

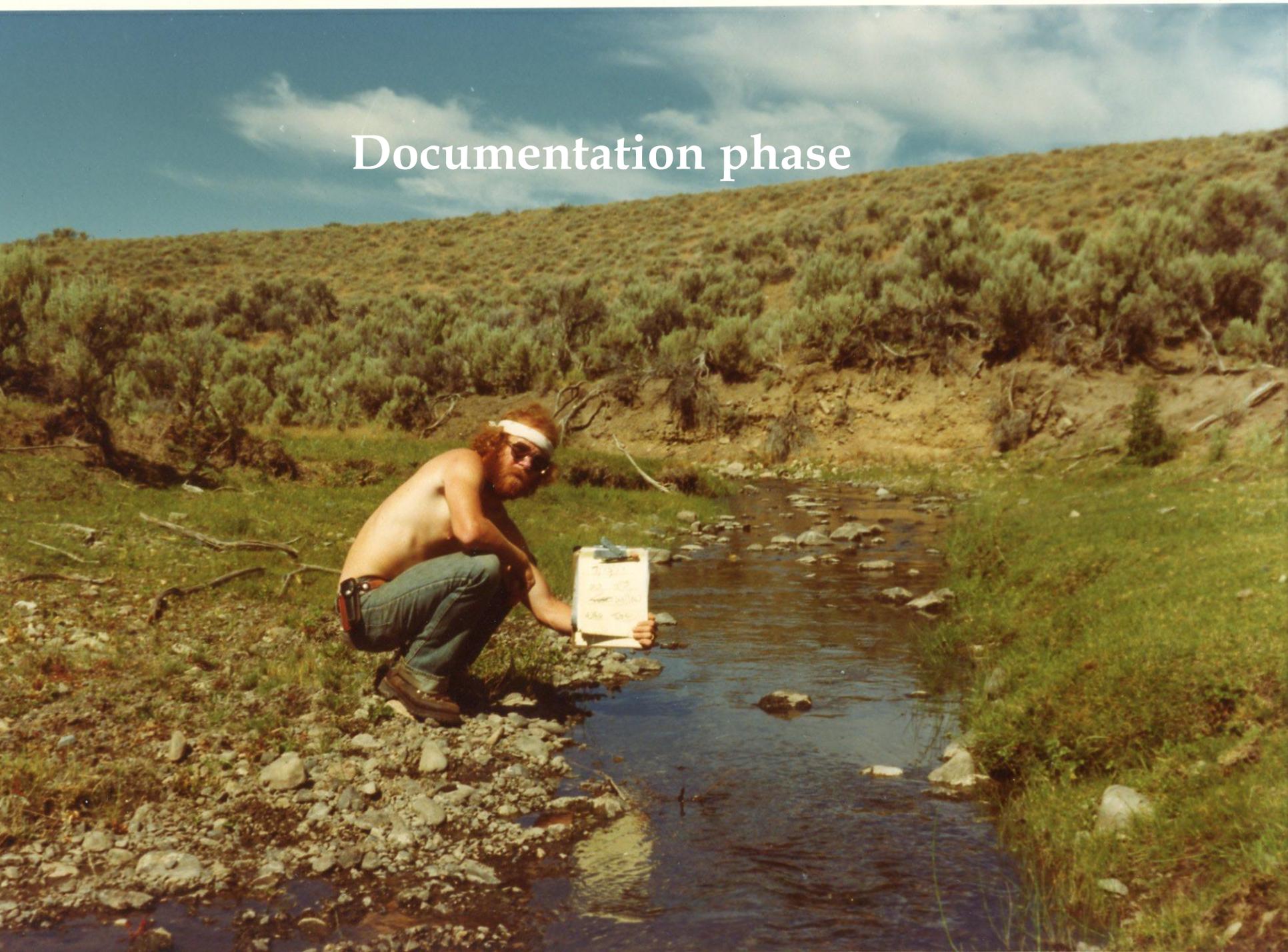
Managing Livestock Grazing on Streams on the Elko District and the Need to be Adaptive

Bureau of Land Management, Elko, Nevada

The Elko District, Our Story

- Documentation phase (late 70's)
- Recognition and protection phase (mid to late 80's)
- Learning how to graze phase (early 90's to now)
- Adaptive management phase?
 - why?
 - how?

