

Recreation & Visual Resources Study

Grant Lake Hydroelectric Project (FERC No. 13212)

March 18th, 2014 - Anchorage, AK



In Association with



Recreation & Visual Resources Study

- Overview of Report
 - Goals and Objectives
 - Scope of Work
 - Methods
 - Component 1:
 - Recreation Resources
 - Possible Impacts
 - Component 2:
 - Visual Resources
 - Possible Impacts



Recreation & Visual Resources Study



- Goals and Objectives
 - Measure quality of scenic environment
 - Evaluate impacts of Project:
 - Visual impacts
 - » Access roads
 - » Buildings
 - Recreational impacts
 - » Local use
 - » Seasonal use

Recreation & Visual Resources Study

– Scope of Work

- (1) Winter and (1) Summer site visit for data collection and observations
- (1) Sight-seeing flight
- Creation of (4) visual simulations
- Evaluation of alternative route of Iditarod National Historic Trail (INHT).



Recreation & Visual Resources Study

Methods

Site visits

Observations/Mapping

Data Collection

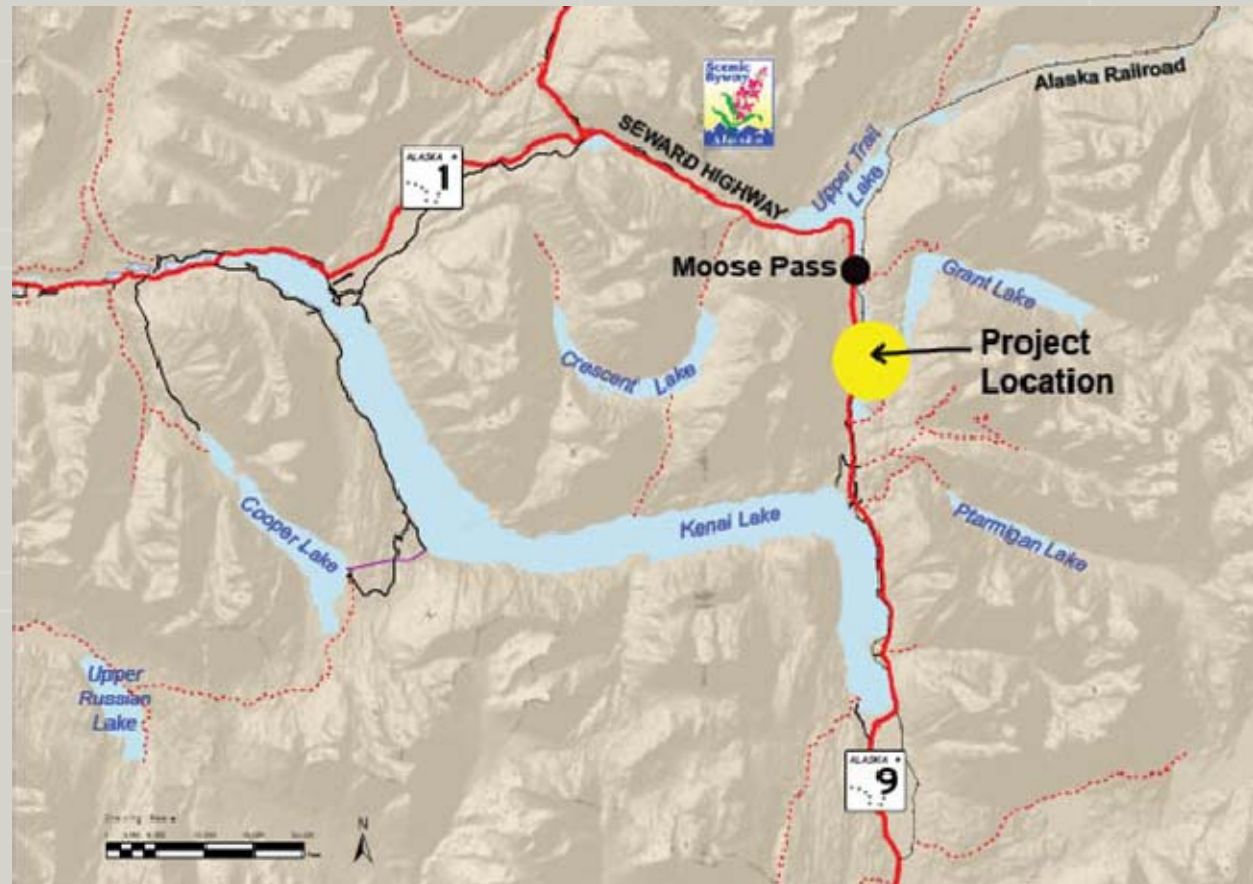
Site analysis

Site Visit Purpose	Date	Instruments	Data Collected
Winter Survey	3/3/13	Camera, GPS unit, Decibel reader	Winter use, winter viewsheds, field observations
INHT reroute	5/31/13	Camera, GPS unit, Decibel reader	Alternative trail reroute, trail viewpoints
Summer Survey	7/12/13	Camera, GPS unit, Decibel reader	Summer use, summer viewsheds, field observations
Aircraft flight	8/25/13	Camera	Sight-seeing route, aerial viewsheds

