

# Reach Gain Changes from Phased-in Application of Water Budget Adjustments

Presentation to Comprehensive  
Aquifer Management Plan Committee

Idaho Falls, February 2008

# Outline

- Phased-in Plan
- What do the results mean?
- Summary of Results
  - Hard Conversions
  - Soft Conversions
  - Recharge
  - CREP/other reductions

# Phased-in Plan

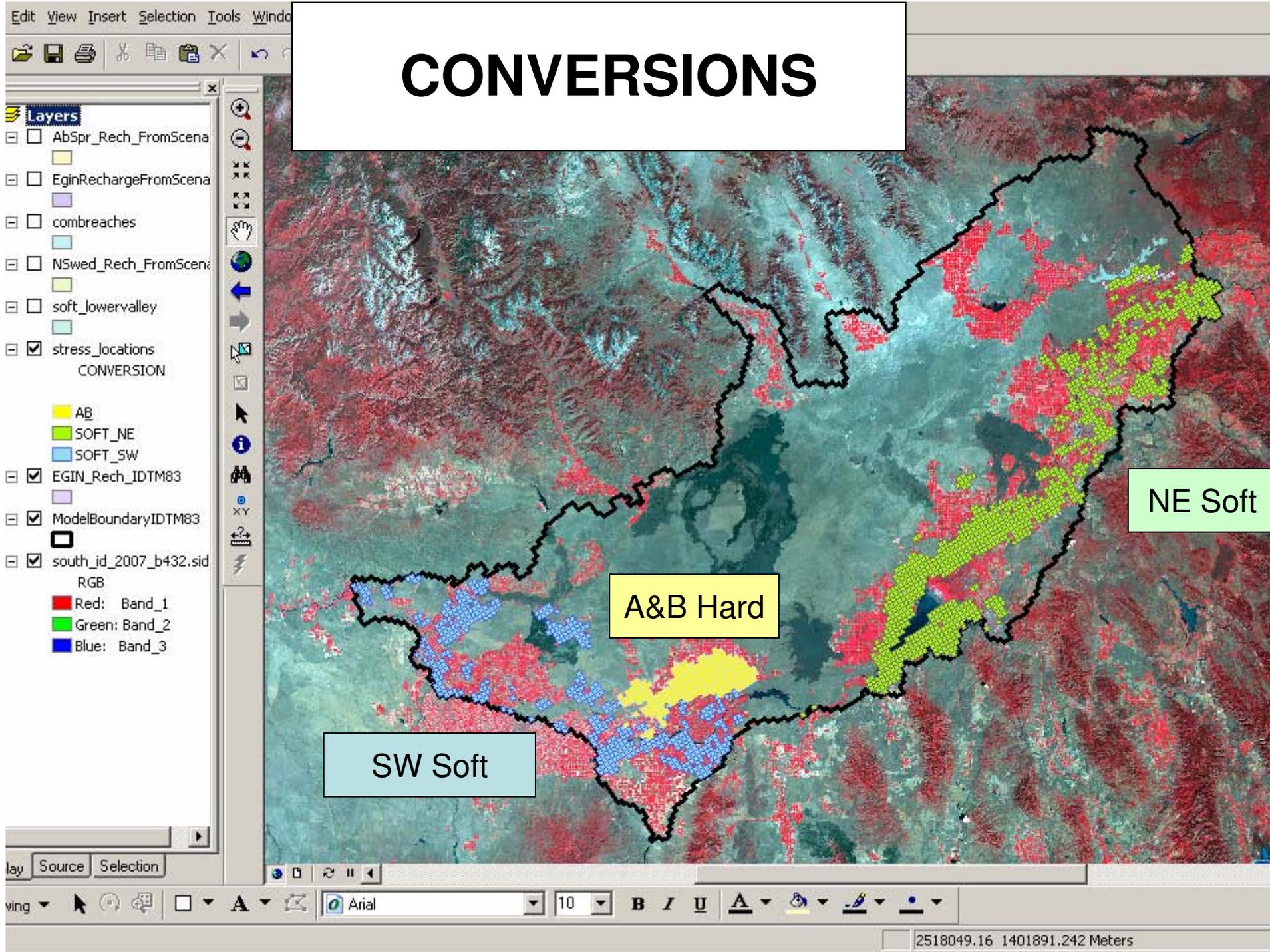
- Some activities are in partially in place now
  - CREP
- Some can be started gradually over time
  - Recharge
  - Soft conversions
  - Other demand reduction
- A&B Hard conversions will take time to implement but once complete can be immediately operated at full capacity