Documentation phase



Protection phase





Riparian grazing system phase

05.11.2010

Successful riparian grazing systems – Elko District

- ▣ fall/spring/rest
- ▣ spring annually
- ▣ spring/rest
- ▣ winter/spring/rest
- ▣ spring/fall/rest/hot
- ▣ hot/spring/rest
- ▣ hot/rest/winter
- ▣ spring/fall/hot
- ▣ spring/hot/fall/winter/rest
- ▣ Fall/ spring
- ▣ Fall annually
- ▣ Winter
- ▣ Winter/rest
- ▣ Early summer/rest
- ▣ Er. Summer/Er. Summer/Fall

Modifiers

- ▣ Elevation
- ▣ Channel/stream type
- ▣ Condition at beginning
- ▣ Class of livestock

**Lower Susie Creek.
S-2, T-1, Up.
10-23-78. Season-long grazing.**



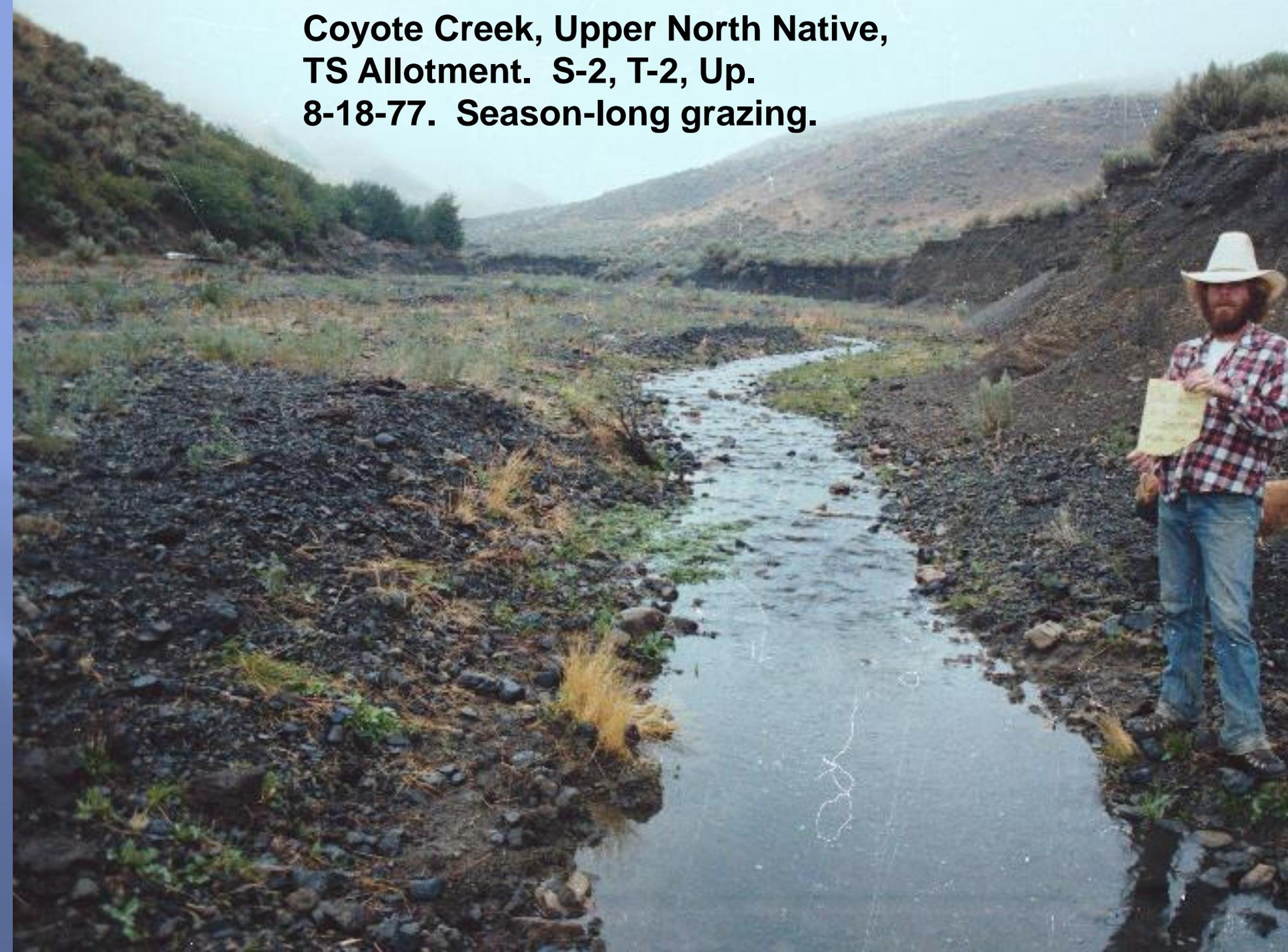
Lower Susie Creek.

S-2, T-2. Up.

7-5-94. 4 years early use (late March or early April to late April or mid May) by co