Recreation & Visual Resources Study

Study Overview

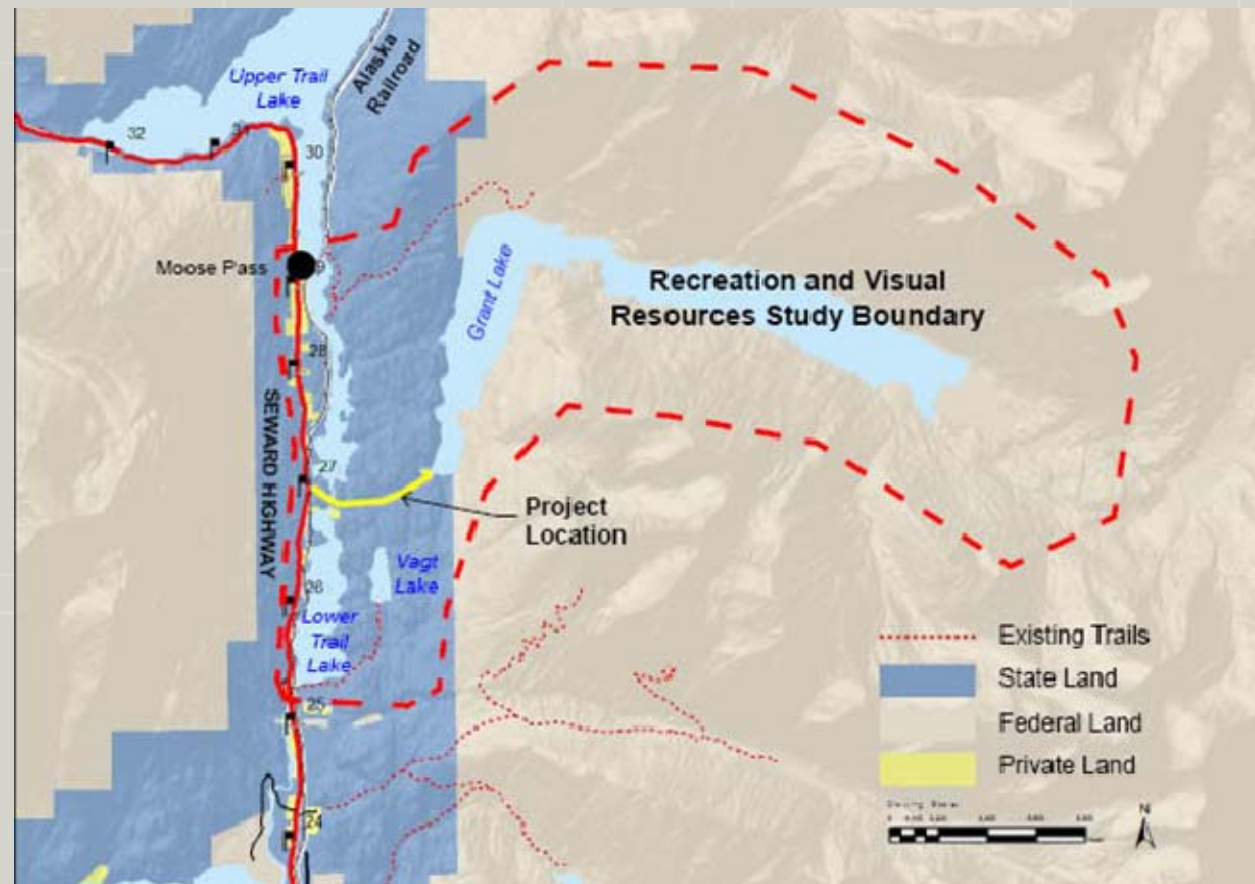
- Project Location
- Existing landscape



Recreation & Visual Resources Study

Study Boundaries

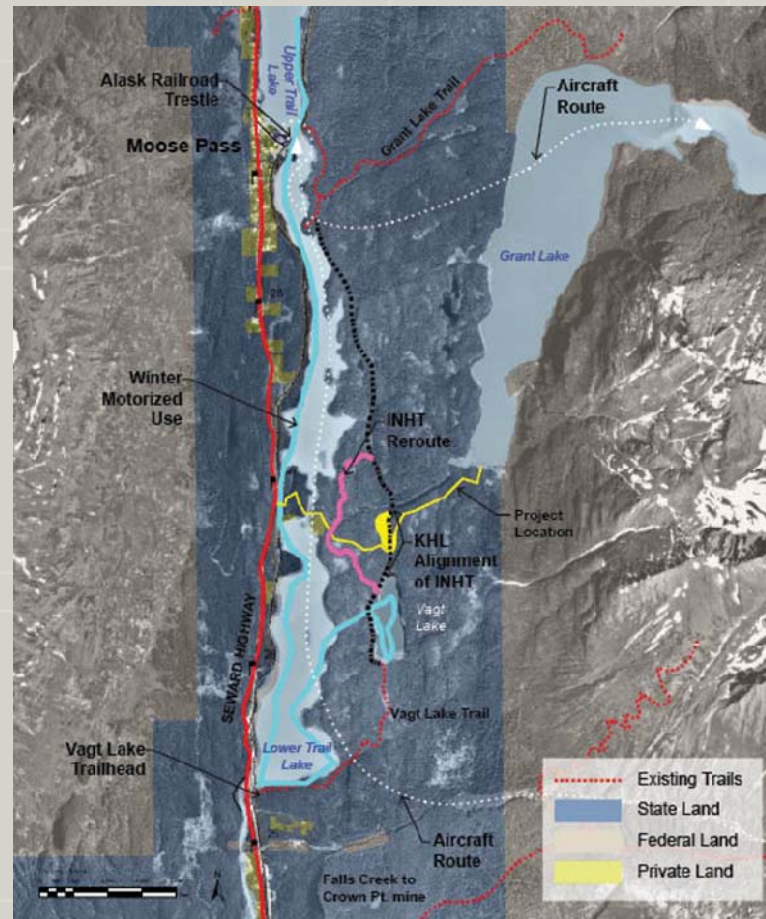
- Lakes
- Mountains
- Trails
- Highway
- Land Ownership



Recreation & Visual Resources Study

Component #1 – Recreation Resources

- Winter Use
- Summer Use
- Motorized
- Non-motorized



Recreation & Visual Resources Study

Observed Winter Uses:

- Snowmachine
- Snowshoeing
- Cross-country skiing
- Dog-walking



Recreation & Visual Resources Study

Observed Summer Uses:

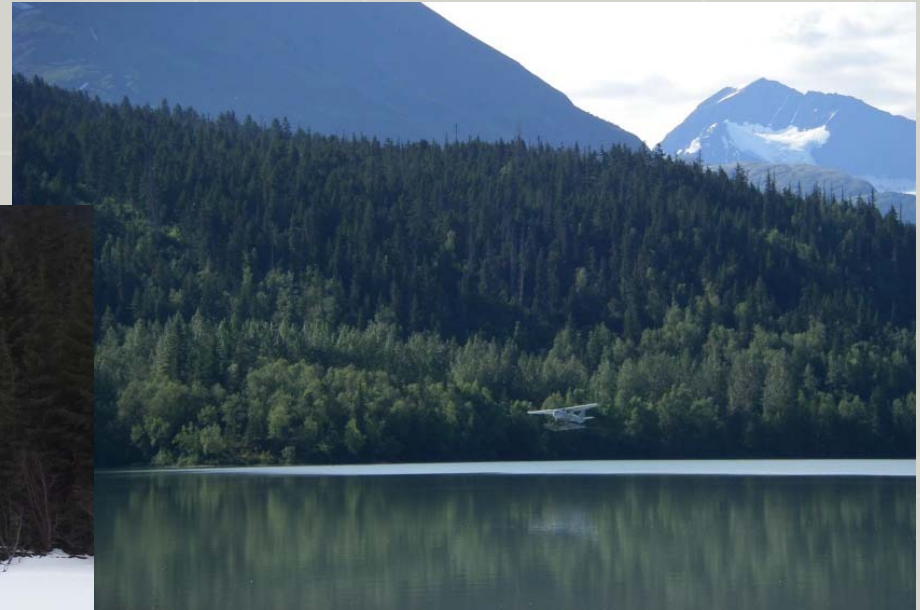
- Fishing & boating
- ATV use
- Hiking
- Driving for pleasure & Sight-seeing
- Dog-walking



Recreation & Visual Resources Study

Noise:

- Recorded levels 40db or less, background hum from highway
- Peak noises (80-90db) caused by aircraft take-offs and snowmachine use