# What do results mean?

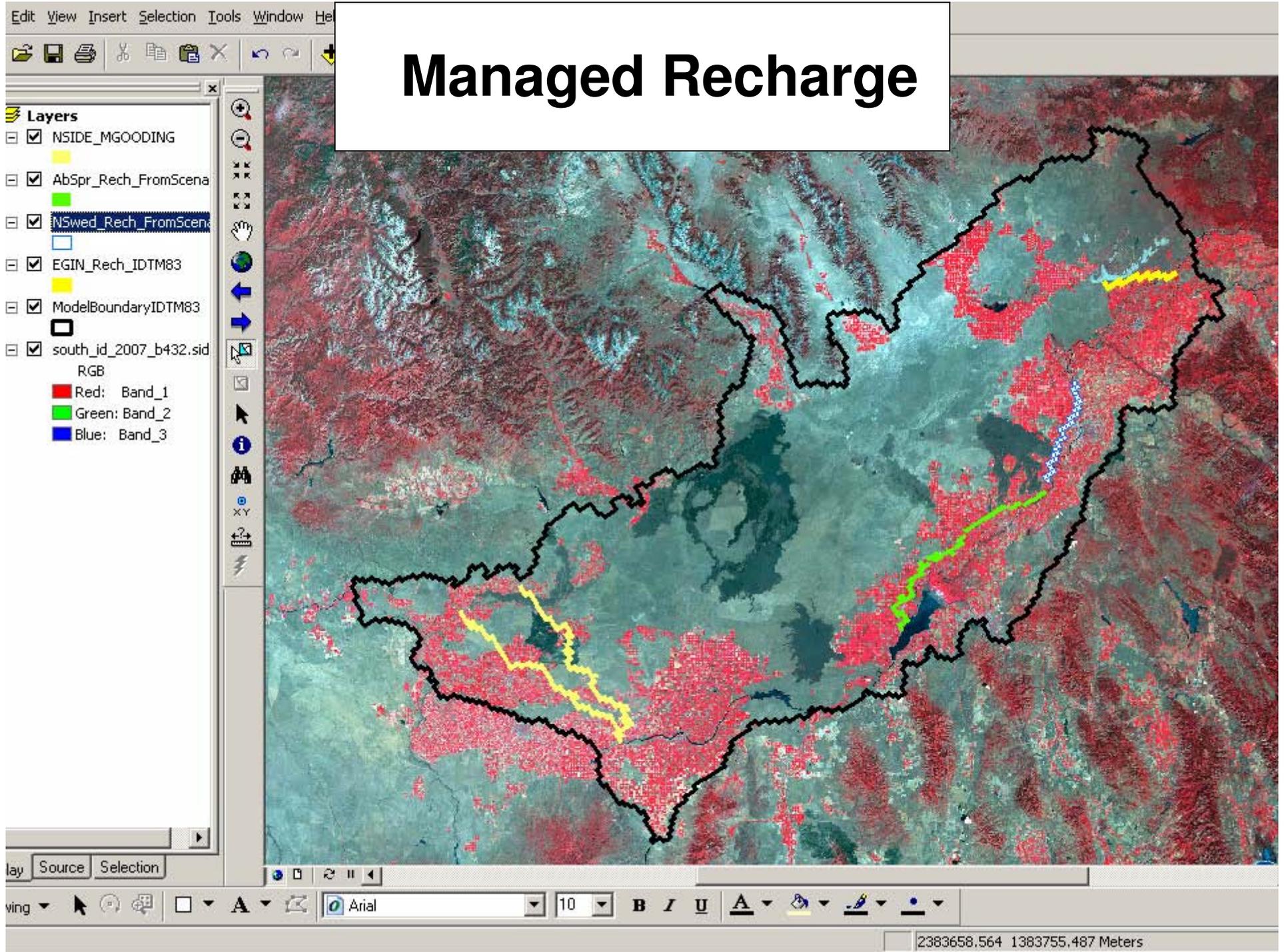
- Model input is *change* in water budget
- Model output is an estimate of *change*
  - **river gains**
  - **spring discharges**
  - aquifer water levels
- ***THESE ARE NOT PREDICTIONS!***

