



# The Little Spokane River & The Hangman (Latah) Creek Watersheds

Nonpoint Source Pollution

# Spokane Conservation District Role

- Assist private landowners in conserving and protecting natural resources.
- We are the tool to implement projects at the landscape level to improve and protect water quality.
- Provide education and awareness.

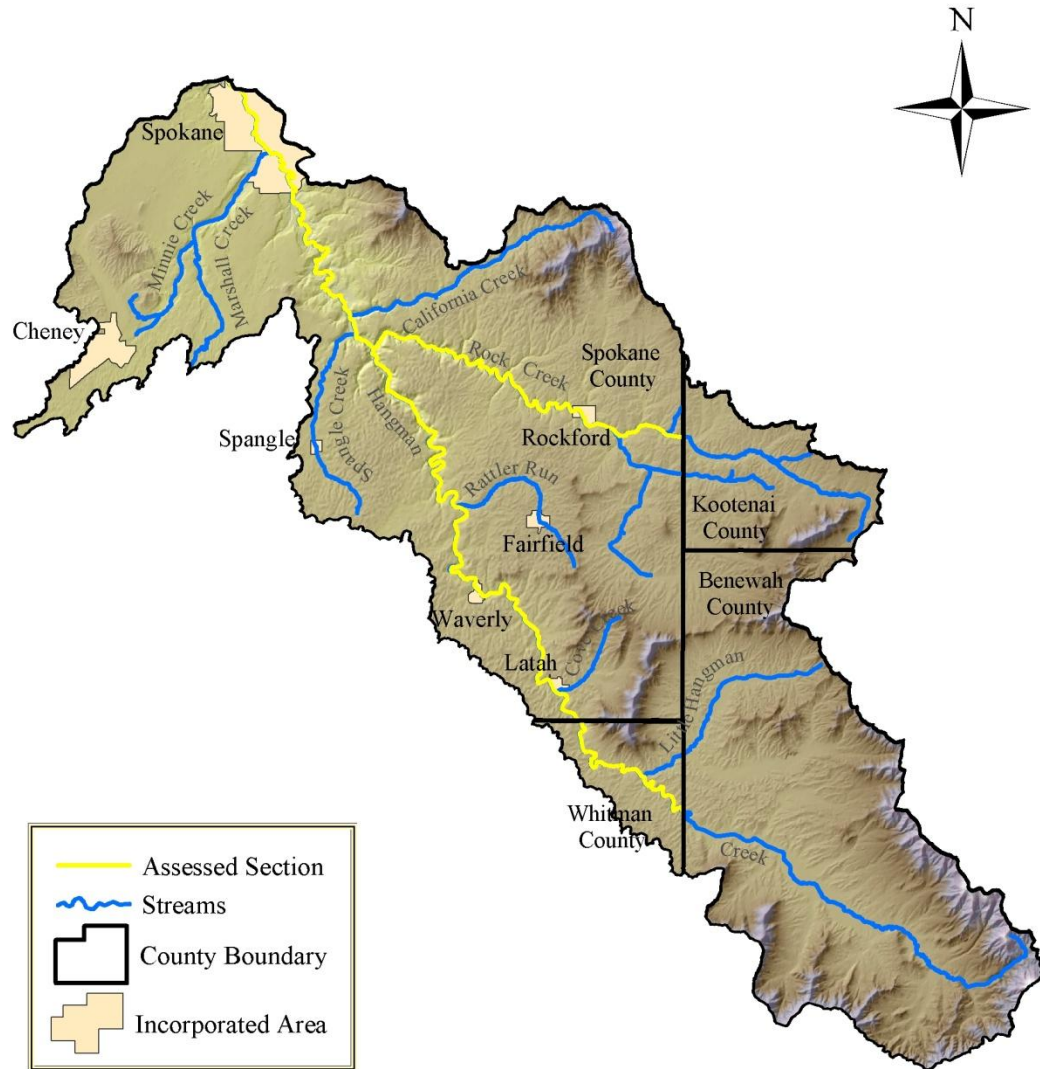
# Hangman Creek Watershed

## Facts

- 441,000 ac.
- 275,000 ac. of dryland agriculture
- 222 miles of perennial streams

## Issues

- Major changes in vegetation
- Altered hydrology
- Easily erodible soils
- Human Impacts



