



# 2010 Annual Conference

## Hydro: Powering the Energy Revolution

### **Licensing and Amendments**

**Keys to Success:**

**Communication, Coordination, Consultation ...**

**Speakers:**

**Dan Ross, Energy Northwest**

**Ron Nelson, Nevada Irrigation District**

**Suzanne Adkins, EWEB**

**Finlay Anderson, Longview Associates**

# Packwood Lake Project

## Located in Washington in the Cascade Mountains



Intake Structure Elevation 2,857 ft.  
MSL at outlet of Packwood Lake

Powerhouse with Single Allis  
Chalmers Turbine Generator  
Rated 27.5 MWe



29 9 2002

# Packwood Lake Project

## “Why do I like my job?”



**...Most of the time**

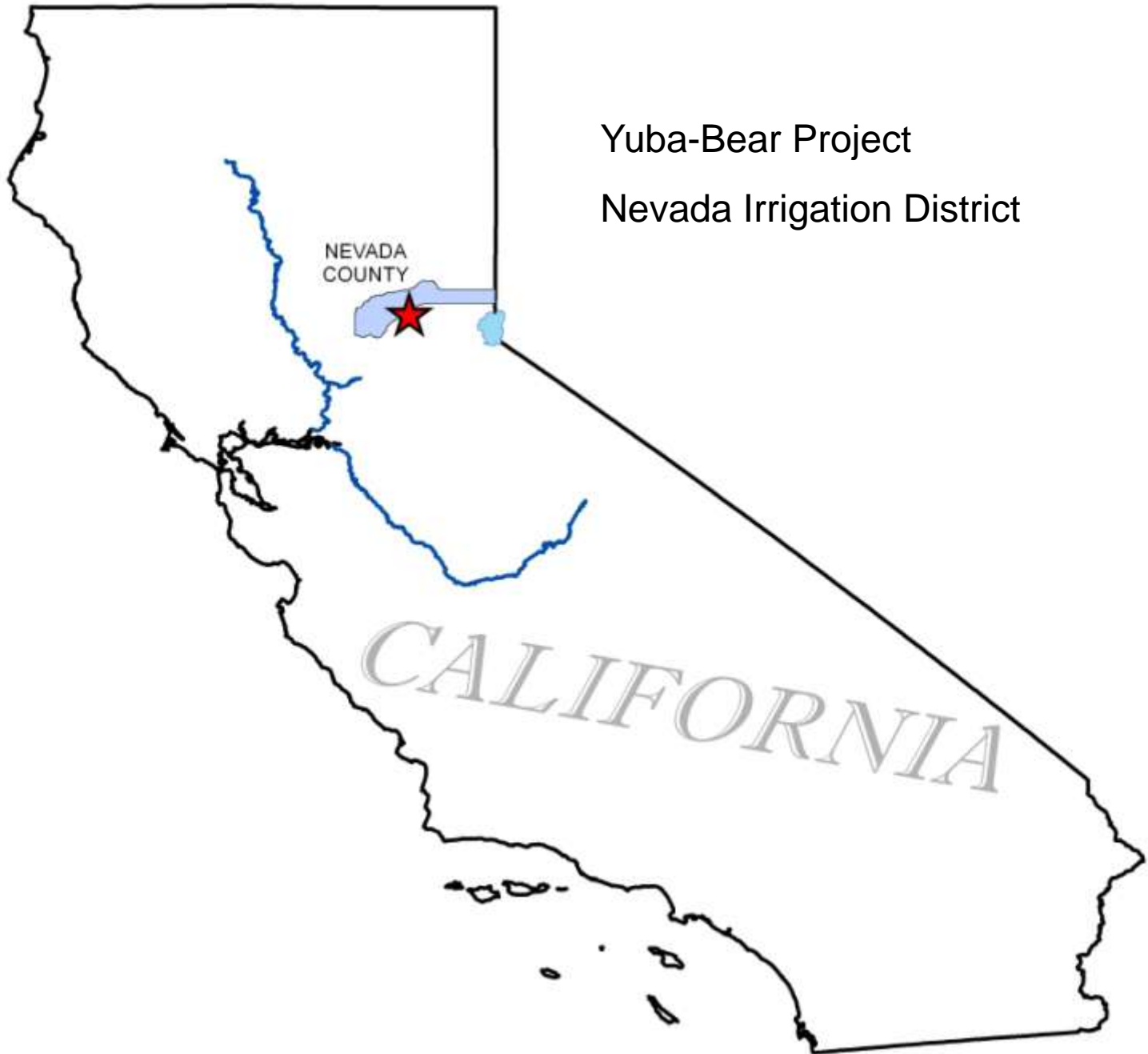




# MEETINGS

NONE OF US IS AS DUMB AS ALL OF US.

