State of the transects: A watershed wide monitoring story

Photo courtesy of Sherlab
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)

Photo courtesy of Sher lab
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 ≥30%**
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.

Photo courtesy of Sher lab
Where were we, all 40 sites?

**2010 data**

- Meeting DRRAP goals, site restored: 0%
- Meeting DRRAP goals, but lacking in total vegetation cover: 5%
- Meeting tamarisk goals: 15%
- Not meeting tamarisk goals: 20%
- No data: 5%

**Beginning Point**

- Not meeting tamarisk goals: 78%
- No data: 15%
- Meeting tamarisk goals: 7%
Where are we, all 40 sites?

**Beginning Point**
- 78%: Not meeting tamarisk goals
- 15%: Meeting tamarisk goals
- 7%: Meeting DRRAP goals, site restored
- 0%: Meeting DRRAP goals, but lacking in total vegetation cover

**2012 data**
- 65%: Not meeting tamarisk goals
- 17%: Meeting tamarisk goals
- 15%: Meeting DRRAP goals, site restored
- 3%: Meeting DRRAP goals, but lacking in total vegetation cover
Where are we, 20 sites with some type of active treatment?
Grand Junction Site 6
2010

Photo courtesy of Sher lab
Grand Junction Site 6
2012

Photo courtesy of Sher lab
Watershed wide monitoring
What else?
Where are we going?

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

Photo courtesy of BLM GJFO
Where are we going?

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