# 1. Where Activities Occur

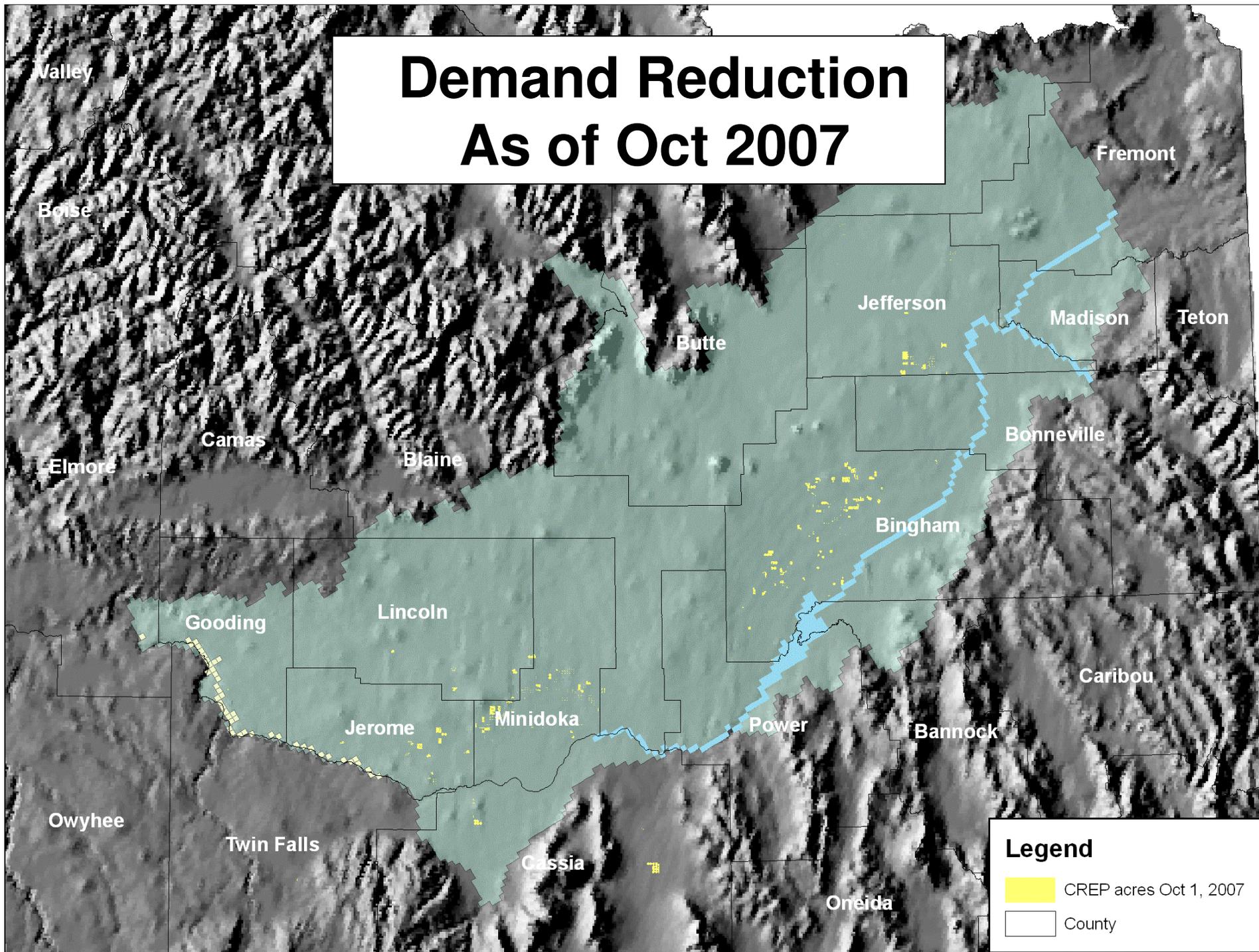
# CONVERSIONS



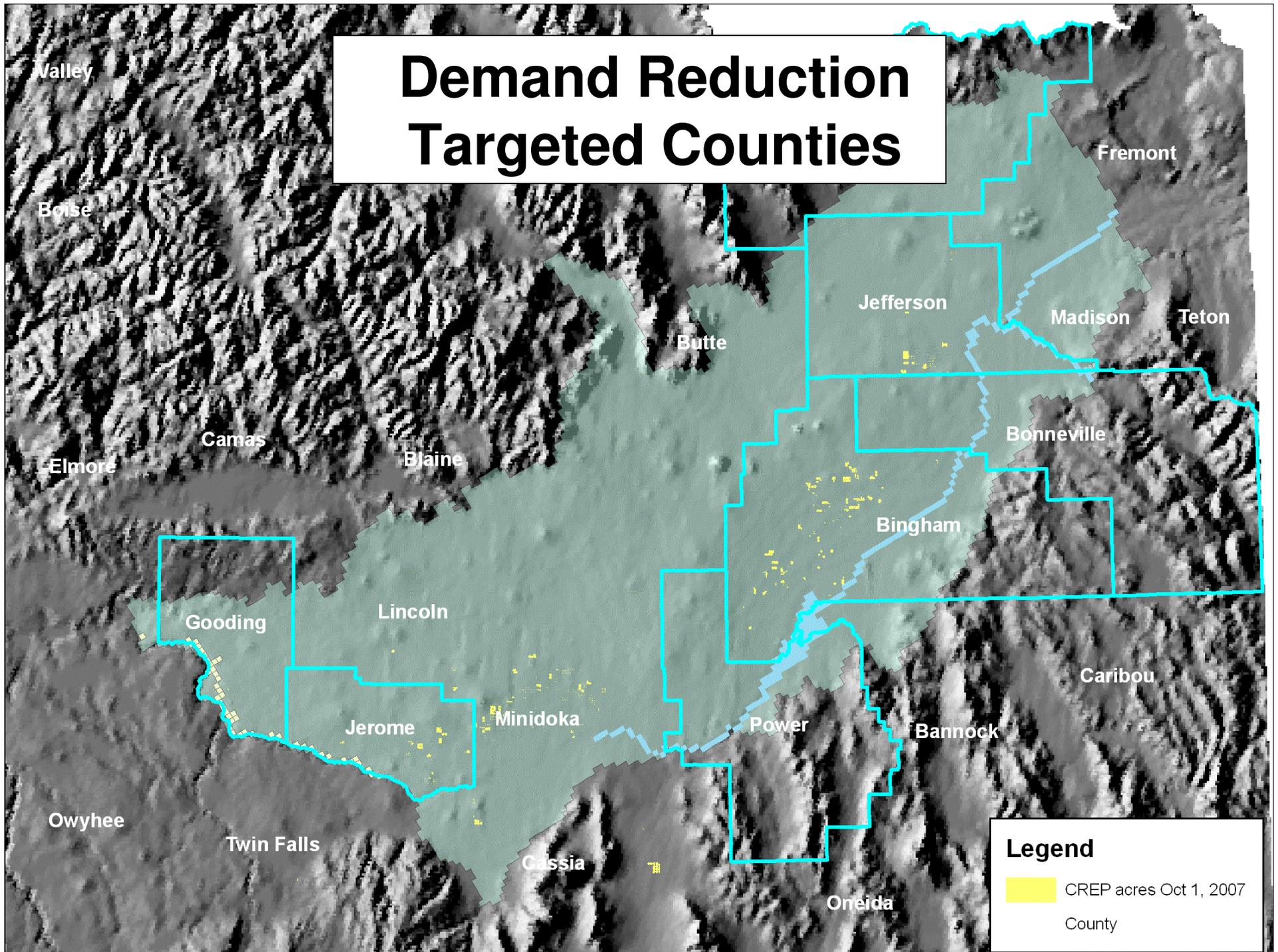
# Managed Recharge



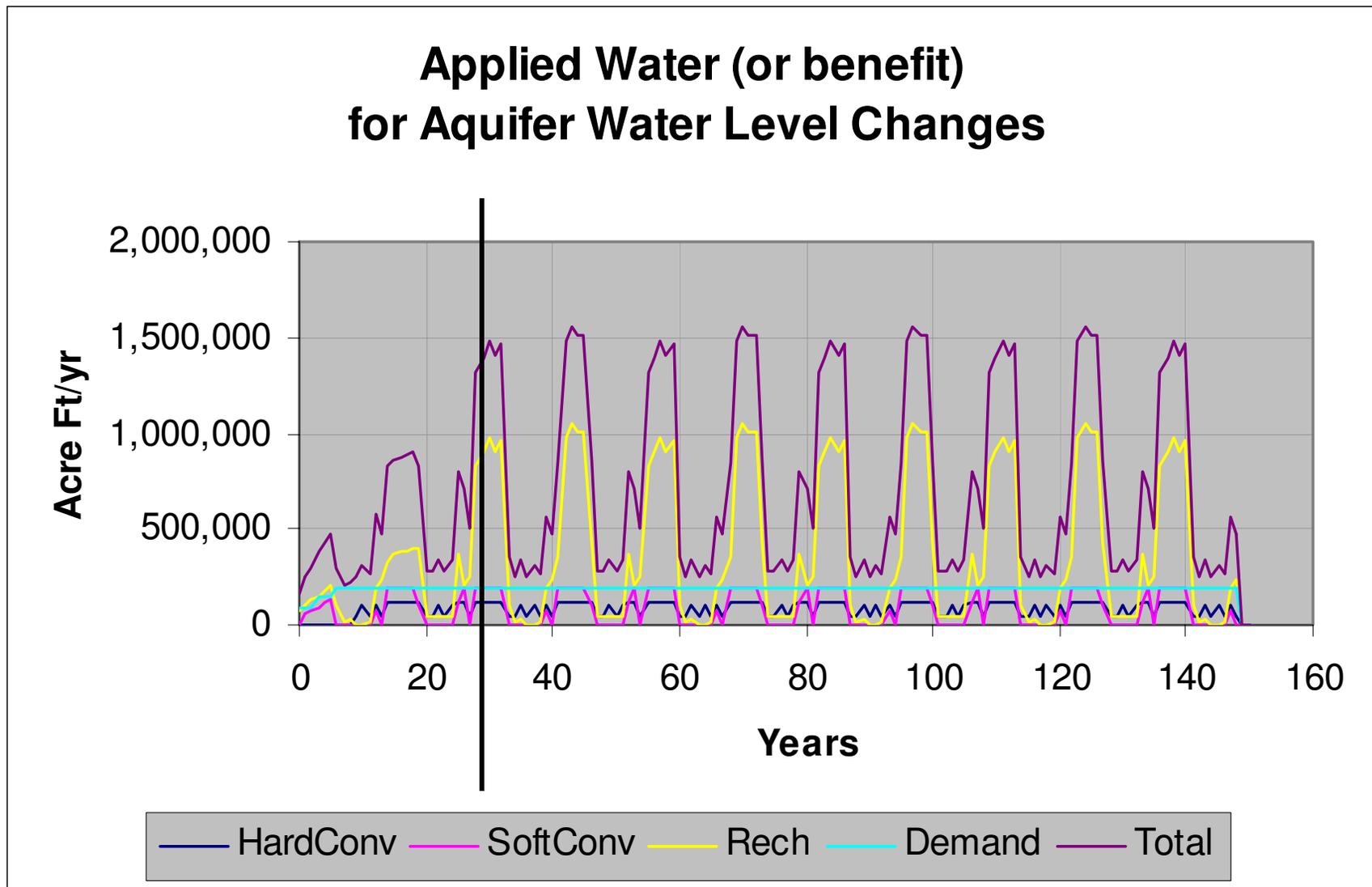
# Demand Reduction As of Oct 2007