[www.despair.com](http://www.despair.com)

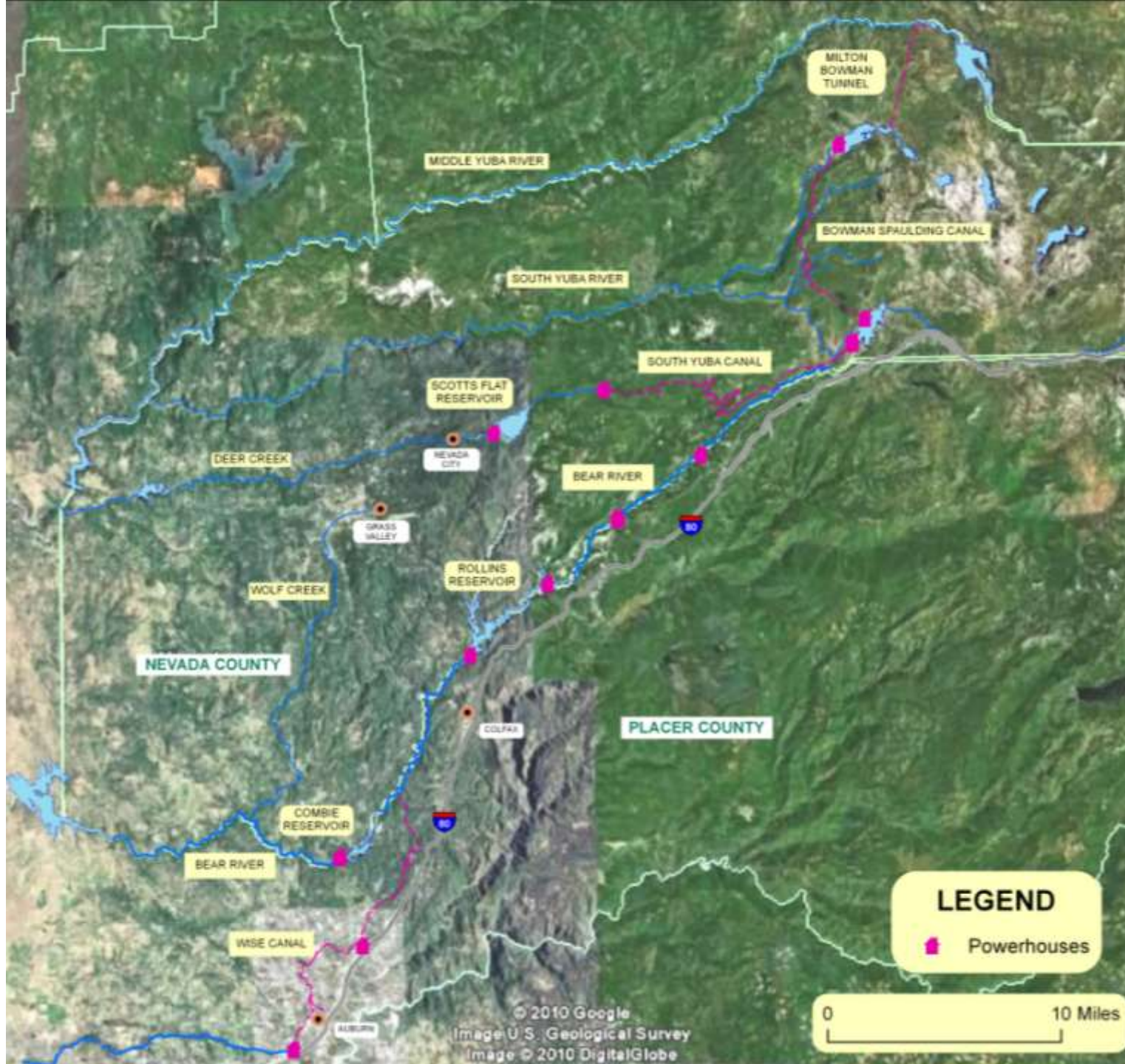


Yuba-Bear Project

Nevada Irrigation District

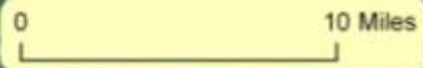