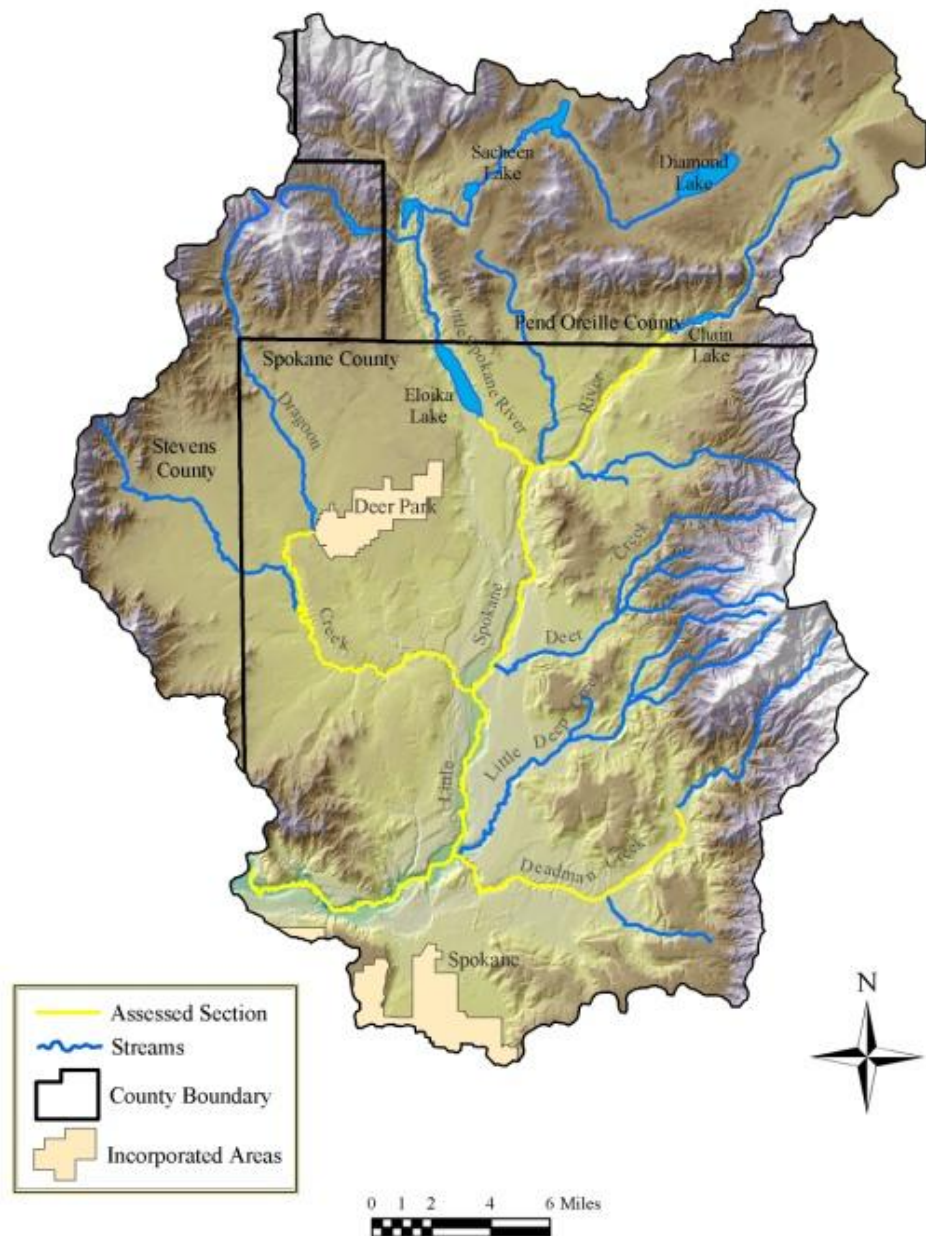
## Facts

- 449,000 ac.
- 99, 670 ac. of agriculture
- 340 miles of perennial streams

## Issues

- Land use changes
- Residential development
- Urbanization
- Numerous Small Farms
- Agriculture

### Little Spokane River Watershed





# Historical and Current Issues



# **NPS is an Investment**

- Trees do not grow overnight!
- The reduction of NPS is a long-term investment.
- The quality of life and the economic engine of natural resources require that we invest today.