# Demand Reduction Targeted Counties



# 1. Level of Effort Applied

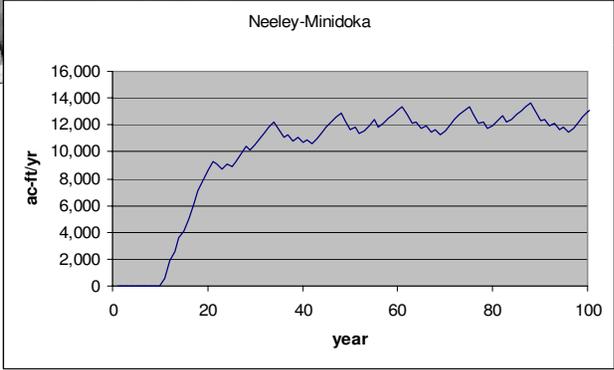
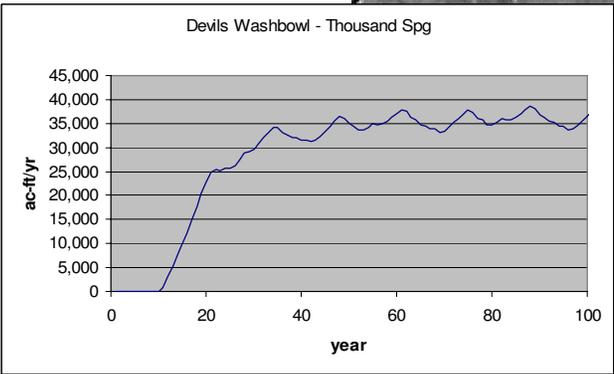
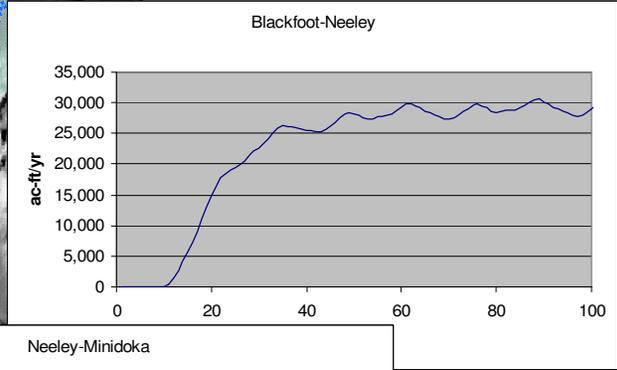
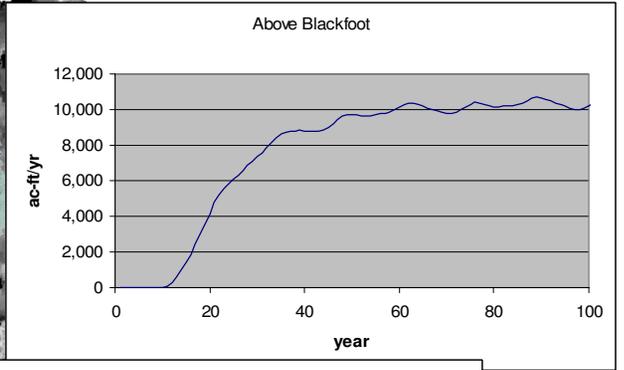