NEVADA  
COUNTY

CALIFORNIA



### LEGEND

■ Powerhouses



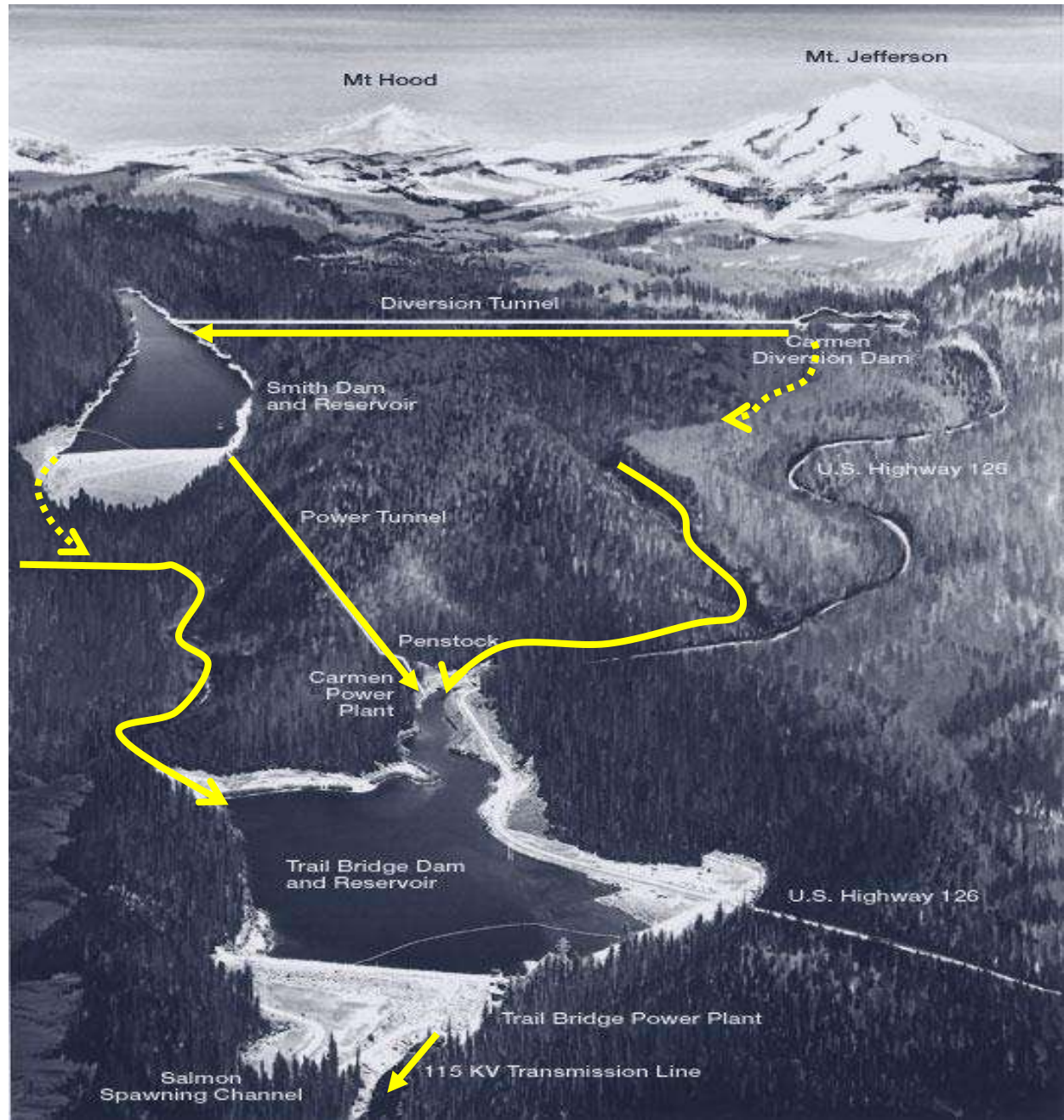
© 2010 Google  
Image U.S. Geological Survey  
Image © 2010 DigitalGlobe