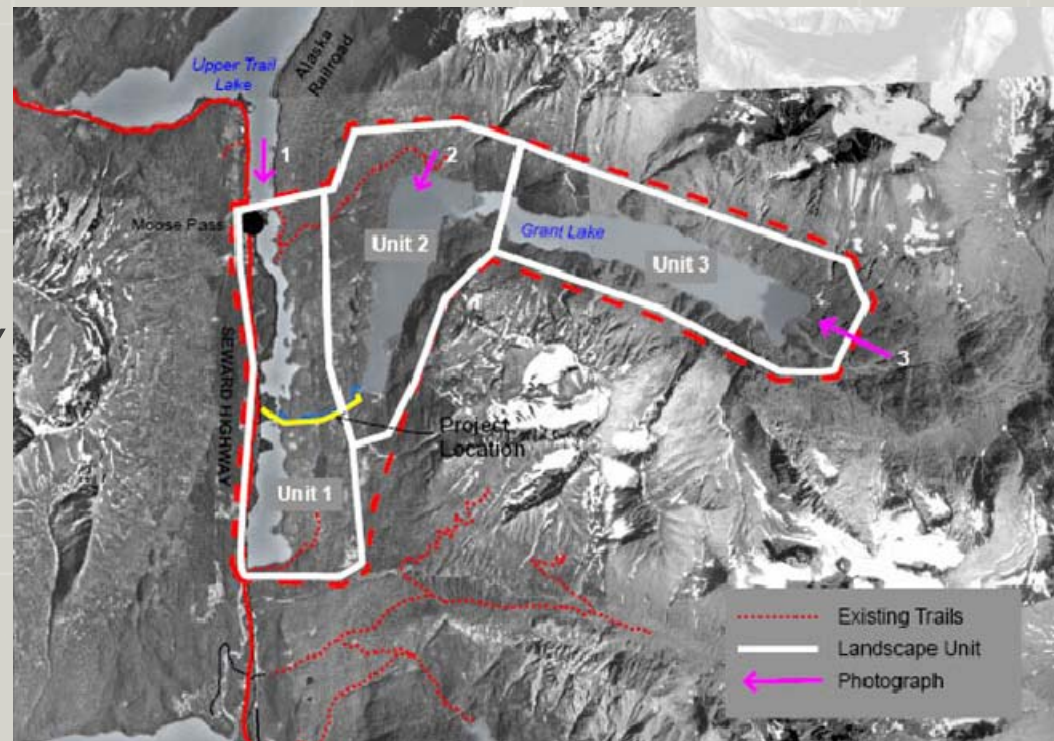
Recreation and Visual Resources Study

- Possible Impacts:
 - Possible increased access to non-salmon fishing
 - Possible increased access to INHT
 - Possible increased access to Grant Lake
 - Possible increased hunting pressure for all large game
 - Noise limited to occasional maintenance vehicles and noise within Powerhouse
 - Minimal light pollution limited to Powerhouse building



Recreation and Visual Resources Study

- Component #2 – Visual Resources
 - USFS – *Landscape Aesthetics: A Handbook for Scenery Management*
 - Ecological Units
 1. Trail Lakes Valley
 2. Grant Lake West
 3. Grant Lake East



Recreation and Visual Resources Study

- Viewers: Who will be seeing the Project's impacts and what are they sensitive to?

Viewer Group	Expected Values
Residents	Generally a desire for protection of visual quality, including views from roadways, waterways, and individual residences. Generally cautious concerning changes to visual environment.
Recreationists/ Tourists	Includes both road and rail traffic. Generally high appreciation for visual quality of an area and desire for undisturbed areas. Also share a desire for views from roadways and waterways.
Aircraft	High variability in visual values and the acceptance of changes to existing visual conditions. Many are sight-seers with high degree of sensitivity to visual quality.

*USFS – *Landscape Aesthetics: A Handbook for Scenery Management*

Recreation and Visual Resources Study

- Distance Zones, Viewer Exposure, & Seasonal Variations:

Distance Zones	Distance	Description	Distance Zones
Foreground (fg)	0 – 0.5 miles	Distinguish vegetative detail and full use of senses	Foreground (fg)
Middleground (mg)	0.5 – 4 miles	Distinguish large boulders, small openings in the forest	Middleground (mg)
Background (bg)	4 miles to horizon	Distinguish groves of trees, large openings in the forest.	Background (bg)

Viewer Group	Exposure Period
Residents	Continual
Recreationists/ Tourists	Varies-generally minutes
Aircraft	Varies-generally seconds or minutes

*USFS – *Landscape Aesthetics: A Handbook for Scenery Management*

Recreation and Visual Resources Study

- Scenic Attractiveness:

Class	Title	Description
A	Distinctive	Areas where landform, vegetative patterns, water characteristic and cultural features combine to provide unusual, unique, or outstanding scenic quality. These landscapes have strong positive attributes of variety, unity, vividness, mystery, intactness, order, harmony, uniqueness, pattern, and balance.
B	Typical	Areas where landform, vegetative patterns, water characteristics, and cultural features combine to provide ordinary or common scenic quality. These landscapes have generally positive, yet common, attributes of variety, unity, vividness, mystery, intactness, order harmony, uniqueness, pattern, and balance. Normally they would form the basic matrix within the ecological unit.
C	Indistinctive	Areas where landform, vegetative patterns, water characteristics, and cultural land use have low scenic quality. Often water and rockform of any consequence are missing in class C landscapes. These landscapes have weak or missing attributes of variety, unity, vividness, mystery, intactness, order, harmony, uniqueness, pattern, and balance.