**Coyote Creek, Upper North Native,
TS Allotment. S-2, T-2, Up.
8-18-77. Season-long grazing.**



2010

07.26.2010



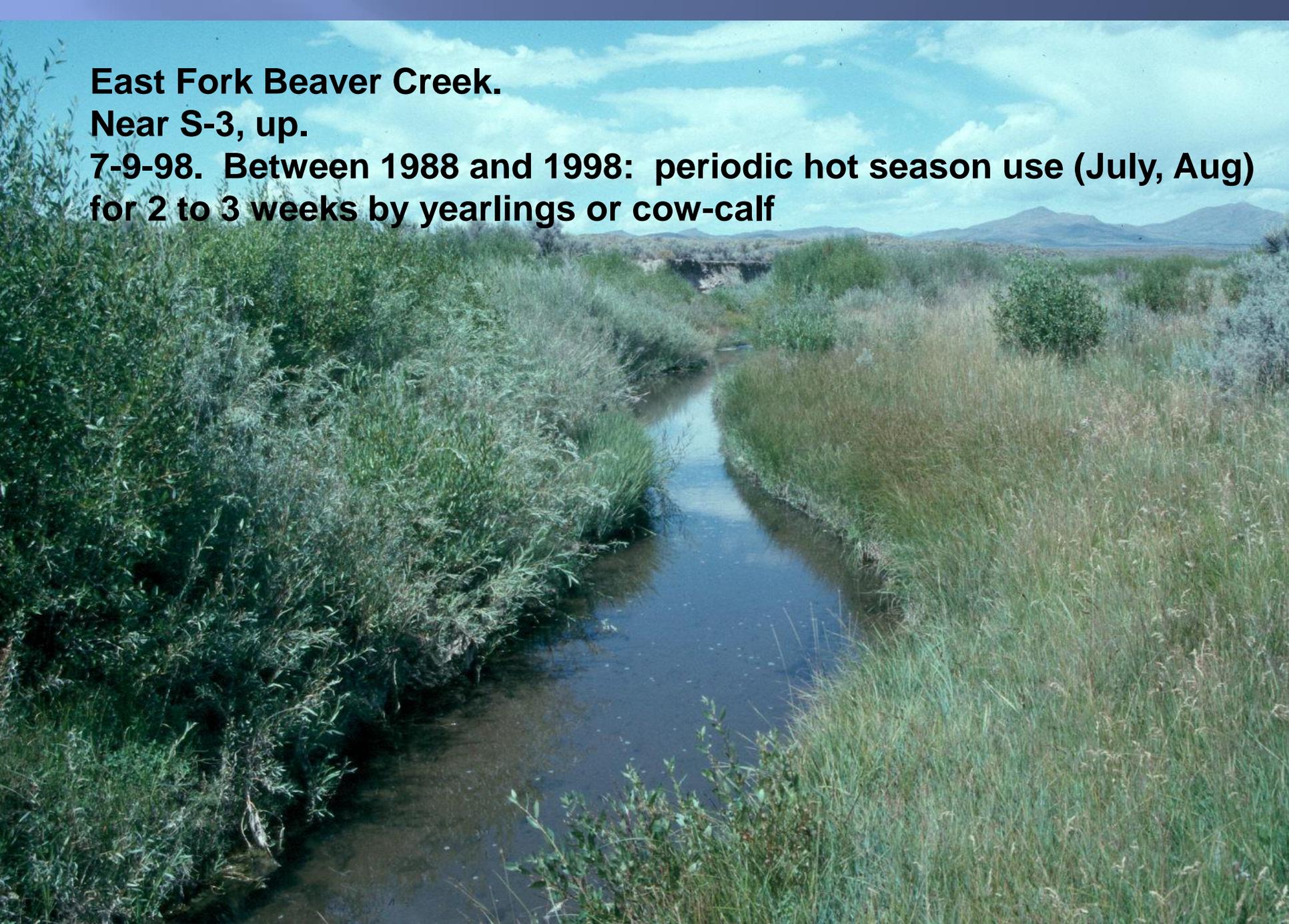
East Fork Beaver Creek. S-3, T-1, Up.
8-7-85. Season-long grazing.



East Fork Beaver Creek.

Near S-3, up.

**7-9-98. Between 1988 and 1998: periodic hot season use (July, Aug)
for 2 to 3 weeks by yearlings or cow-calf**









Bottom Line

More good than bad

▣ Good

- ▣ Early, fall, winter, rest
- ▣ Short duration
- ▣ Rotate use areas
- ▣ Light to moderate use
- ▣ Long recovery periods
- ▣ Regrowth before winter
- ▣ Riding to move livestock
- ▣ More offsite water
- ▣ Well scattered salt/supplements
- ▣ Cleaned pastures and closed gates (Compliance!)
- ▣ More palatable uplands
- ▣ Yearlings, domestic horses, managed sheep

▣ Bad

- ▣ Seasonlong
- ▣ Long season of use
- ▣ Hot season grazing in big pastures with limited riparian
- ▣ Few waters and only riparian water
- ▣ Heavy use too often in the system
- ▣ Little or no regrowth before winter
- ▣ Use at same time every year – repeating stress
- ▣ No rest – little recovery with long seasons use
- ▣ Salt on creeks
- ▣ Little or no riding
- ▣ Stragglers

Most Important

Has to be do-able for agency and rancher





Other influences

(things are changing fast)

- ▣ Climate change?
- ▣ Woodies increasing?
- ▣ Uplands changing?
- ▣ Elk
- ▣ Non-native invasives

▣ *and*

Beaver!
(so what's going on out there?)