# For Example



Dragoon Creek  
1997

Implementation  
1998





# Dragoon Creek 2008





# The NPS “investment” needs time to pay off



1997



2008

# NPS Accomplishments?

## “On the Ground” Implementation Since 1998:

- 10 grassed waterways (25,000 ft)
- 15 sediment basins
- Riparian fencing (60,400 ft)
- 26 Off-creek watering facilities
- 13,350 ft of irrigation pipe
- 15 RMS farm plans
- 7,450 ft of stream bank projects
- AWEPP project – 10,000 acres of conservation tillage



# Cont'd

- 4 wetland restoration/enhancement projects (165 acres)
- Over 135 riparian projects (125,000 ft of shoreline/riparian planting /358,210 trees/shrubs)
- Harvested and planted over 36,000 willow and cottonwood whips
- Inventoried over 100 miles of shoreline habitat
- All fish barriers identified in Hangman Creek Watershed
- 13 fish barrier removal projects since 2007
  - Opened 21.0 miles of new spawning and rearing habitat
- Approximately 30,000 acres of direct seed through loan and mentoring program



# 2011 Fish Barrier– Deadman Creek





# 2011 Hangman Creek Stream Bank Restoration (1,600')









2009



2011



# New Livestock and Land Program

## “Tough Dirty Work”

- Livestock Operation Improvement Cost-Share Program
- Workshop Series
- Demonstration Projects and Tours
- Peer to Peer Assistance Program
- Livestock Health & Pasture Management
- Chore Efficiency
- Watershed Stewardship









## Winter 2011 Livestock Inventory

### Livestock Inventory

Total # of Operations with animals : 305

Total # of Animals Counted: 2071

Animal totals by class:

Cow: 763

Horse: 870

Goat: 38

Chicken: 44

Sheep: 68

Llama: 46

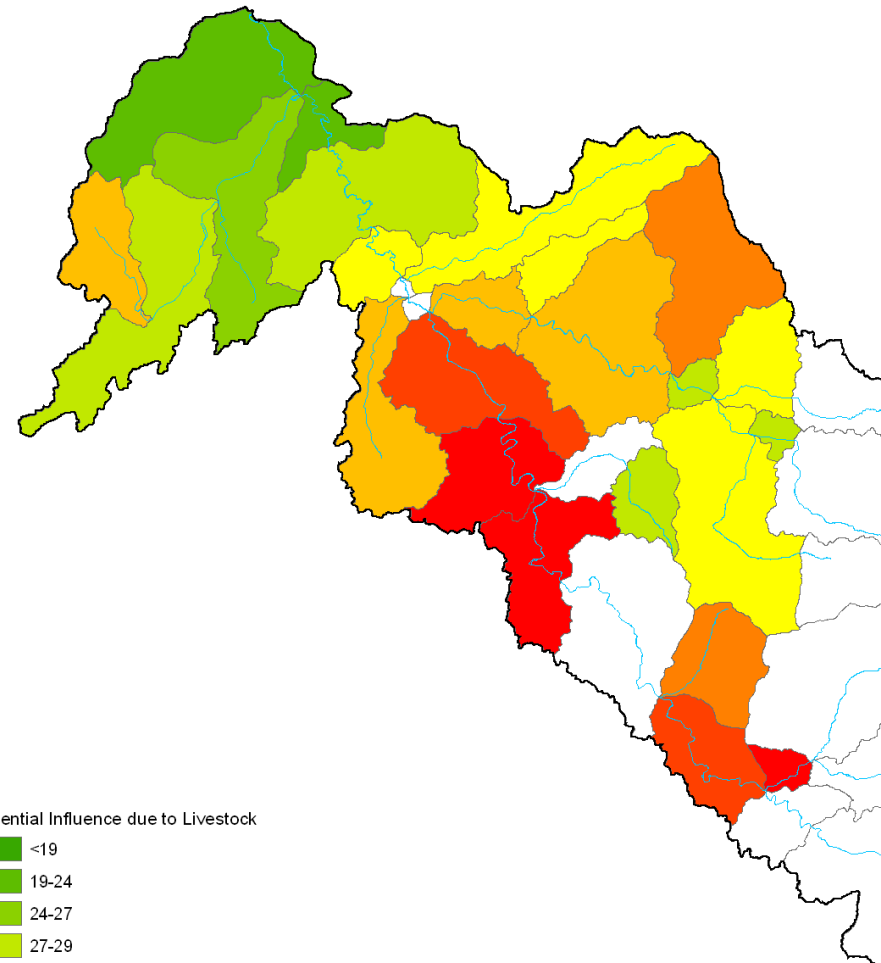
Other: 242

### Operations by size:

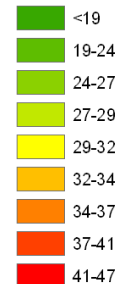
Small (less than or equal to 5 animals):  
218