- Scenic Classes:

		Distance Zone and Concern Levels		
		Fg1	Mg1	Bg1
Scenic Attractiveness	A	1	1	1
	B	1	2	2
	C	1	2	3

*USFS – *Landscape Aesthetics: A Handbook for Scenery Management*

Recreation and Visual Resources Study

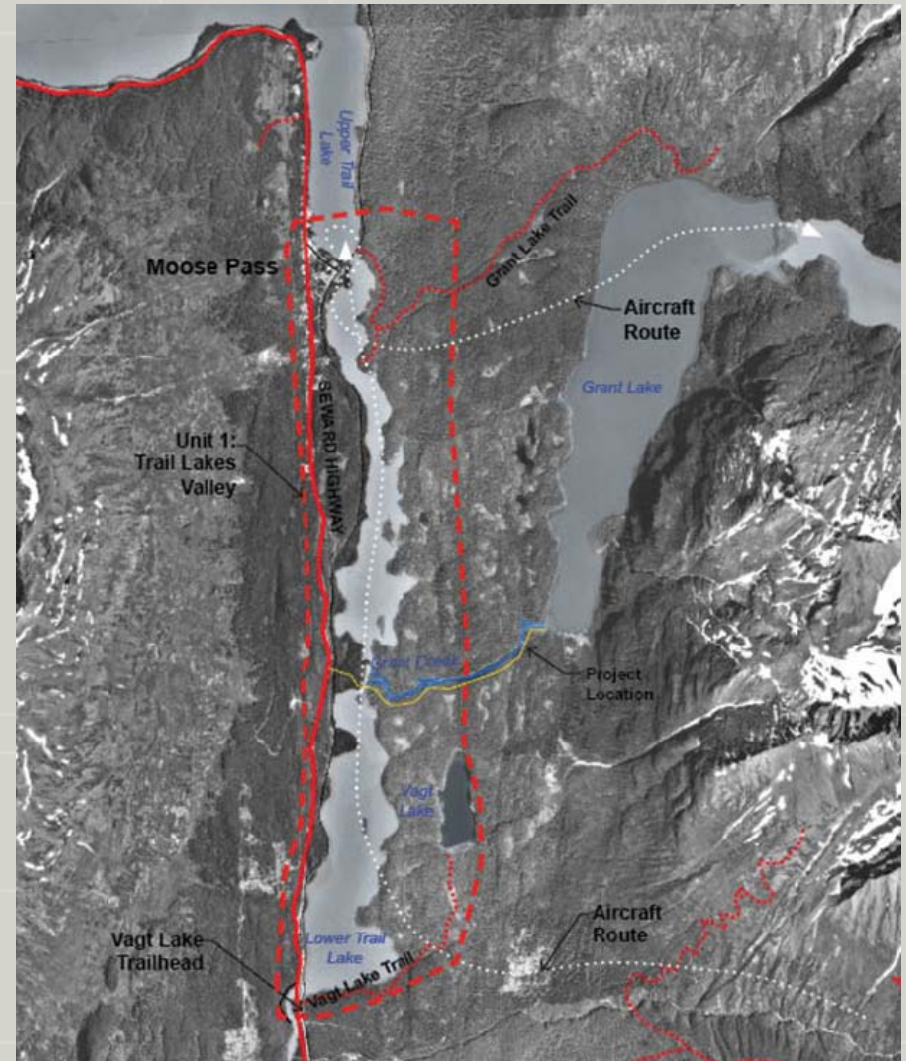
- Landscape Analysis Discussion
 - Unit 1: Trail lakes Valley



Photograph 1: Looking South, Upper and Lower Trail Lakes, Vagt Lake, Kenai Lake, Seward Hwy, and Moose Pass

Recreation and Visual Resources Study

- Unit 1: Trail Lakes Valley:
 - Foreground views
 - Variable terrain & vegetation
 - Landforms
 - Highly variable viewsheds
 - High scenic attractiveness
 - Moderately intact
- Possible Impacts:
 - Powerline connection across Seward Hwy
 - Bridge at narrows
 - Crossing of INHT
 - Access road visible from creek at some locations