Susie Creek







South Fork Salmon Falls Creek, Little Quakey Riparian Pasture, \\\nONeil Allotment. S-42, down.
10-10-79. Use unknown.









*“The Stream is Gonna Git Where the Stream is
Gonna Get” (Wayne Elmore, 2010)*

So, as land managers, should we

Manage for Desired Future Condition

(I have no idea what this is)

OR

*Manage for functionality and ADAPT our management
to ever changing conditions in an ever changing
environment?*



**Indian Jack Creek. Lower North Native,
TS Allotment. S-3, T-1, Up.
9-17-92, up. Season-long**

1992

7/17/92
INDIAN
CR T-1
UP S-3



**Indian Jack Creek. Lower North Native,
TS Allotment. S-3, T-1, Up. 8-1-98.**

1998

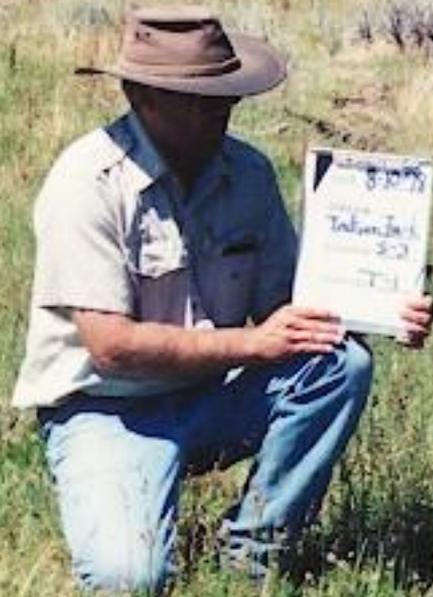
1993 and 1994: rest;

1995: 2/26-6/14 cow-calf pairs;

1996: 3/16-6/24 cow-calf pairs;

1997: rest;

1998: 3/19-6/25



2000

Indian Jack Creek. Lower North Native,
TS Allotment. S-3, T-1, Up. 11-1-00.

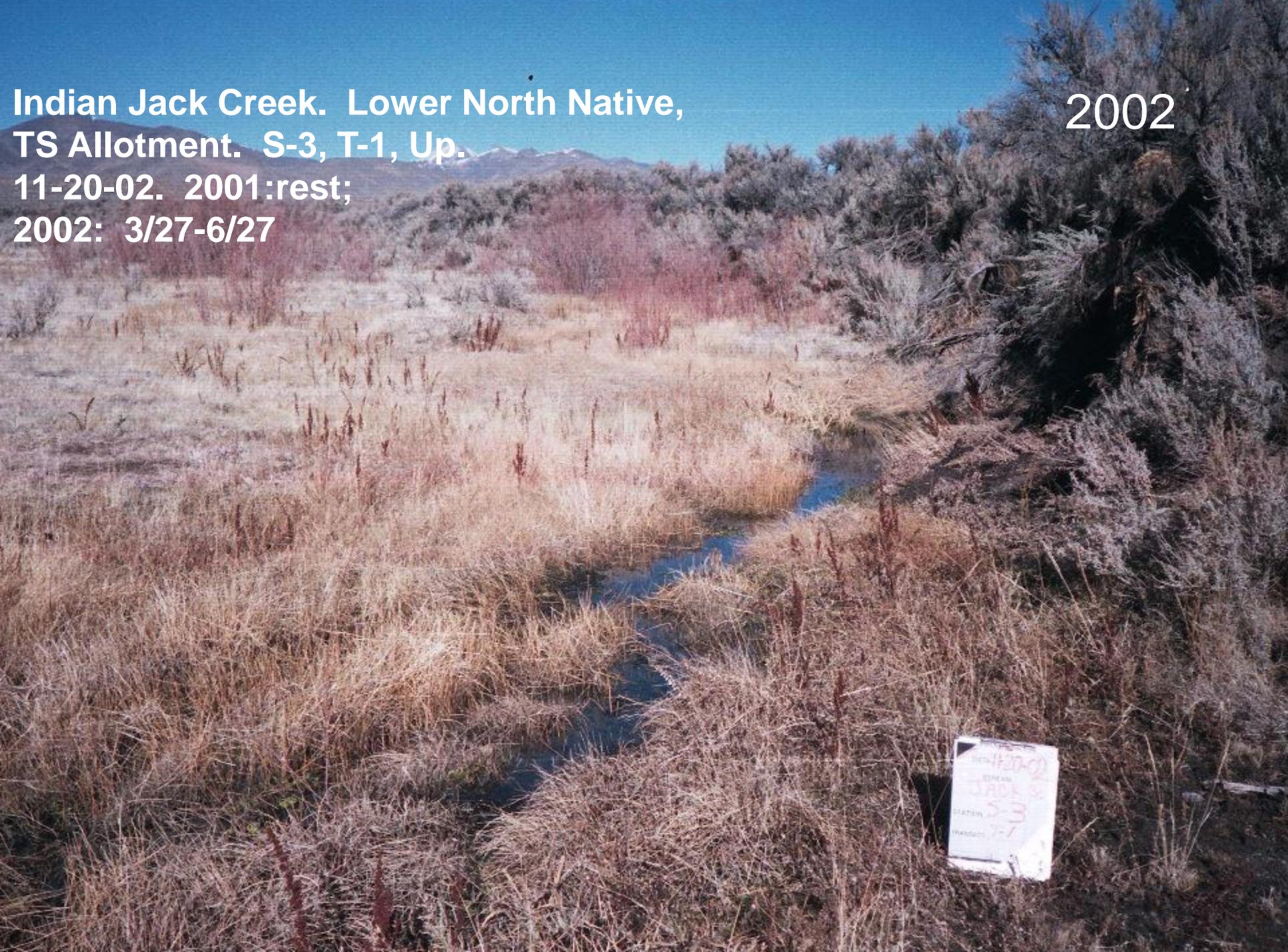
1999: 3/19-6/25 cow-calf pairs;

