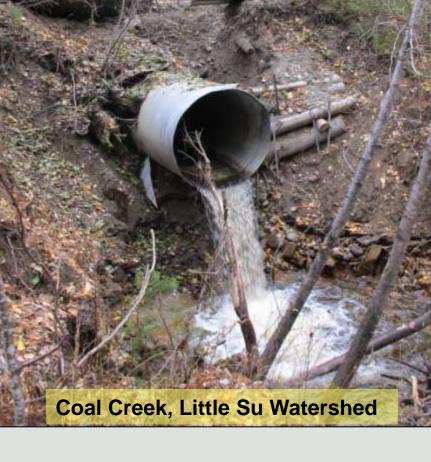
# Mat-Su Fish Passage Program: Policy and Practice



**Bill Rice, PE Hydrologist U.S. Fish and Wildlife Service** 

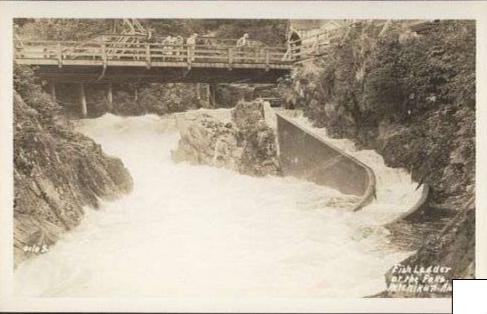


# **Connecting Habitats**

# **Connecting Communities**



# **Authorities**



#### <u>State</u>

Fishway Act '841' Anadromous Fish Act '871'

#### **Federal**

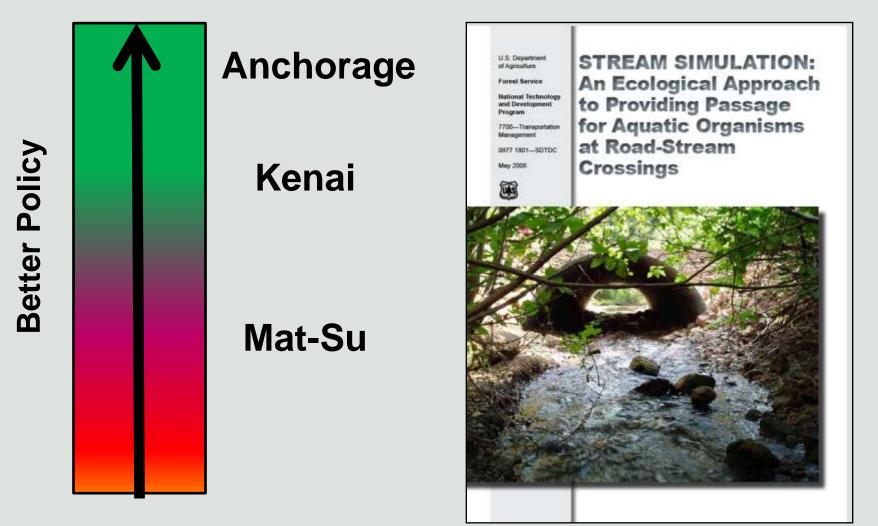
- Section 404 Clean Water Act ('Waters of the U.S').
- Section 10 of Rivers and Harbors Act ('Navigable waters').



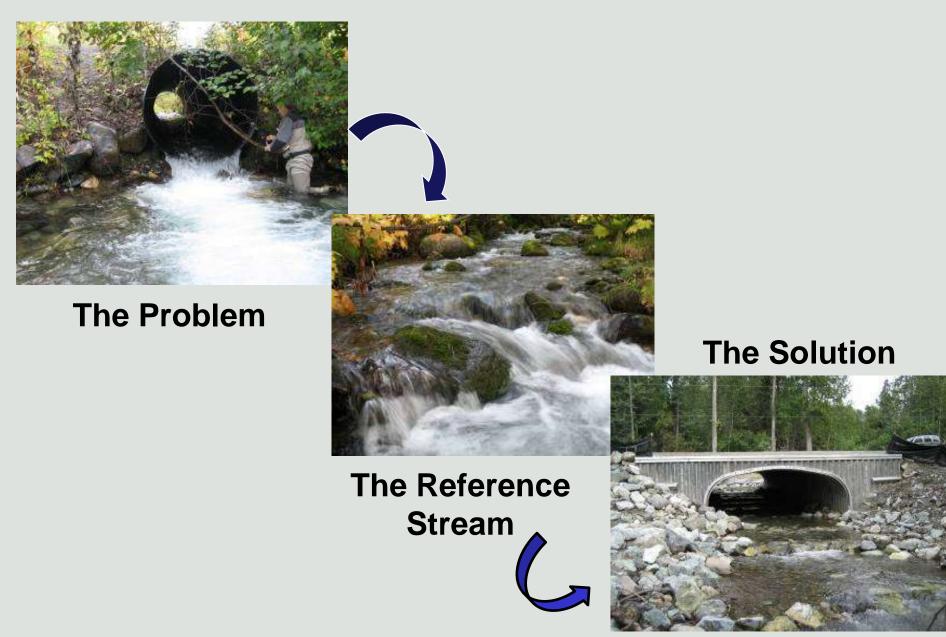
Property of MSCUA, University of Washington Libraries. Photo Coll 247