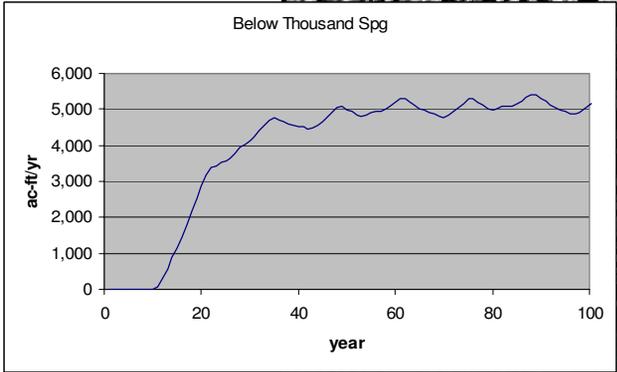
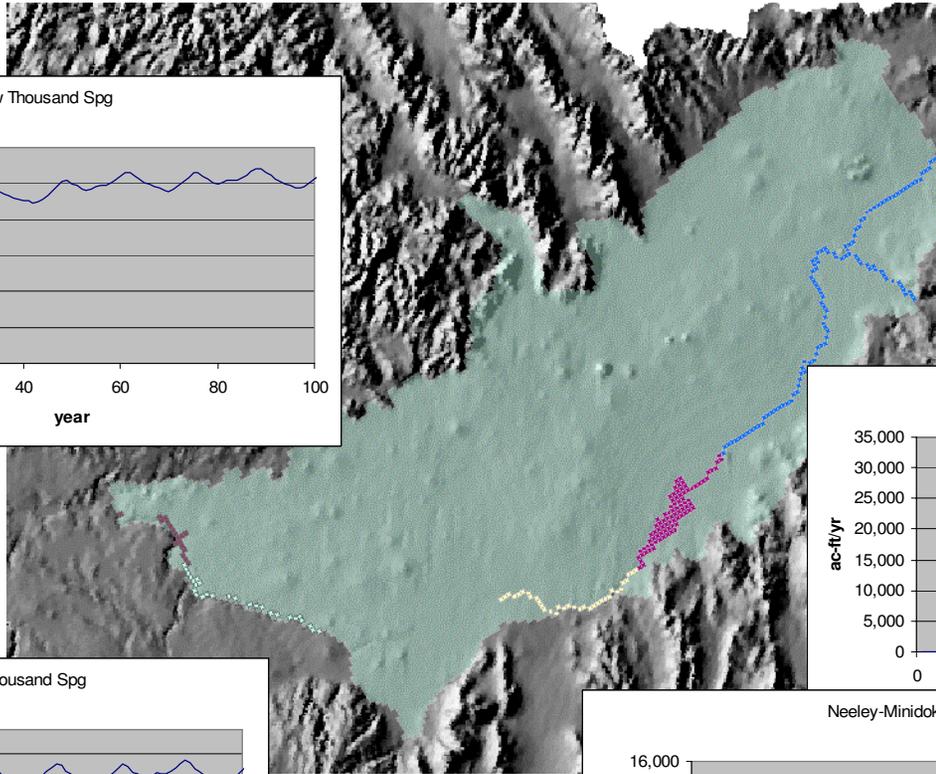


# Results

- Model input is *change* in water budget
- Model output is an estimate of *change*
  - river gains
  - spring discharges

