

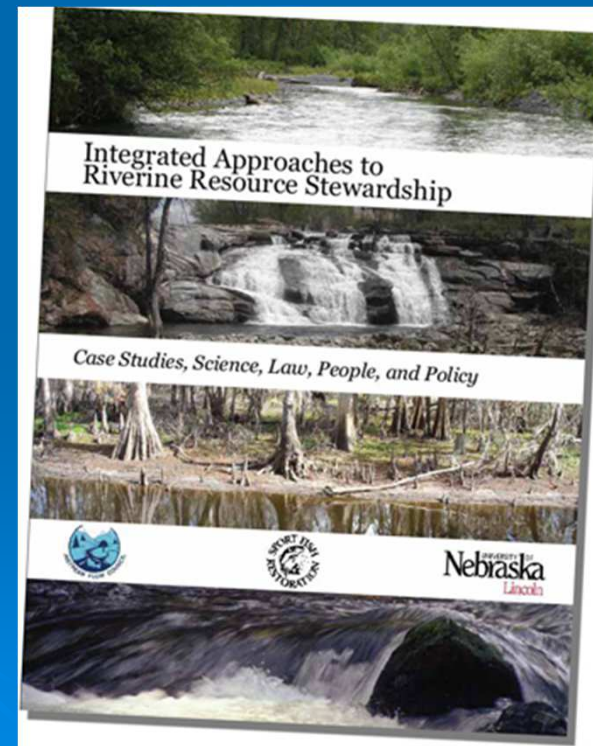
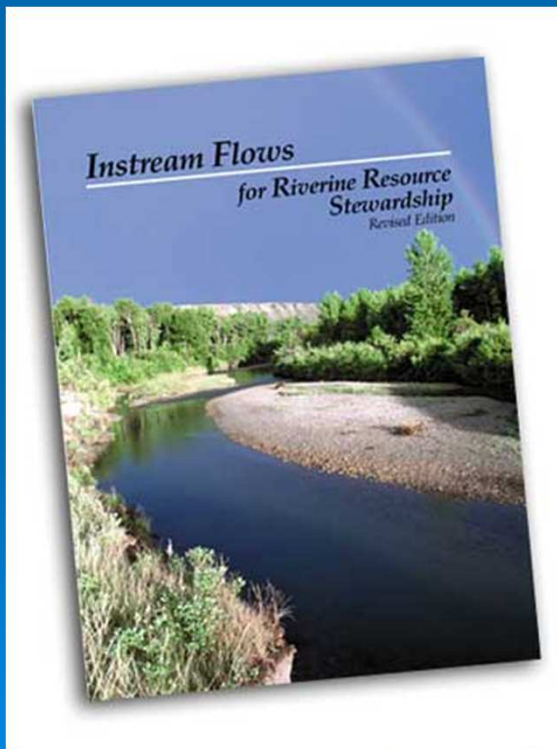
# Instream Flow Protection and the Status of ADF&G Reservations of Water

Joe Klein, P.E.  
Alaska Department of Fish and Game



# Useful References on Instream Flow

Available from Instream Flow Council  
(<http://www.instreamflowcouncil.org/>)