2000: 3/15-6/30



Indian Jack Creek. Lower North Native,
TS Allotment. S-3, T-1, Up.
11-20-02. 2001:rest;
2002: 3/27-6/27

2002



DATE 11-20-02
CREEK
JACK C.
SECTION S-3
RANGE T-1

**Indian Jack Creek. Lower North Native,
TS Allotment. S-3, T-1, Up.
12-3-03.**

2003



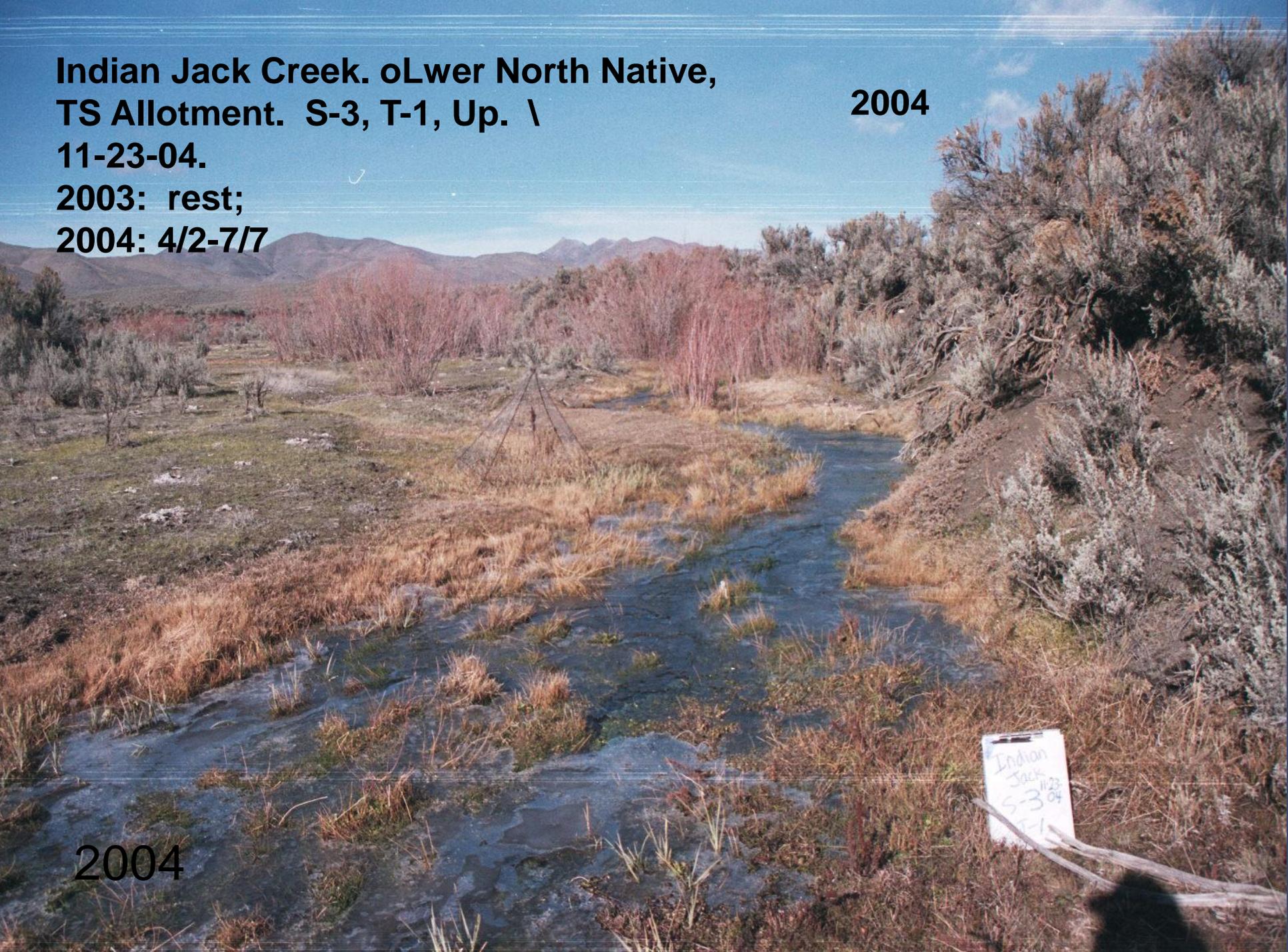
Indian Jack Creek. oLwer North Native,
TS Allotment. S-3, T-1, Up. \

2004

11-23-04.

