

# State of the transects: A watershed wide monitoring story



Photo courtesy of Sher lab



# Monitoring for Progress Reporting

## Tools for progress reporting

- Rapid monitoring - inform progress tracking and implementation planning
- Site visits
- Watershed wide monitoring



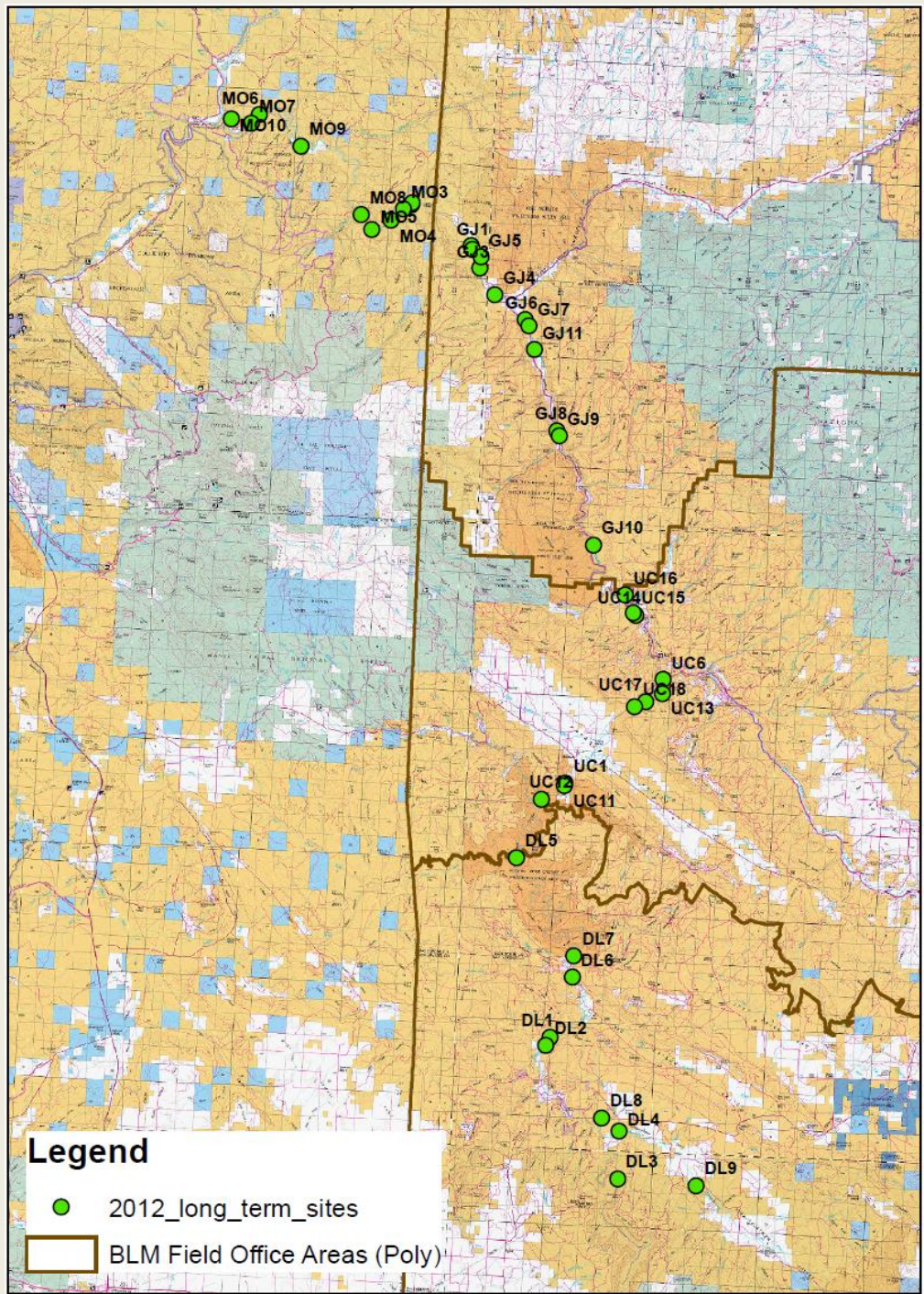
# What are we doing and why are we doing it?