# Science of Instream Flow

from IFC Instream Flows for Riverine Resource Stewardship

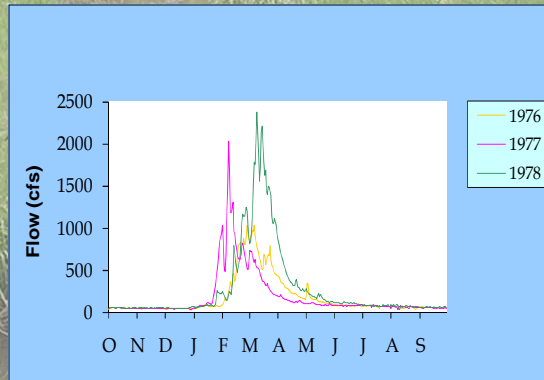
Biology



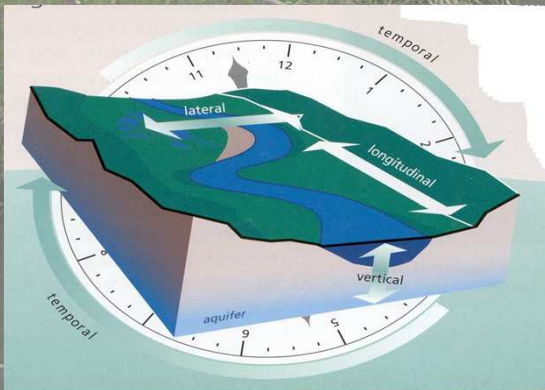
Geomorphology



Hydrology



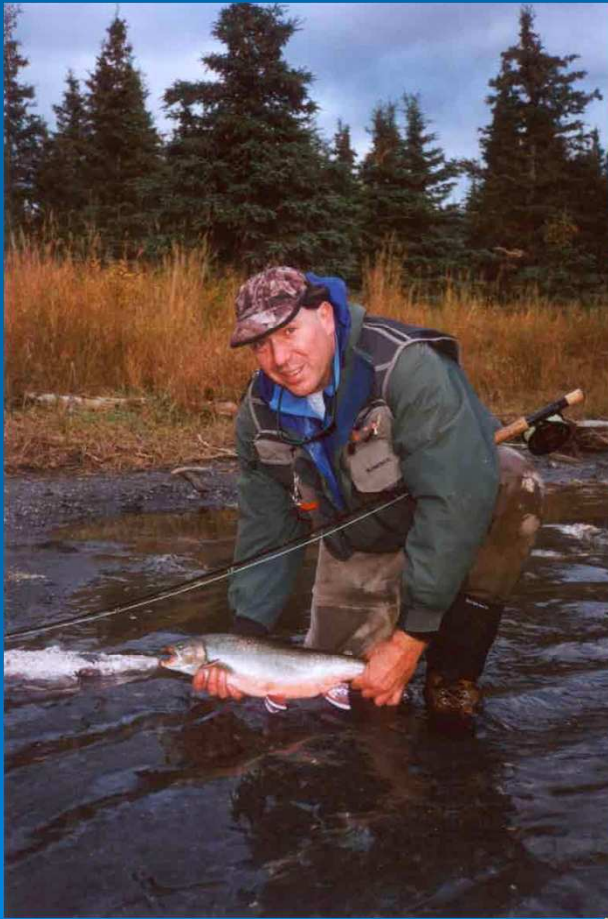
Connectivity



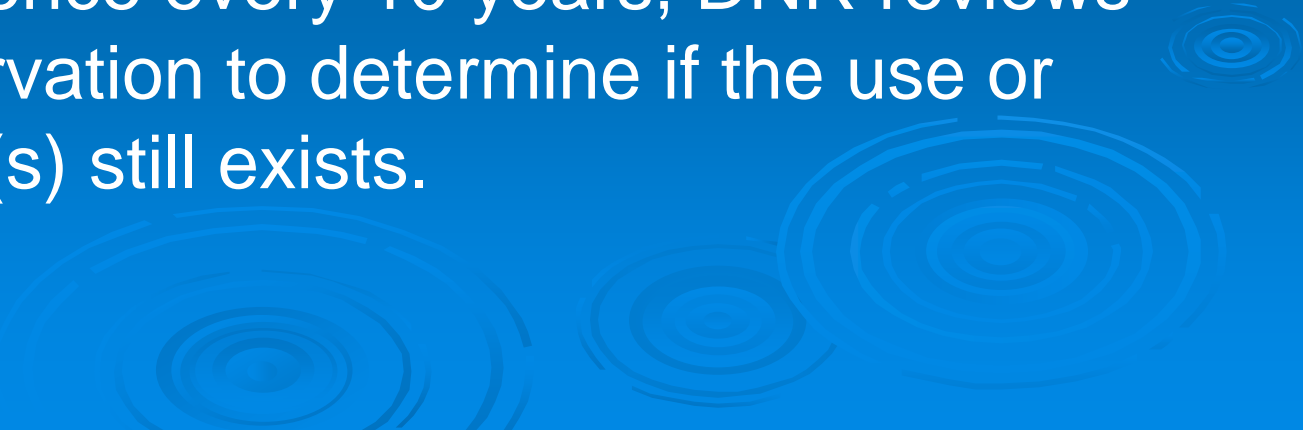
Water Quality



# Who cares about instream flow?



# Alaska's Instream Flow Law

- Defined 4 categories of instream uses as a beneficial use available for appropriation as a reservation of water.
  - Any person, agency, or organization can file for a reservation.
  - At least once every 10 years, DNR reviews the reservation to determine if the use or purpose(s) still exists.
- 

# Alaska's Instream Flow Law

## 4 Categories of Instream Uses

### Fish and Wildlife



John Hyde ADF&G