2003: rest;

2004: 4/2-7/7



2004

**Indian Jack Creek. Lower North Native,
TS Allotment. S-3, T-1, Up.
11/05; 2005: rest**

2005



2006



2007



2009

07.09.2009



2009



2011



2011



2012



Adaptive Management

- ▣ As streams change, shouldn't we be able to change our management prescriptions?









Maggie Creek

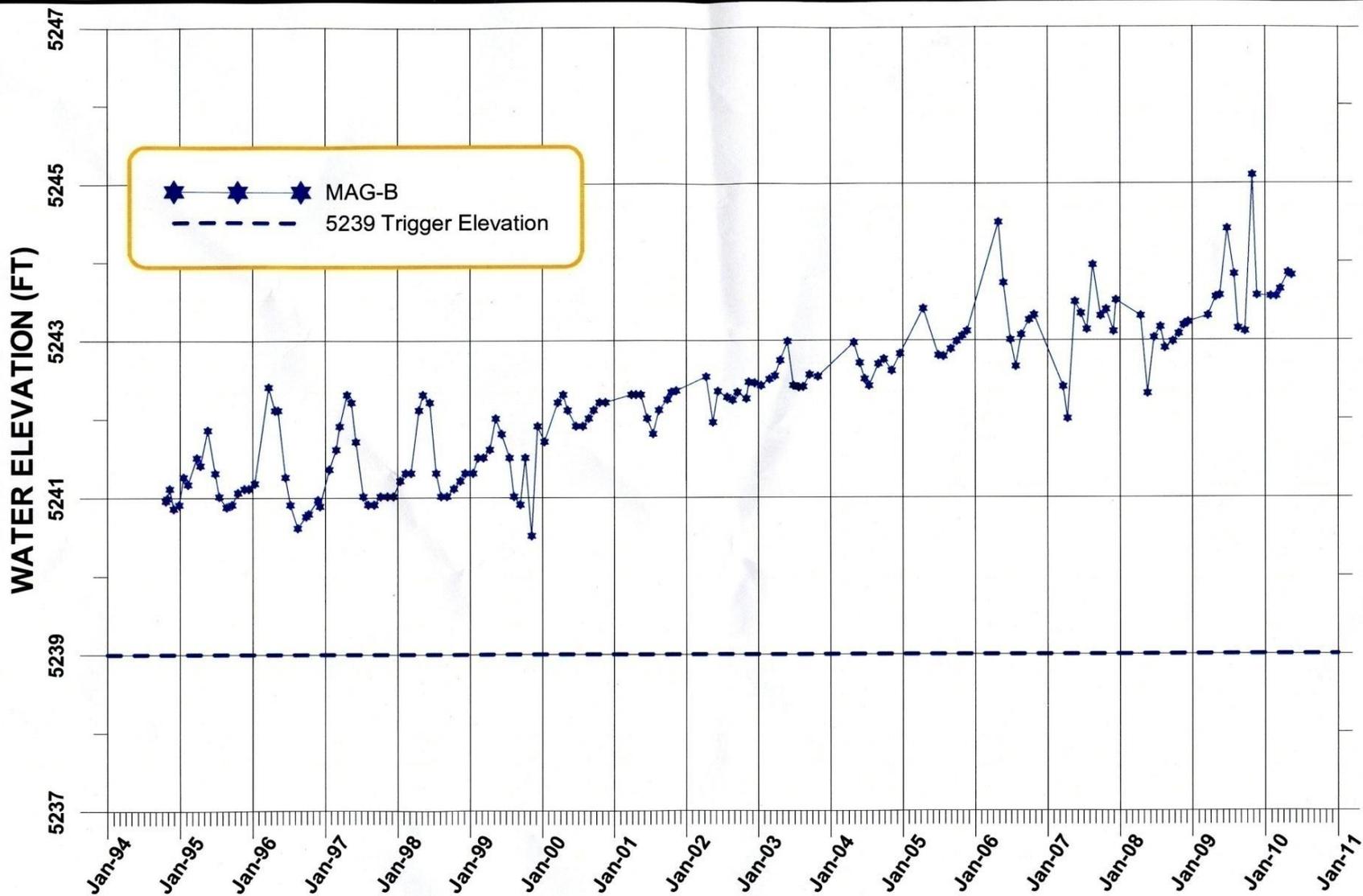