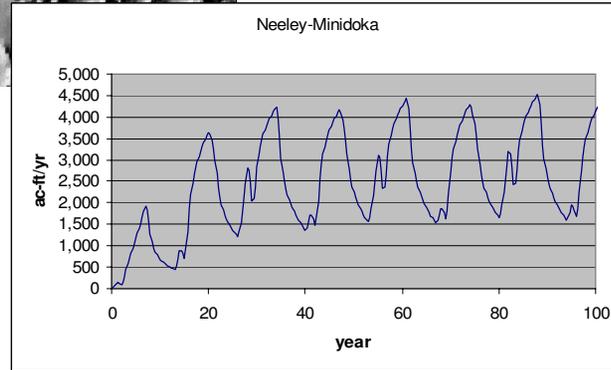
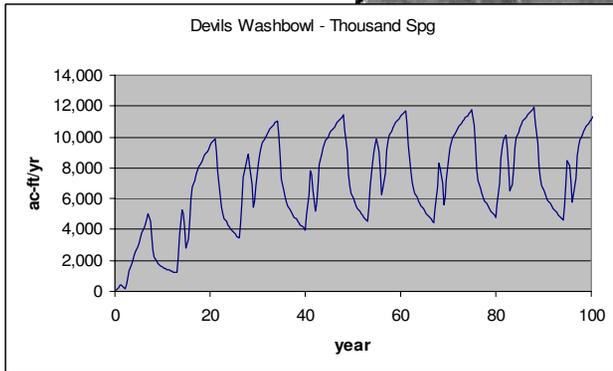
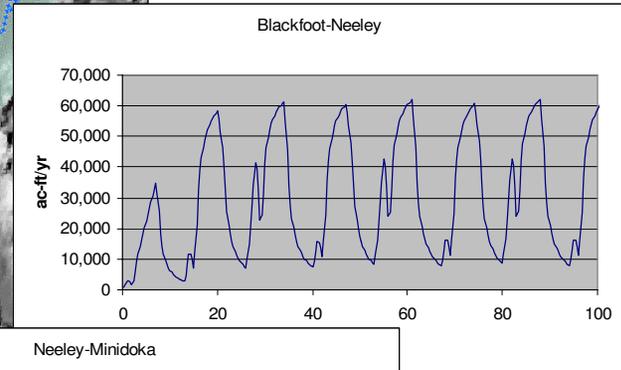
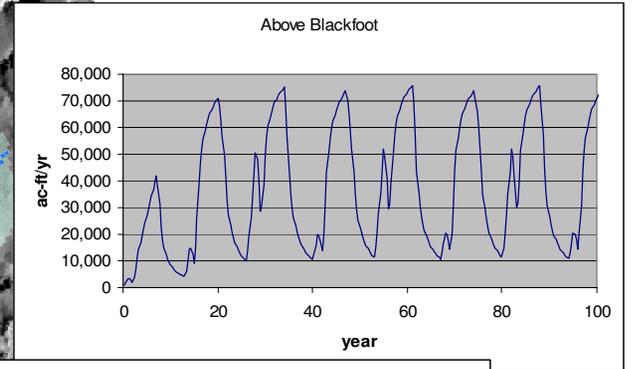
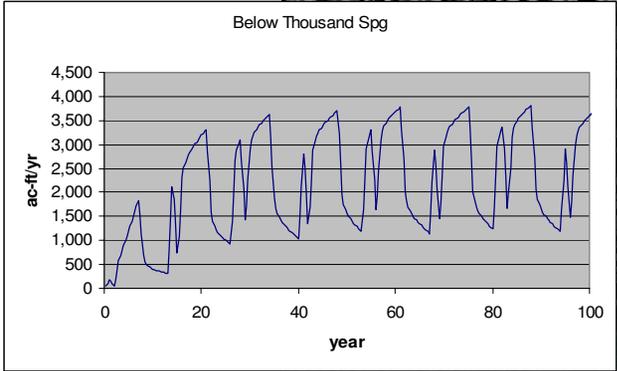
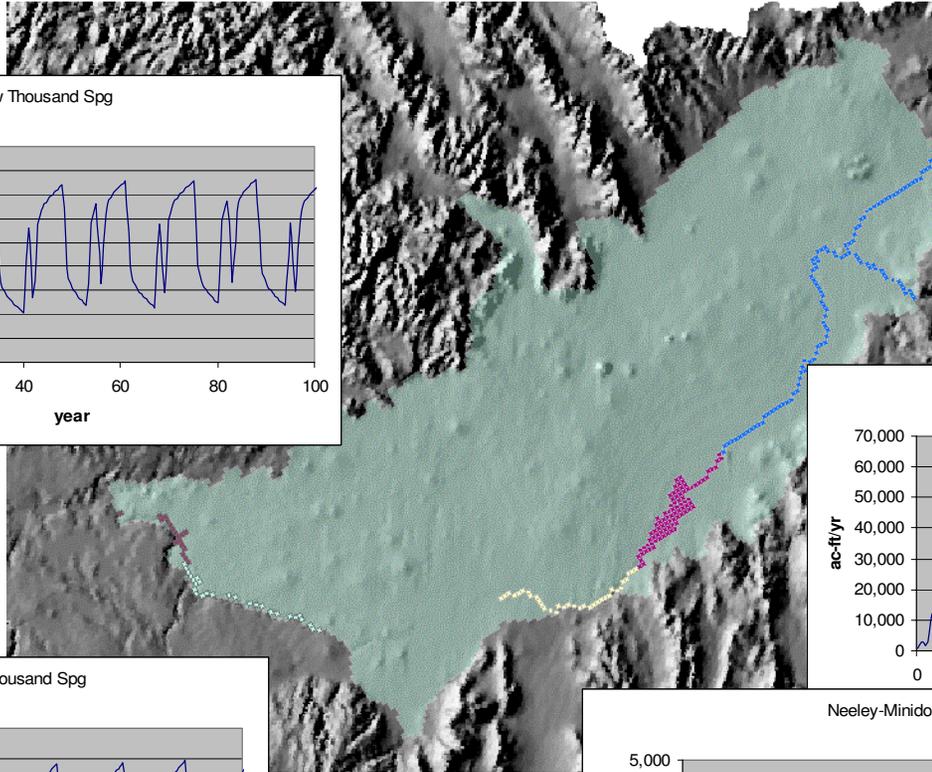
# Hard Conversions

- A&B Irrigation District
  - Convert ground water portion of the district to surface water
  - Water supplied by
    - Purchase of high lift water rights
    - Additional storage in Milner
  - 10 yrs to develop
  - First priority for available water