# Project Facilities



*Carmen-Smith*

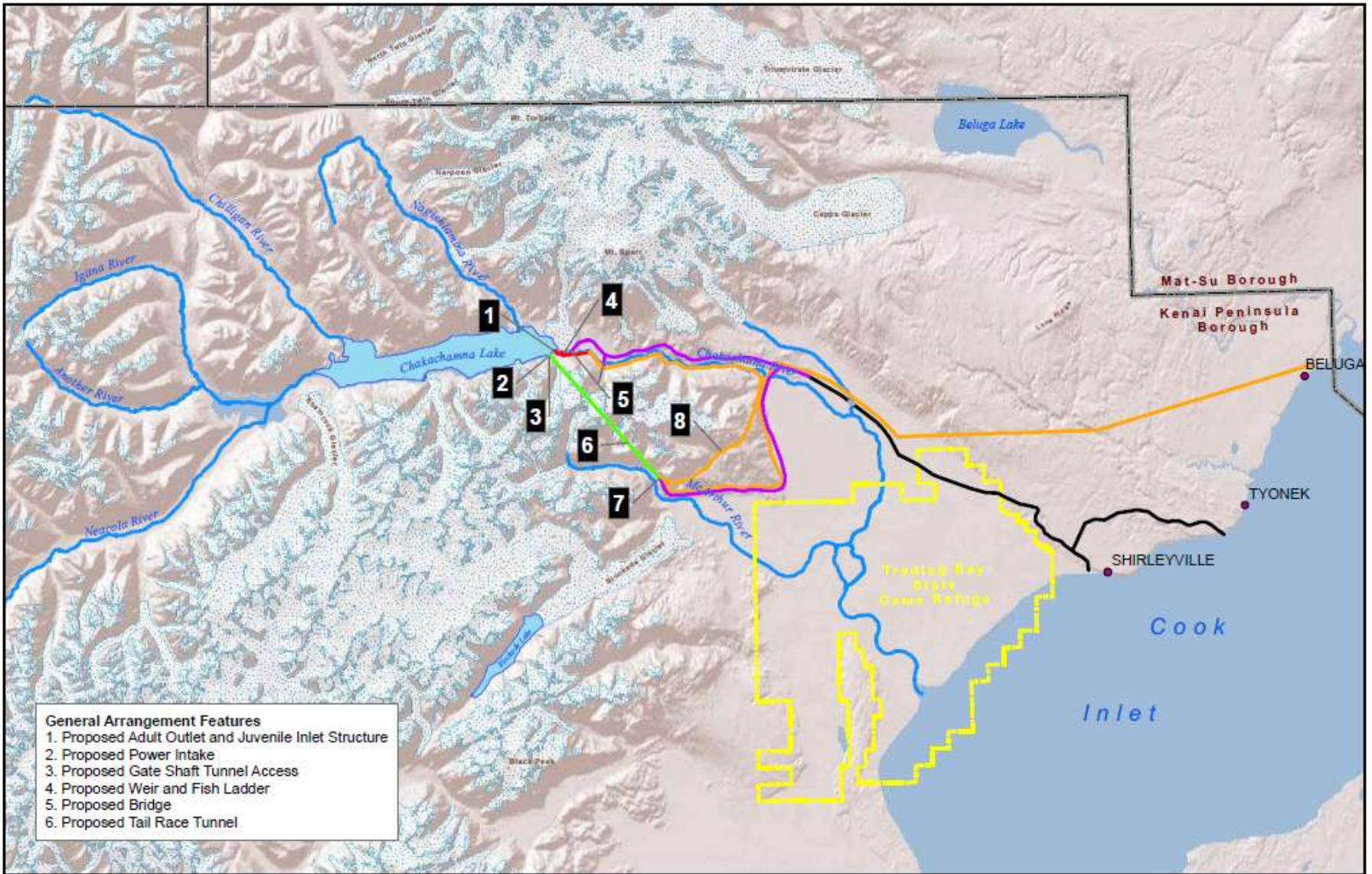




# Carmen Diversion, Smith, and Trail Bridge Reservoirs

*Carmen-Smith*





- General Arrangement Features**
1. Proposed Adult Outlet and Juvenile Inlet Structure
  2. Proposed Power Intake
  3. Proposed Gate Shaft Tunnel Access
  4. Proposed Weir and Fish Ladder
  5. Proposed Bridge
  6. Proposed Tail Race Tunnel



- Legend**
- General Arrangement**
- Bridge
  - Existing Road For Improvement
  - Proposed Fish Passage Tunnel
  - Proposed Access Road
  - Proposed Transmission Line
  - Proposed Tunnel
  - Trading Bay State Game Refuge
  - Borough Boundary