## What are we doing?

- 40 intensively monitored sites
- Point intercept vegetation monitoring (systematic way to sample vegetation cover)
- Photos
- Soils analysis
- Coupled with treatment data (implementation committee)







# Why are we doing this?



- Rapid monitoring – progress
  - Did we meet our goals?
- Watershed wide monitoring– patterns
  - How did we meet our goals?



# Why are we doing this?

- How did we get success?
  - Native vegetation regrowth
  - Treatments
- How did we get failure?
  - Secondary invasions
  - Native vegetation
- How often did we get success or failure?





# Watershed wide



# DRRAP Ecological goals

## DRRAP goals

1. Relative cover of tamarisk <5%
2. Relative cover of other invasive, non-native plants <15%
3. Relative cover of native species >80%
4. \*\*Total vegetation cover of a site  $\geq 30\%$

Dolores Site 8,  
meeting DRRAP  
goals

Photo courtesy of Sher lab







Photo courtesy of BLM GJFO



# Site evaluation categories: Where are we in the process of ecological restoration?

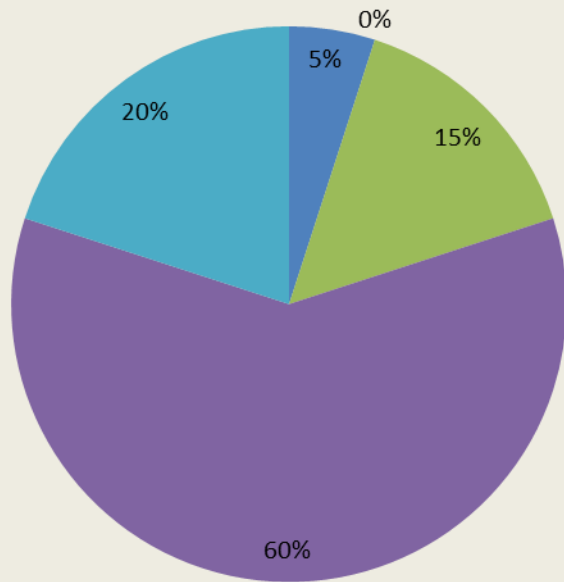


1. Site meeting DRRAP goals, site restored.
2. Meeting DRRAP goals, but lacking in total vegetation cover.
3. Meeting tamarisk goals.
4. Not meeting tamarisk goals.



# Where were we, all 40 sites?

**2010 data**



■ Meeting DRRAP goals, site restored

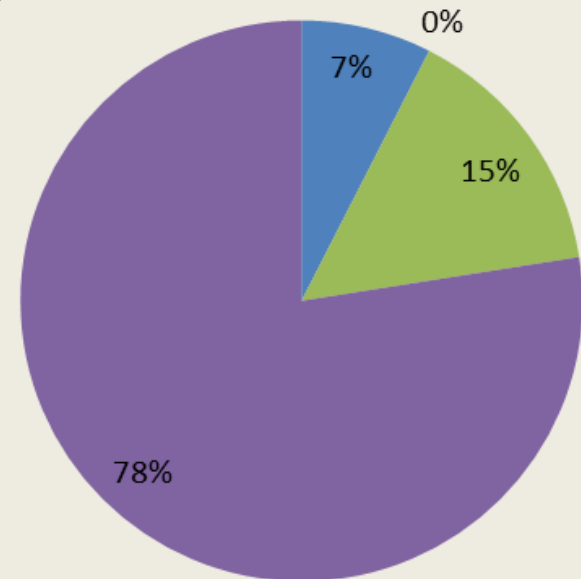
■ Meeting DRRAP goals, but lacking in total vegetation cover