Robert Angell, AK Div. Tourism

### Recreation



### Navigation



(ADFG 2010)

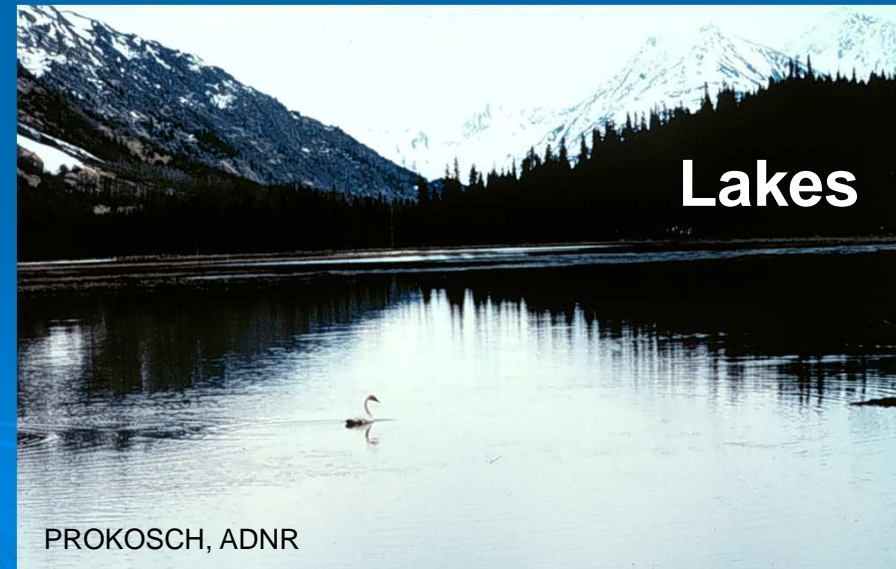
### Water Quality



# Reservation of Water



A water right to leave water in a river or lake to protect recognized use(s).



# Status of Reservations Filed

359 Filed as of 2009

- **ADF&G – 118**
- **USFWS – 197**
- **BLM – 13**
- **Others – 23:**
  - Trout Unlimited – 13
  - Arctic Unit, Alaska Chapter, American Fisheries Society – 1
  - Cheesh-na Tribal Council – 1
  - Chickaloon Native Village - 1
  - Chuitna Citizens NO-COALition/Trustees for Alaska – 1
  - Curyong Tribal Council/Trout Unlimited – 1
  - Eklutna Native Village – 1
  - Southwest Alaska Salmon Habitat Partnership – 1
  - The Nature Conservancy/ADF&G - 1
  - Trout Unlimited/ADF&G – 1
  - DNR (per water export provision) – 1