# Policies

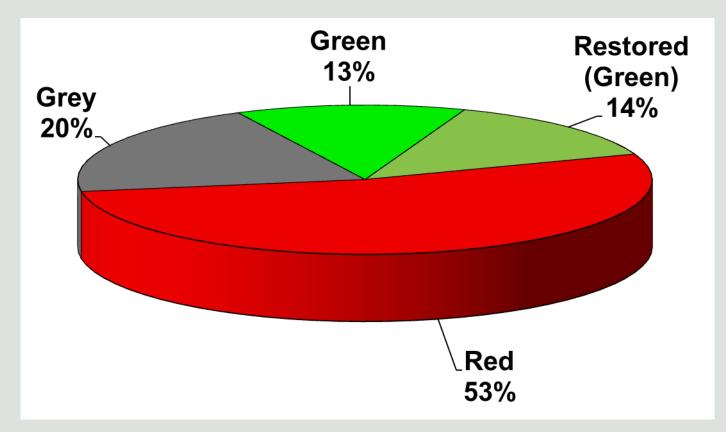
#### **Statewide Fish Passage MOA Between ADFG and DOT**



## **Stream Simulation Design**

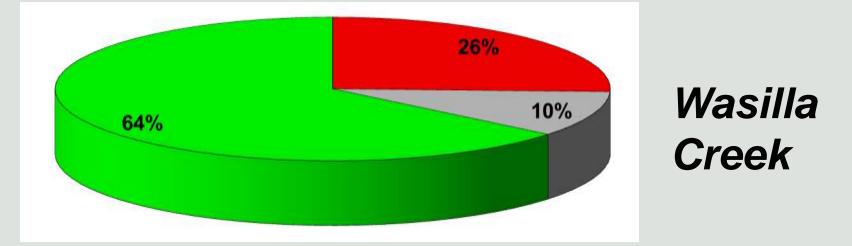


### **Mat-Su Assessment**



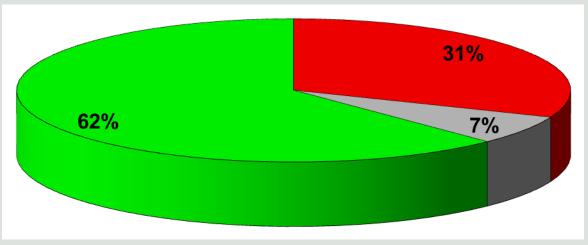
### 587 Culverts (81 Restored)