■ Meeting tamarisk goals

■ Not meeting tamarisk goals

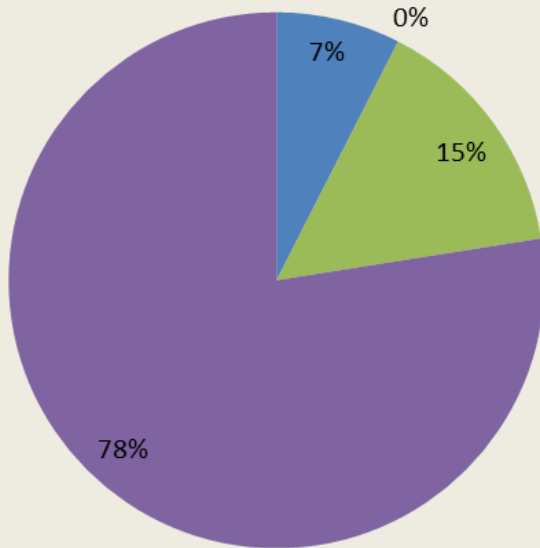
■ No data

**Beginning Point**

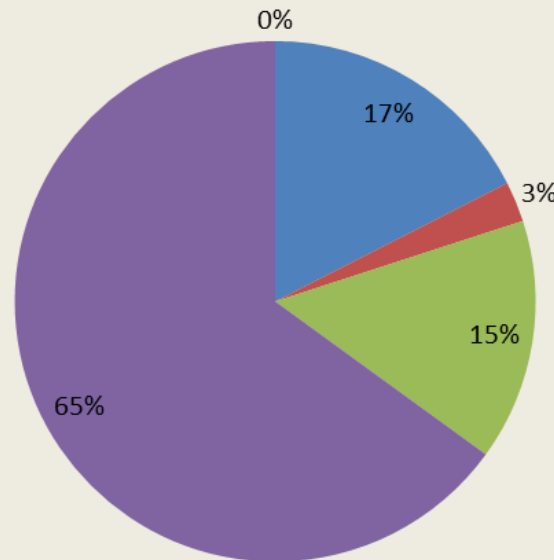


# Where are we, all 40 sites?

**Beginning Point**



**2012 data**

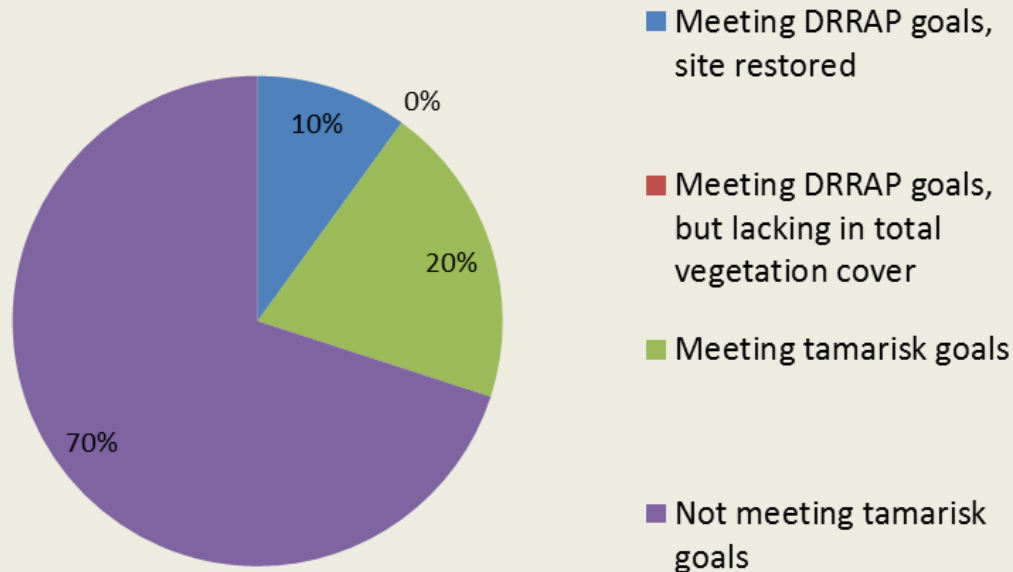


- Meeting DRRAP goals, site restored
- Meeting DRRAP goals, but lacking in total vegetation cover
- Meeting tamarisk goals
- Not meeting tamarisk goals