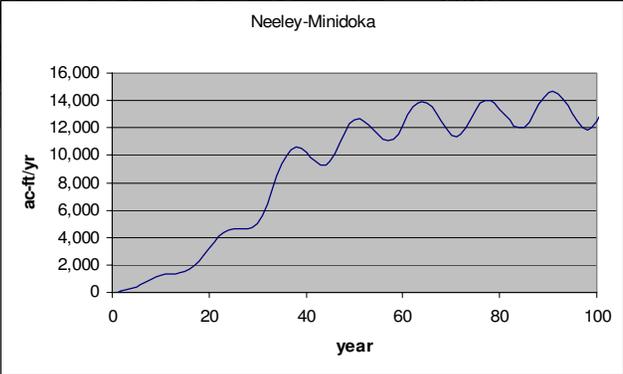
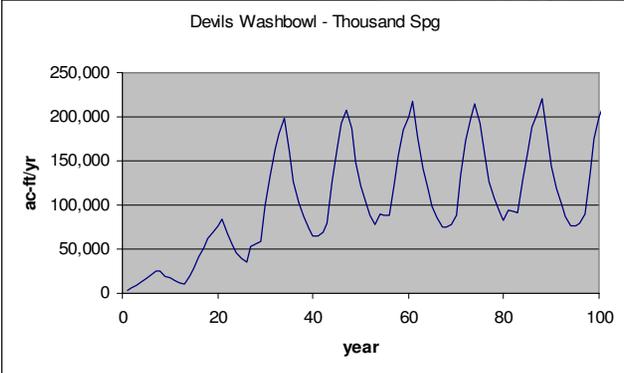
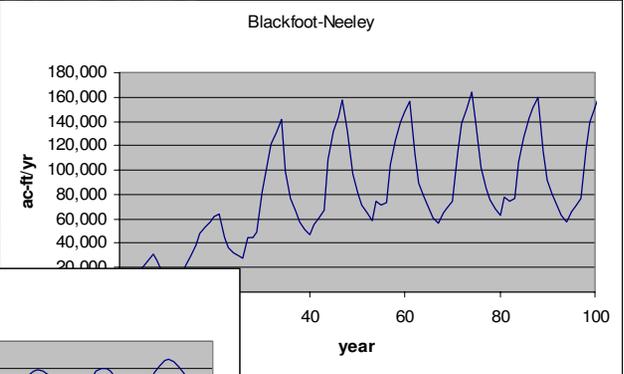
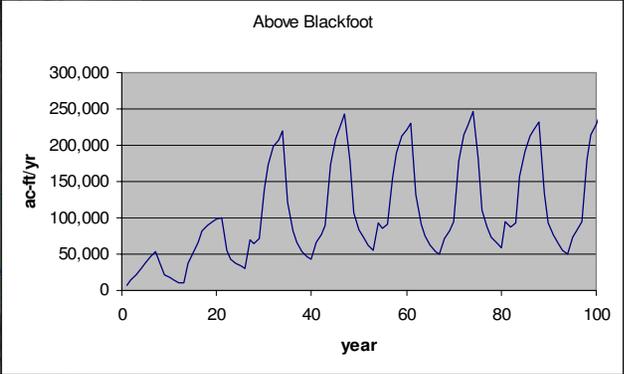
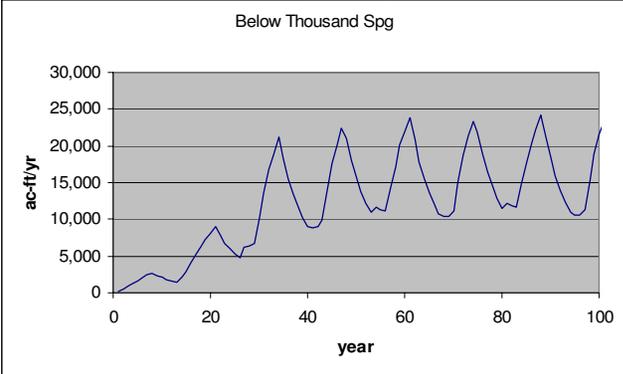
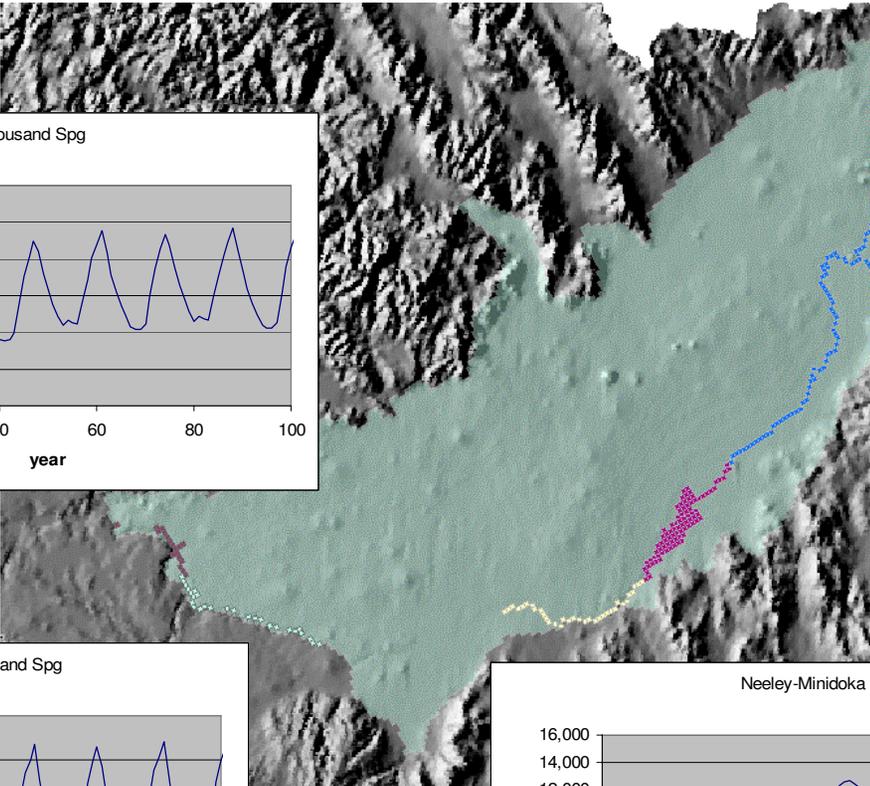
# Soft Conversions

- Converting lands with both surface water and ground water rights to higher dependency on surface water
  - Water supplied by
    - Purchase of high lift water rights
    - Excess natural flow in high water years
- 10 yrs to develop
- Last priority for available water