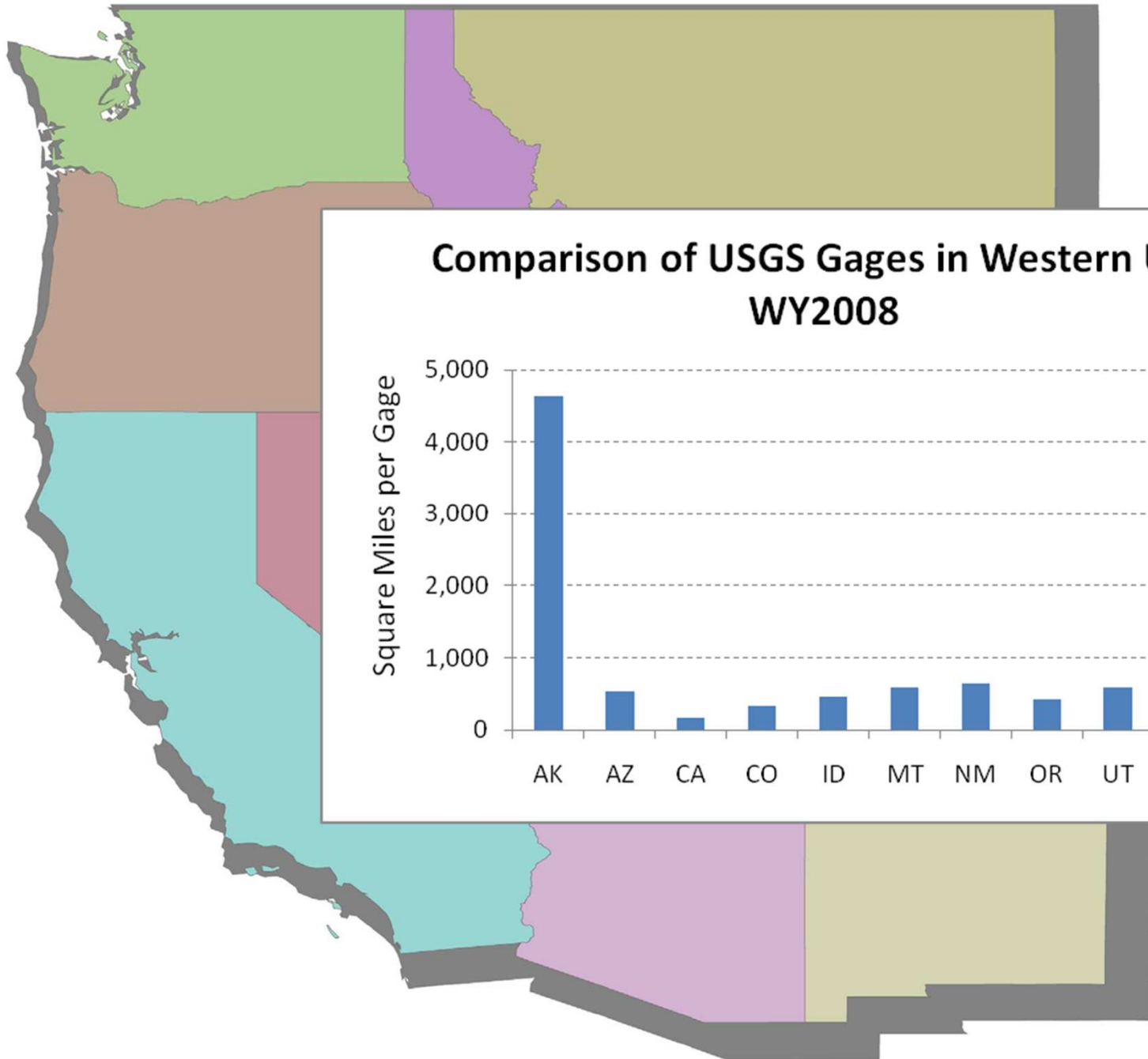