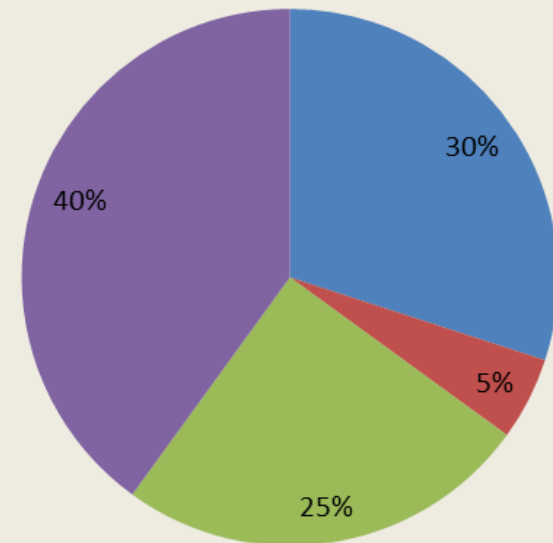


# Where are we, 20 sites with some type of active treatment?

**Actively treated 2010**



**Actively treated 2012**



# Grand Junction Site 6 2010

Photo courtesy of Sher lab





# Grand Junction Site 6 2011

Photo courtesy of Sher lab





# Grand Junction Site 6 2012

Photo courtesy of Sher lab

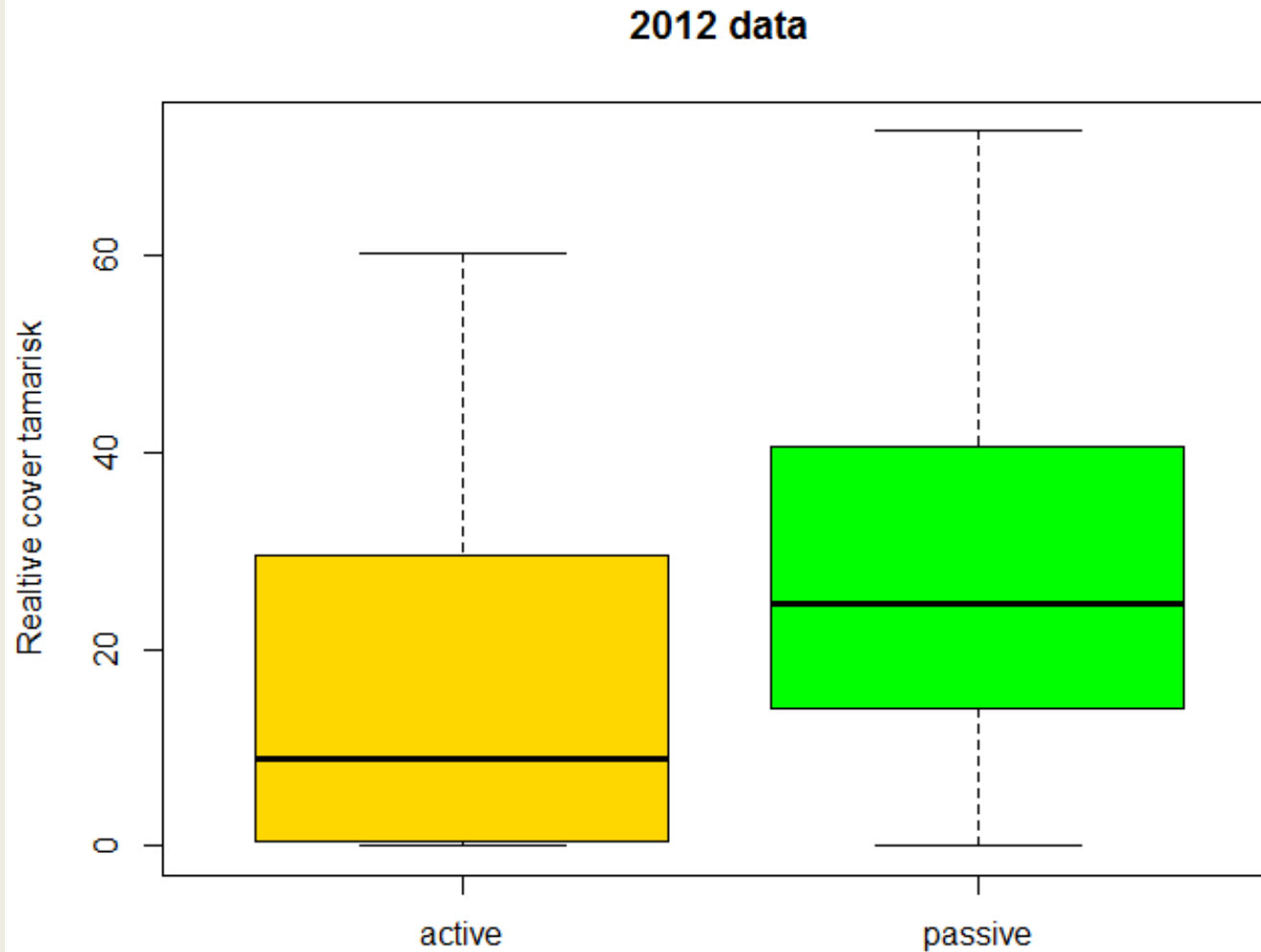