1980

2010



05.25.2010



DATE: 24 MAY 10

**MAGGIE CREEK BASIN MONITORING PLAN
WATER ELEVATIONS, PERIOD OF RECORD**

file name: magb

Maggie Creek



Susie Creek



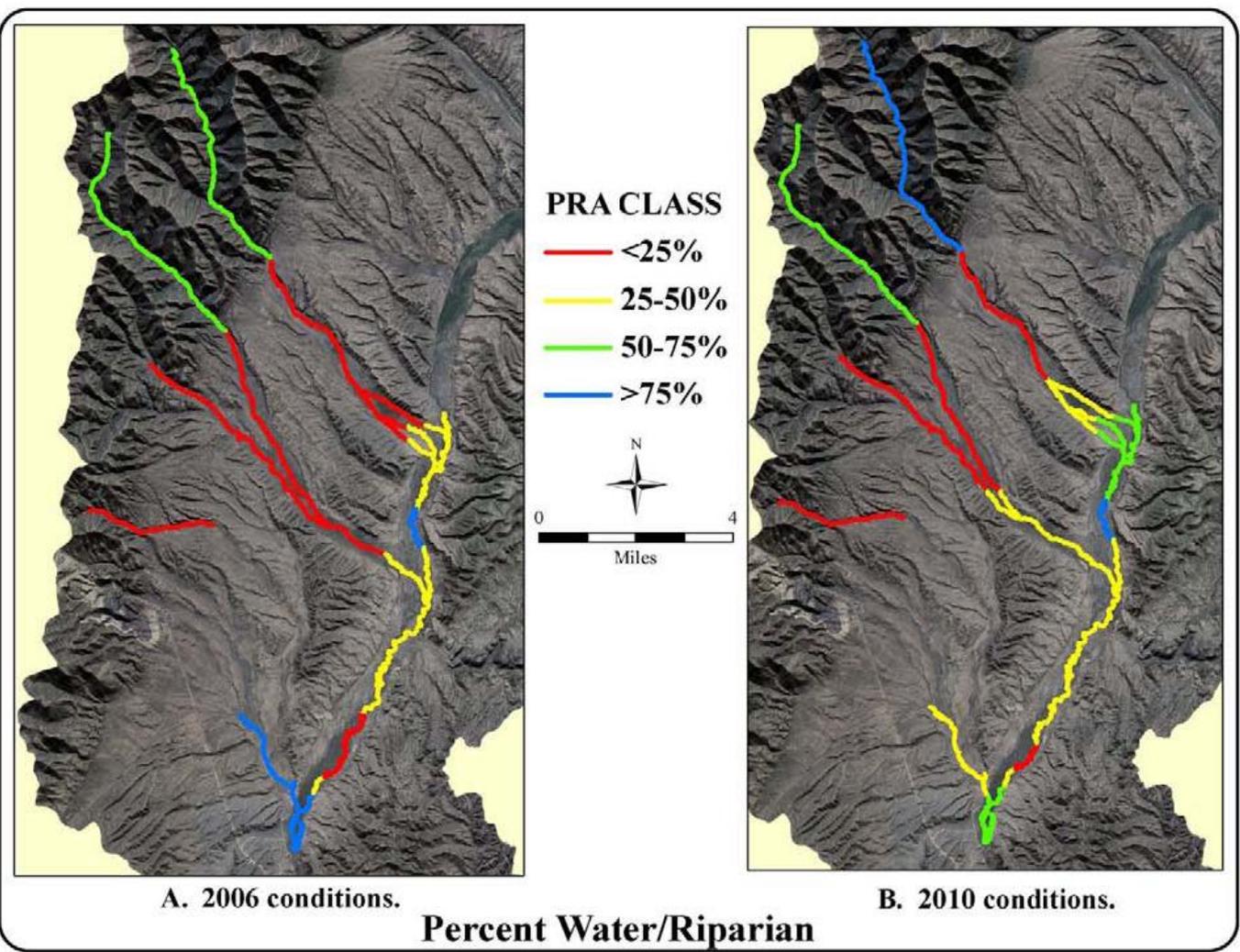


- ▣ A really good objective/standard (*I think*):
- ▣ PFC or Functional-at-Risk, upward trend
 - ▣ *Build it and they will come*