## **Some Restoration Efforts**



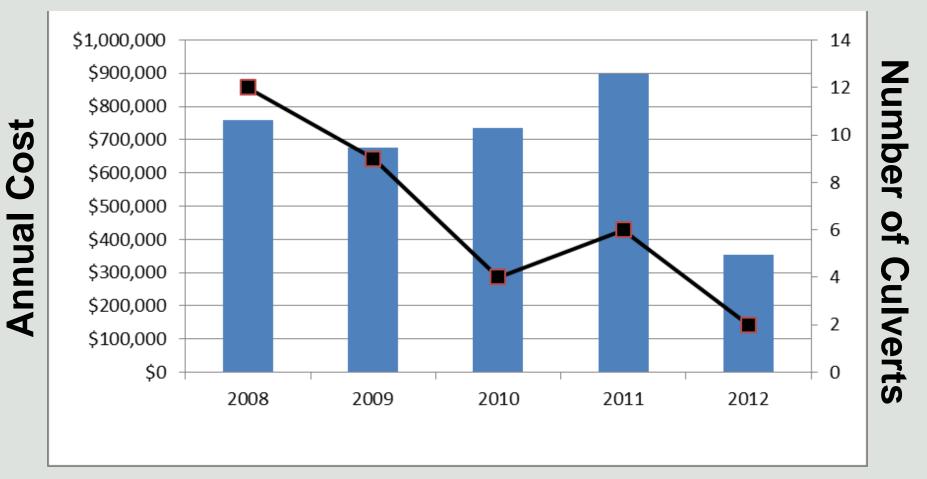
\$2.2 million (18 projects) N=39

Little Su



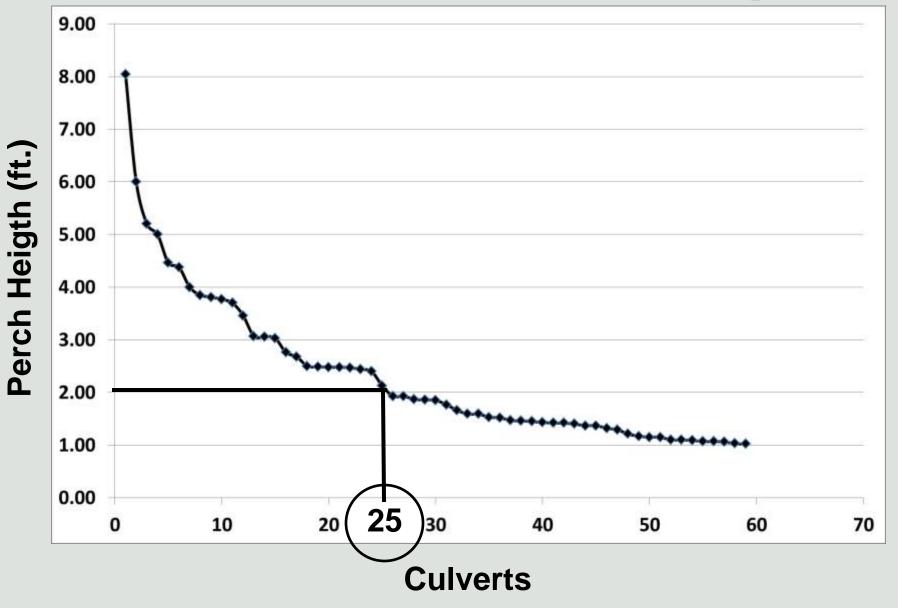
\$2 million (22 projects) N=61

# Past Efforts MatSu

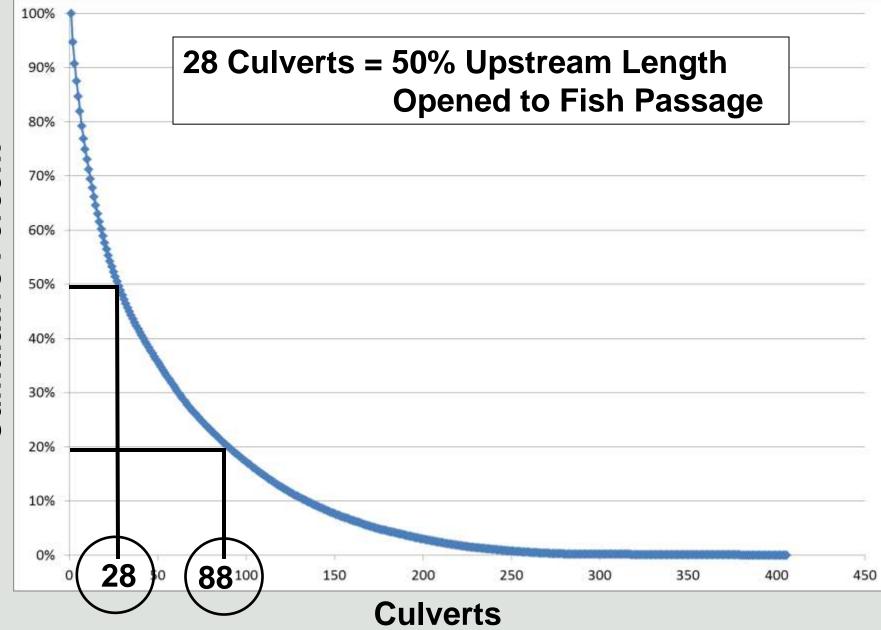


1995-2012 (> \$6 million)

### **Future Efforts Perched Pipes**



## **Future Efforts Upstream Miles**



**Cumulative Percent** 

# **Future Efforts**

\$4.3 million in Total Requests for 2013
Estimated 30 Culverts over 3-4 Years





#### **Proposed for Restoration**

**Finished Culvert** 



Shirley Town Bridge, Willow

#### 2012 Floods (provisional)

- >100 year flood
  - Little Su
  - Matanuska and Knik
- <u>50-100 year flood</u>
  - Talkeetna
- 25-50 year flood
  - Montana Creek
  - Wasilla Creek



#### Mile 5.5 on Oilwell Road



# **Results of Flood**

### Of the 81 Restored Crossings

- Only two had water overtop the road
- No failures
- Some experienced > 100 year flood event
- Some bioengineering impacts

### **MSB Recovery Taskforce**

- Damage Assessment
- Policies
- Funding