Medium (between 5 and 20 animals):  
74

Large (greater than 20): 13



Potential Influence due to Livestock

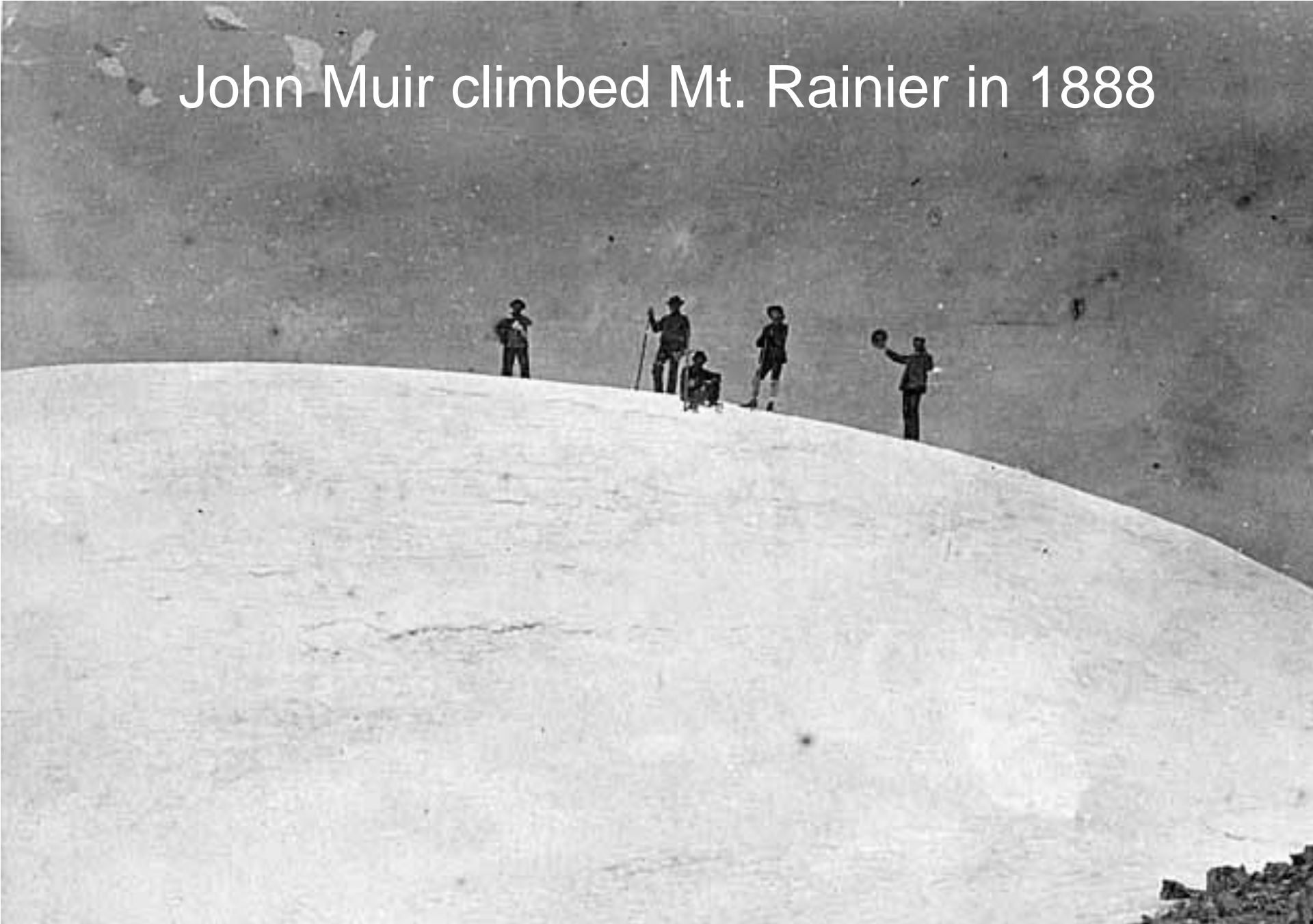


Units of influence are unitless. Please see report for more details.

# Water Resource Monitoring

- Significant WQ monitoring in Hangman Creek, Little Spokane River (Ecology/SCD wrote TMDLs for both)
- (8 stations) Ground water monitoring network in Hangman Creek Watershed (new)
- Volunteer WQ monitoring program (30 volunteers)
- Sediment monitoring in Hangman Creek Watershed
- Installed and maintained 11 stream discharge stations for 10 years
- Established 2 new USGS real-time stream gages in County

# John Muir climbed Mt. Rainier in 1888









**THE END**