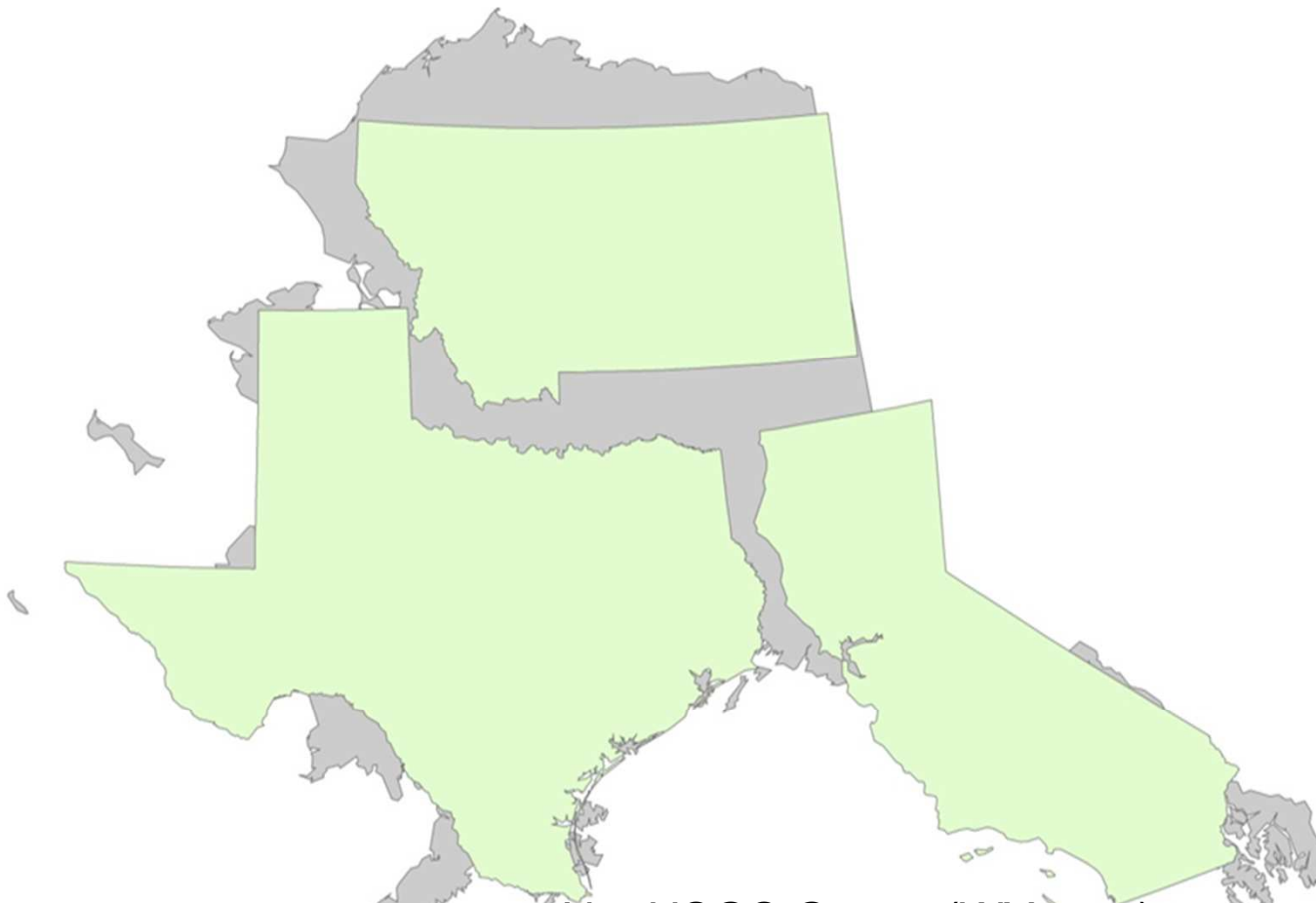
# Why so (relatively) few?