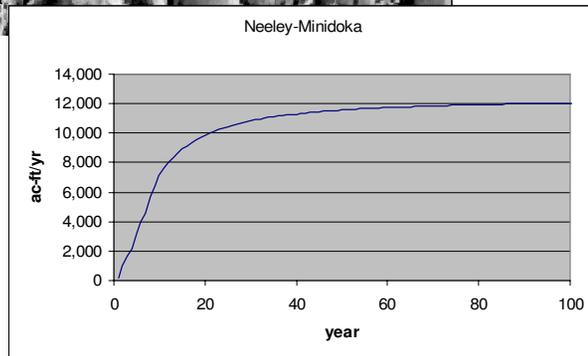
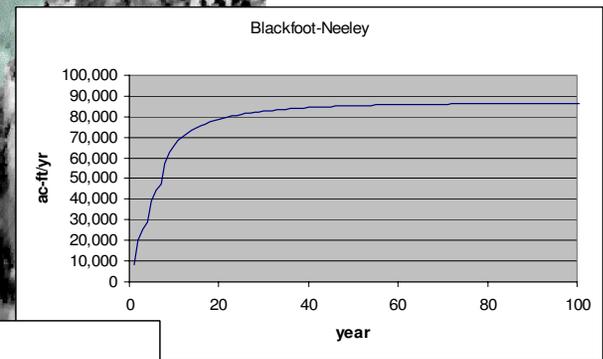
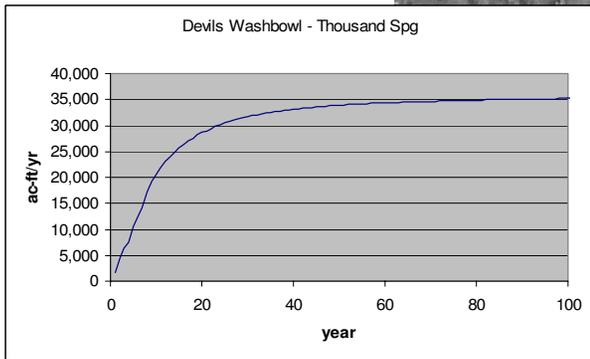
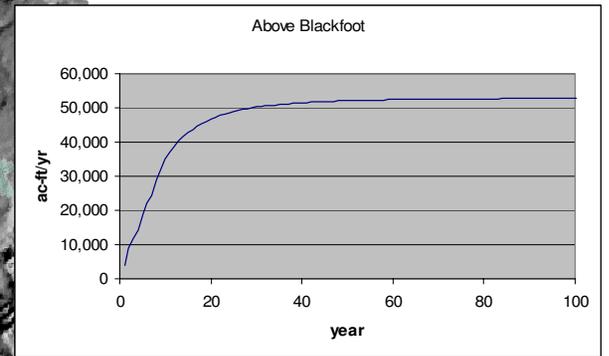
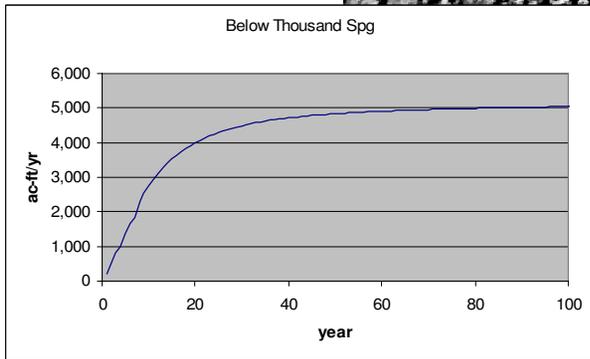
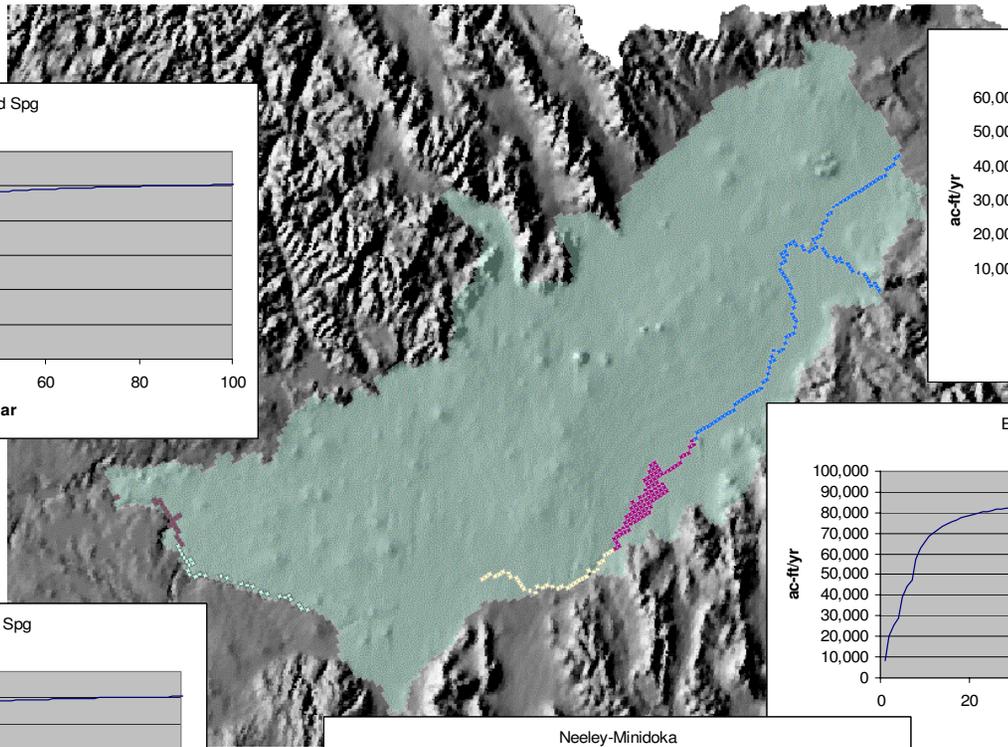
# Recharge

- Recharge conducted using sites near existing canals
  - Water supplied by
    - Natural flow when Water Board's recharge right is in priority
  - 20 yrs to develop



# CREP/Other Demand Reductions

- Start with current CREP
  - Add buyout
    - 10,000 ac in Bingham Co
    - 20,000 ac in Power Co
    - 10,000 ac in upper valley
      - Divided between Bonneville, Jefferson, and Clark
  - Add additional demand reduction to make 100,000 acres
  - 10 yrs to develop
  - INDEPENDENT of water supply





# Discussion