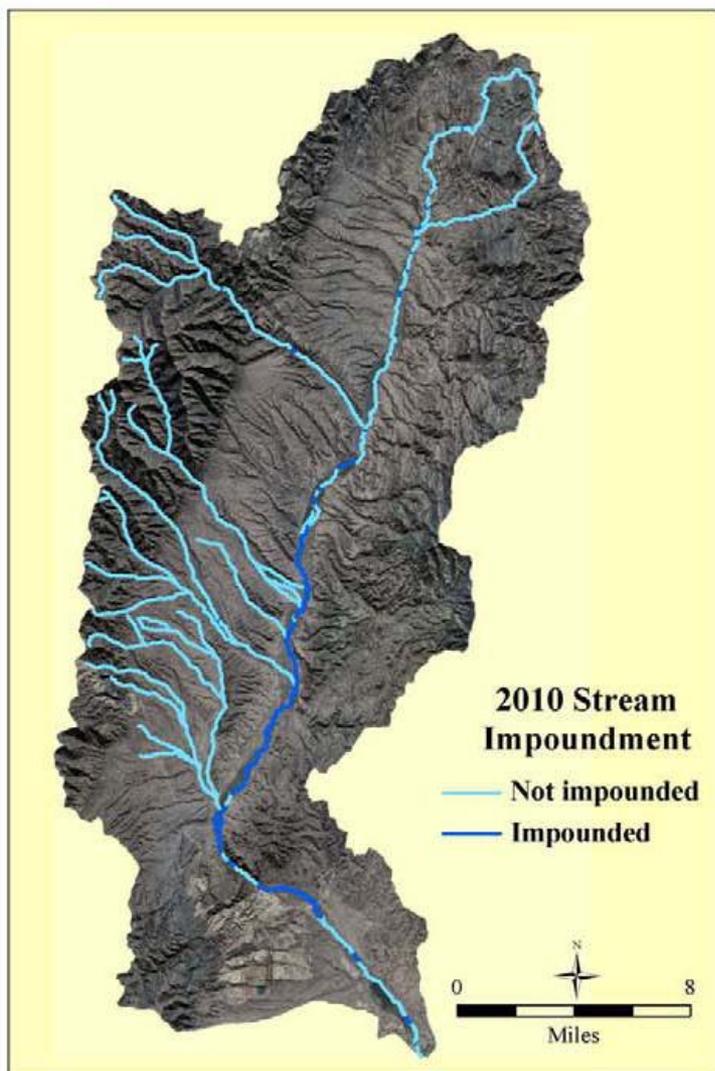
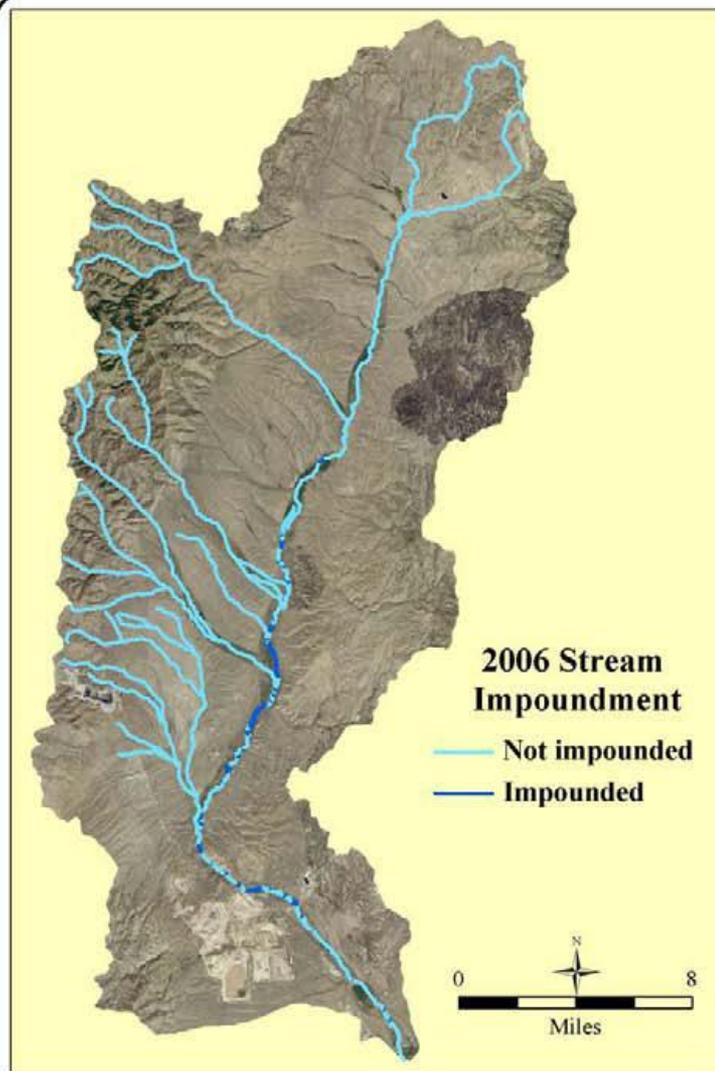
Monitoring/Assessment Tools

We already have great ones!

- ▣ PFC
- ▣ Mims
- ▣ Stream survey
- ▣ Greenline
- ▣ Etc.
- ▣ **Remote Sensing**



Riparian and water increased by 243 acres
 White Horse Associates 2011



Ponding increased from 6.9 miles to 15.9 miles
White Horse Associates 2011

At the End of the Day -

- ▣ *Simplicity* - Essential
 - ▣ *Flexibility* - Don't take any tools away because we can't predict the future
 - ▣ *Accountability* - Too often missing
-
- ▣ *Mary O'Brien, Grand Canyon Trust, 2012*

<http://www.arcgis.com/explorer/?open=f5140025d81b4cfc879e1e9d419c0fd3>