Instrument*
  - *October instrument adjusted to include different seasonal calendar than June version*
    - *Assist socioeconomic study and gather information for most current activity*
  - *3 questions added in October version:*
    - *Between November 2012 and October 2013, how many total days did you recreate in the Study Area?*
    - *How many people in your party were under the age of 18?*
    - *How many people in your party live in your household for at least 6 months of the year?*

# Regional Household Mail Survey

## During 2013

- June Mailing—activity from May 2012 to April 2013
- October Mailing—activity from Nov. 2012 to Oct. 2013
- Surveys closed (online and paper) on December 31, 2013
- June Mailing data cleaned and coded
- Alaska recreation use data (hunting, fishing, boating, and snowmachining) provided to Veritas for social condition analysis

# Regional Household Mail Survey

During 2013

<b>JUNE Mail Sample Components (<i>As of April 11, 2014</i>)</b>	<b>Number</b>
<b>Voter Registration List, Unduplicated households, randomly-selected</b>	7,500
<b>Surveys Undeliverable for Incorrect Addresses</b>	29
<b>Number of surveys mailed</b>	7,471
<b>Surveys returned with no forwarding address</b>	457
<b>Surveys returned for other reasons (moved, died, refusal)</b>	17
<b>Total Mail Survey Sample</b>	6,997
<b>Second mailing of surveys to non-respondent Households</b>	4,500
<b>Completed surveys returned by mail</b>	1,423
<b>Completed surveys returned online</b>	291
<b>Total completed surveys</b>	1,714
<b>Response rate</b>	<b>24.5%</b>



# Regional Household Mail Survey

During 2013

<b>OCTOBER Mail Sample Components (<i>As of April 11, 2014</i>)</b>	<b>Number</b>
<b>Voter Registration List, Unduplicated households, randomly-selected</b>	8,274
<b>Surveys Undeliverable for Incorrect Addresses</b>	362
<b>Number of surveys mailed</b>	7,912
<b>Surveys returned with no forwarding address</b>	473
<b>Surveys returned for other reasons (moved, died, refusal)</b>	23
<b>Total Mail Survey Sample</b>	7,416
<b>Second mailing of surveys to non-respondent Households</b>	5,400
<b>Completed surveys returned by mail</b>	1,182
<b>Completed surveys returned online</b>	396
<b>Total completed surveys</b>	2,275
<b>Response rate</b>	<b>30.6%</b>

# Regional Household Mail Survey

## Next Steps

- October Mailing data cleaned and coded
- Data Analysis
  - Integrate survey data sets (June/Oct., online/ paper); produce unweighted results
  - Weight mail survey data (for nonresponse bias)
  - Model volume of baseline recreational activity
- Prepare USR

# Nonresponse Bias Telephone Survey

## *Proposed Modification of RSP Methods*

- *Second fielding in Q1 2014 rather than Q4 2013*

## During 2013

- 1<sup>st</sup> Telephone Survey (August 26-September 3, 2013)
  - 418 completes (205 cellphone lines and 213 landlines)
- Data cleaned and coded

## Next Steps

- 2<sup>nd</sup> Telephone Survey (January 22-26, 2014)
  - 400 completes (217 cellphones and 183 landlines)
- Data cleaned and coded
- Compare survey data with other secondary sources of demographic data, including U.S. Census, American Community Survey, and Alaska Department of Labor and Workforce Development
- Prepare USR