# Watershed wide monitoring

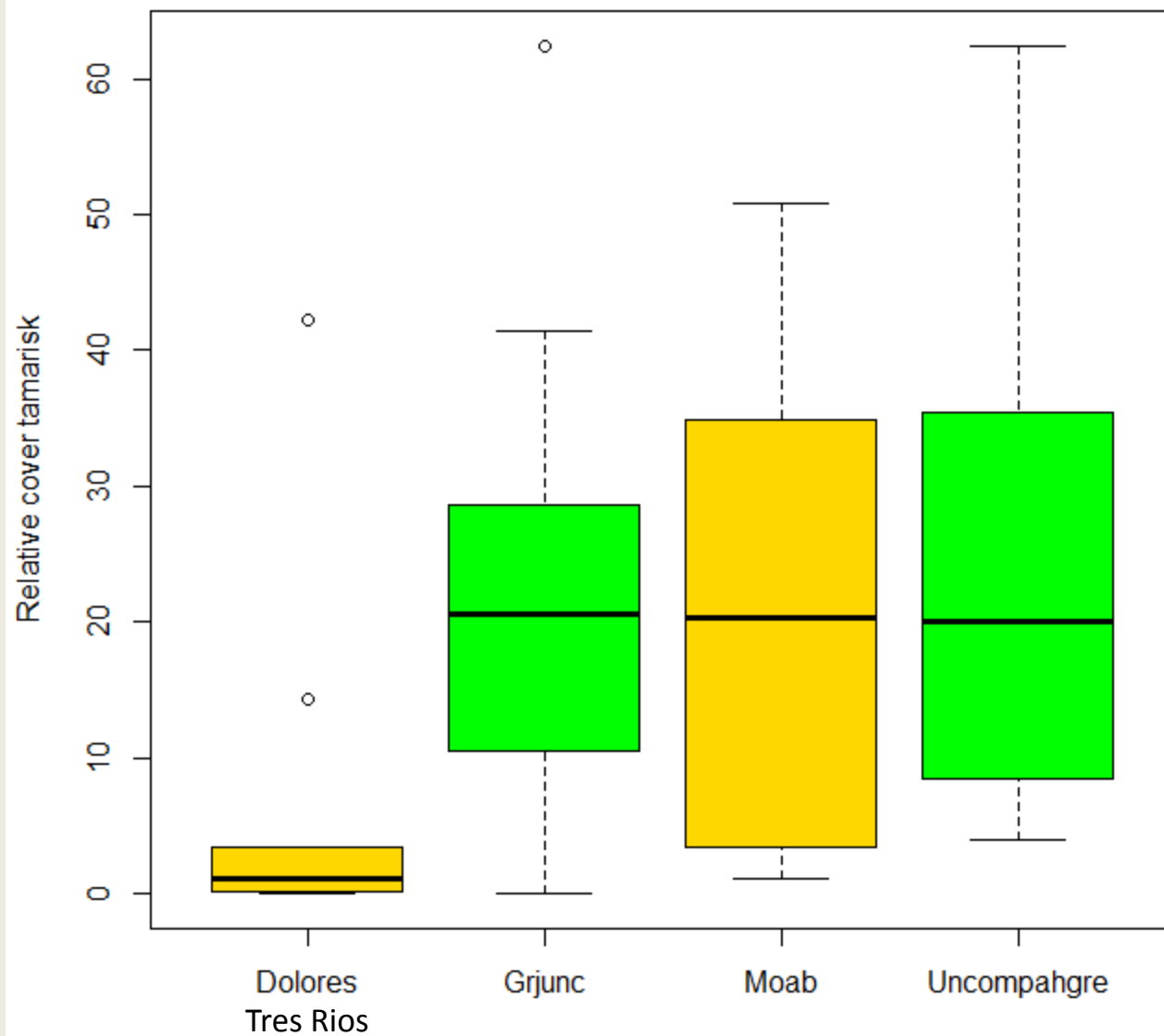


# What else?





## Comparisons between reach 2012



# Where are we going?

- Types of treatments
  - Response of tamarisk
  - Response of non-natives
  - Response of natives





# Where are we going?

- Relationship between % cover tamarisk in year 1 versus % cover native plants 4 years later





Photo courtesy of BLM GJFO