Recreation and Visual Resources Study

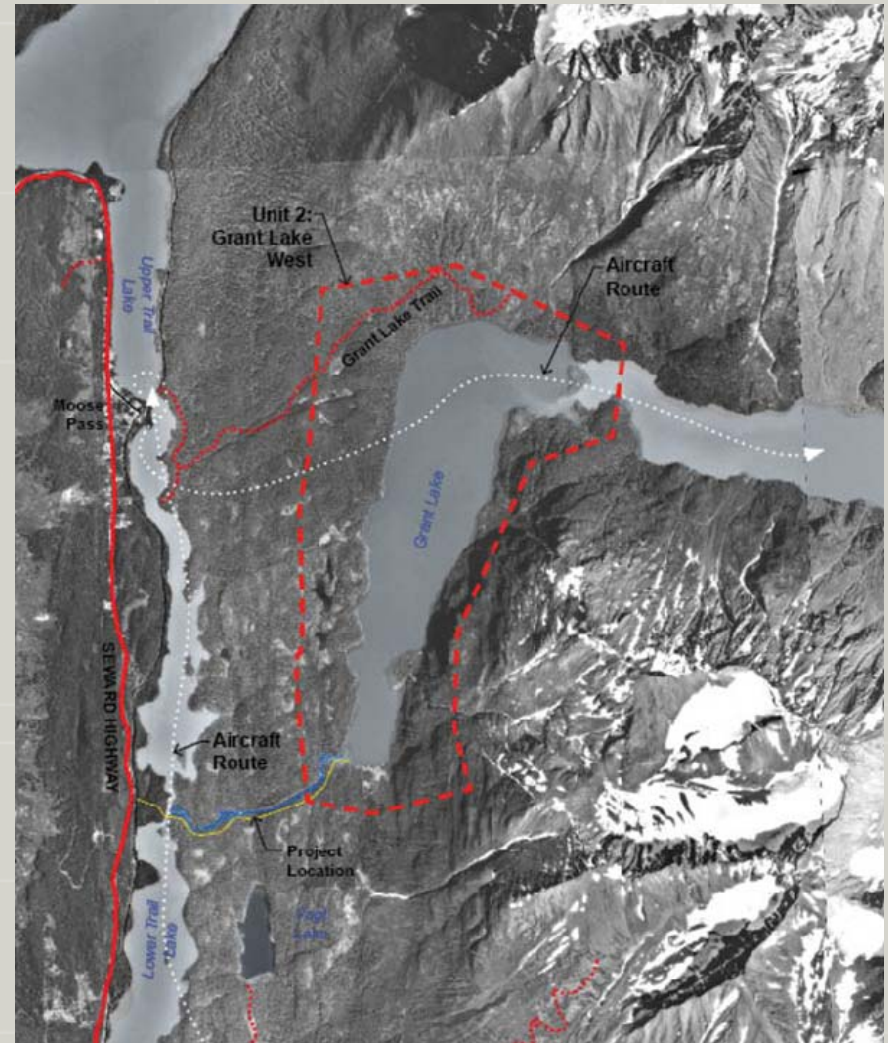
- Landscape Analysis Discussion
 - Unit 2:
Grant Lake West



Photograph 2: Looking South across Grant Lake

Recreation and Visual Resources Study

- Unit 2: Grant Lake West:
 - Foreground & middleground
 - Highly distinctive/attractive
 - Virtually intact
 - Unseen by highway
 - Limited viewers
- Possible Impacts:
 - Intake structure with access road will be exposed