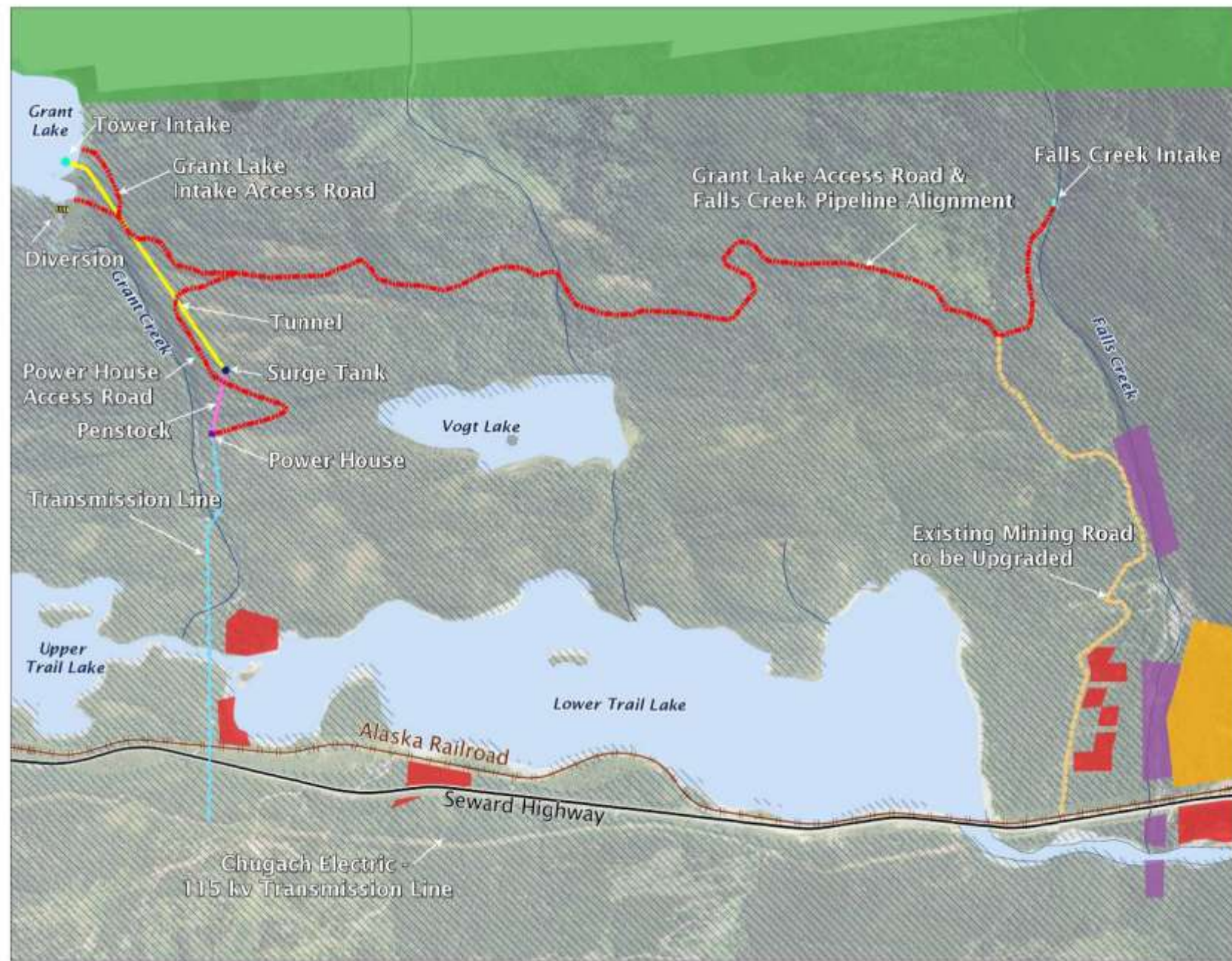
Author: HDR Alaska - MC  
 Date: 09 June 2009  
 Sources: ESRI, USGS, HATCH, MWH  
 Filename: FIG 3 2-2 GA-8r11.mxd

Graphic representation only.  
 HDR makes no guarantee as to the accuracy or completeness of source data.





Proposed project facilities and land ownership



**Project Features**

- Intake
- Power House
- - - Access Road
- - - Diversion
- - - Existing Mining Road
- Penstock
- Transmission Line
- Tunnel

**Land Ownership**

- / / / State
- ARRC
- BLM
- USFS
- Private
- Seward Highway
- + Alaska Railroad

**Scale:** 0 to 1,000 Feet

**Orientation:** NORTH

Map Projection: NAD 83 ASP  
 Data Sources: HDR Alaska, Lounsbury and Associates, Borough, AK DNR, USFS  
 Author: HDR Alaska, Inc.  
 Date: 27 July 2009

These maps are for review purposes only.

**Kenai Hydro LLC**