# Lack of Stream Gages



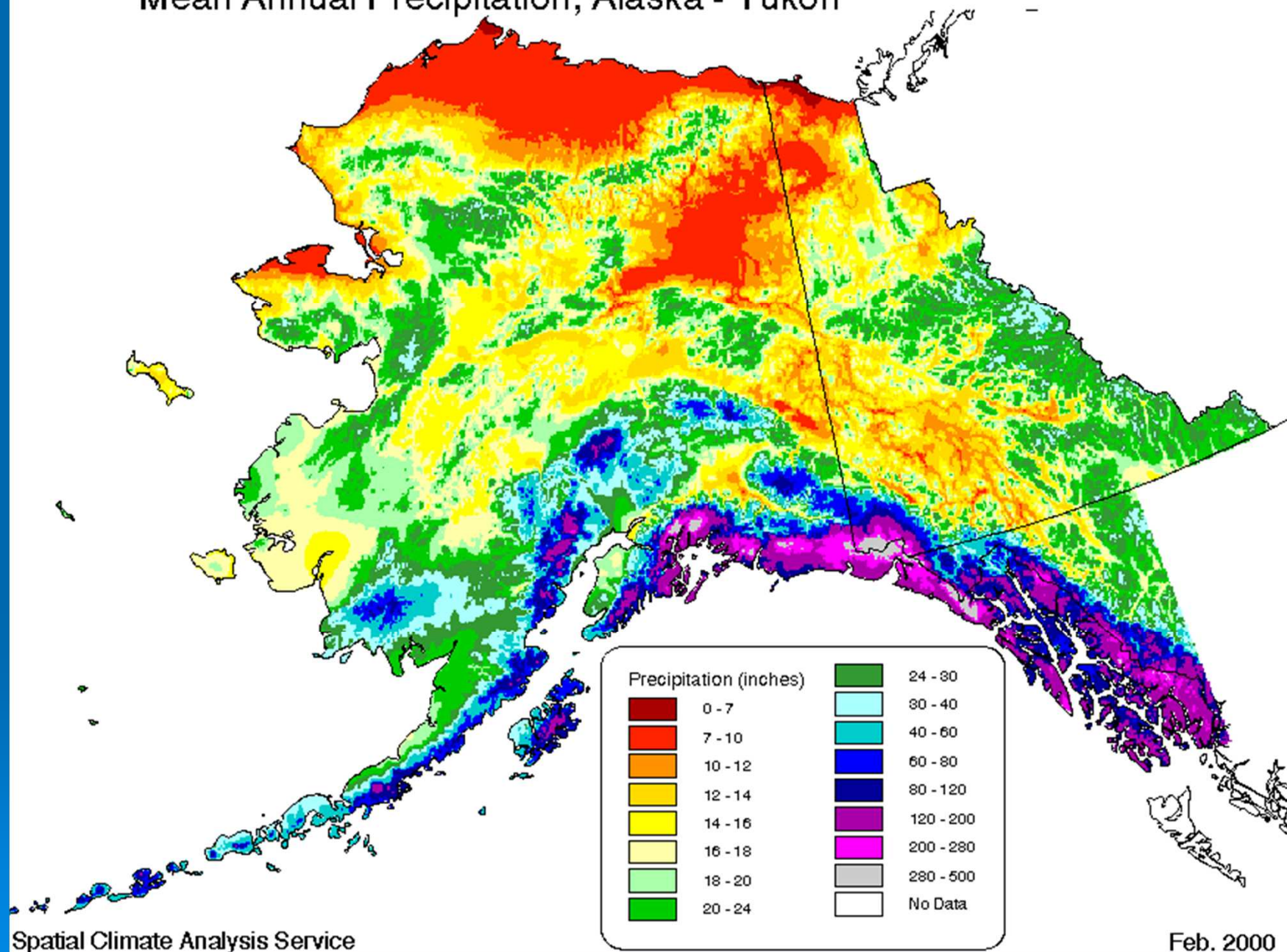




No. USGS Gages (WY2008)

Montana	244
Texas	452
California	<u>898</u>
Total	1,594
Alaska	126

## Mean Annual Precipitation, Alaska - Yukon



# RECOMMENDATIONS

- More stream gages in Alaska!
- More research on fish responses to flows, ideally with fish population dynamics.



# Summary

A race against time . . .

Perpetual nature of prior appropriation water rights seldom gives us a second chance to ensure sufficient water for instream flow uses.



# Thank You



(R E Johnson)