Impacts to Grazing / Ranching

• Reduced rangeland forage production
• Lower overall carrying capacity and potential ranch economic sustainability
• Restricted herd movement, more difficult gathering
• Reduced spring flow/water livestock distribution
• Possible long term reduction in site potential soil loss
• Possible late-term abortion in cows
Summary of studies relating range forage production with juniper

• Increased by 3x from 22 acres per AUM to 7 and increased by 219 lbs to 646 acre (Winegar and Elmore 1977)

• 900% increase in biomass production / 350% increase in herbaceous cover (Bates 1998)

• Increased herbaceous cover from 2% to 11% (Miller et al)

• Increased perennial cover from 17.6 % to 19.2% (Miller et al)

• Reduced herbaceous cover and biomass with increasing juniper canopy (Coultrap et al)
Great Basin Wildrye

Bluebunch wheatgrass
Bottlebrush squirrel-tail
Perennial bluegrass
Indirect effect on livestock grazing from juniper expansion

- More grazing use into riparian zones
- Intensifies competition with wild horses / wildlife
- Increased regulation if Sage Grouse listed under ESA
- Short-term rest associated with restoration projects
Economic...what if’s

- Variable but significant given acreage
- 1000 lbs. dry forage sustain one cow-calf-pair per month
- 70 lbs. beef produced on that AUM with a value of about $100
- If an increase of 1 AUM per 8 acres, each acre of juniper treatment could result in gross production value per year $12.50
- Sage Steppe FEIS proposes 1.25 Million acres of treatments over long term.
Questions?
• Reduced diversification opportunities such as hunting... 72% decrease in deer tags from 1987 to 1997...30% canopy, 15 ft height 13 trees /acre occupied by deer...flip side juniper restricts understory and reduces foraging base.