Recreation and Visual Resources Study

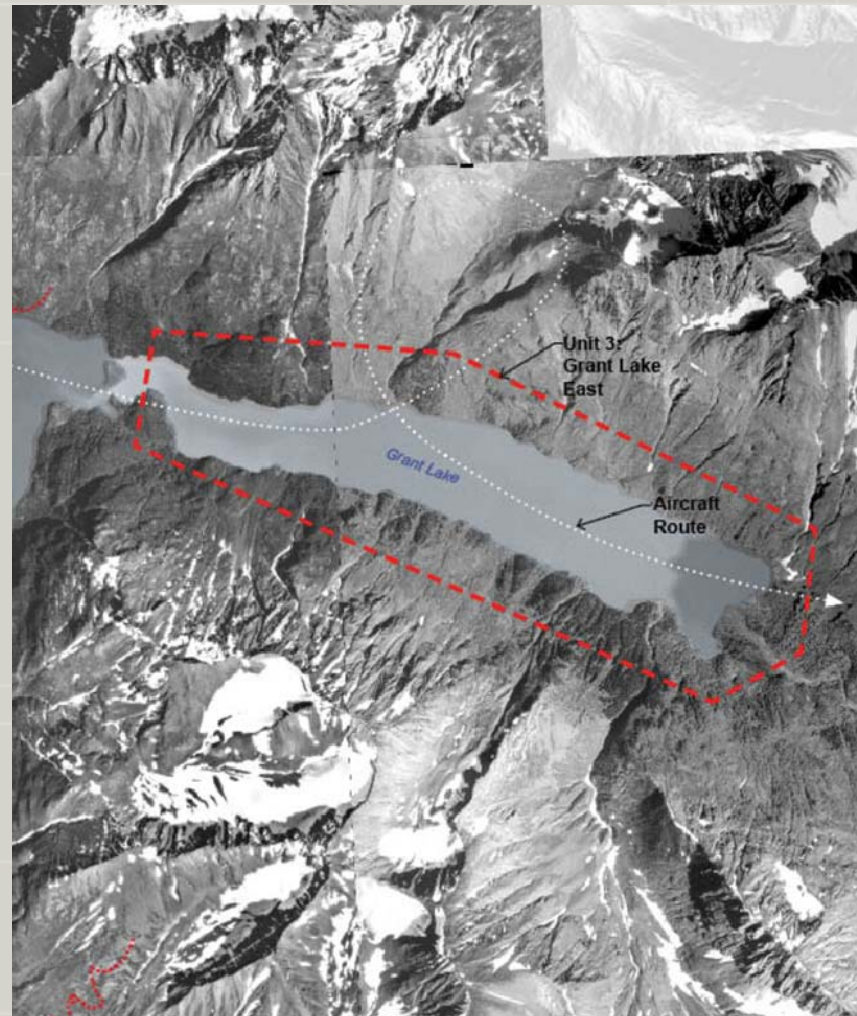
- Landscape Analysis Discussion
 - Unit 3:
Grant
Lake East



Photograph 3: Looking West across Grant Lake

Recreation and Visual Resources Study

- Unit 3: Grant Lake East:
 - Viewer group limited to hunters, sight-seers, no trail access
 - Highly distinctive, managed as wilderness
- Possible Impacts:
 - Lake level after Project may vary above present levels



Recreation and Visual Resources Study

- Key View #1: Access Road from Seward Hwy MP 26.9

BEFORE:



Existing driveway

AFTER:



Driveway relocated to new access road

Recreation and Visual Resources Study

- Key View #2: View of Intake Structure and Lake Shoreline

BEFORE:



Existing creek outfall

AFTER:



Powerhouse, detention pond, spillover, seasonal access road, intake structure, drying of creekbed.

Recreation and Visual Resources Study

- Key View #3: View of Facilities from Seward Hwy

BEFORE:



Existing view toward facilities

AFTER:



Seasonal access road in distance, most exposed during winter conditions

Recreation and Visual Resources Study

- Key View #4: Access Road or Powerhouse from the Right-of-Way for the Proposed INHT

BEFORE:



Existing view through forest

AFTER:



Intersection of INHT with access road

Recreation and Visual Resources Study

- Impacts to Visual Resources and Possible Mitigation:
 - Impacts are localized and mostly unseen
 - Opportunity to increase views with INHT reroute

