



Dry Cottonwood Creek Ranch 2009-2012:

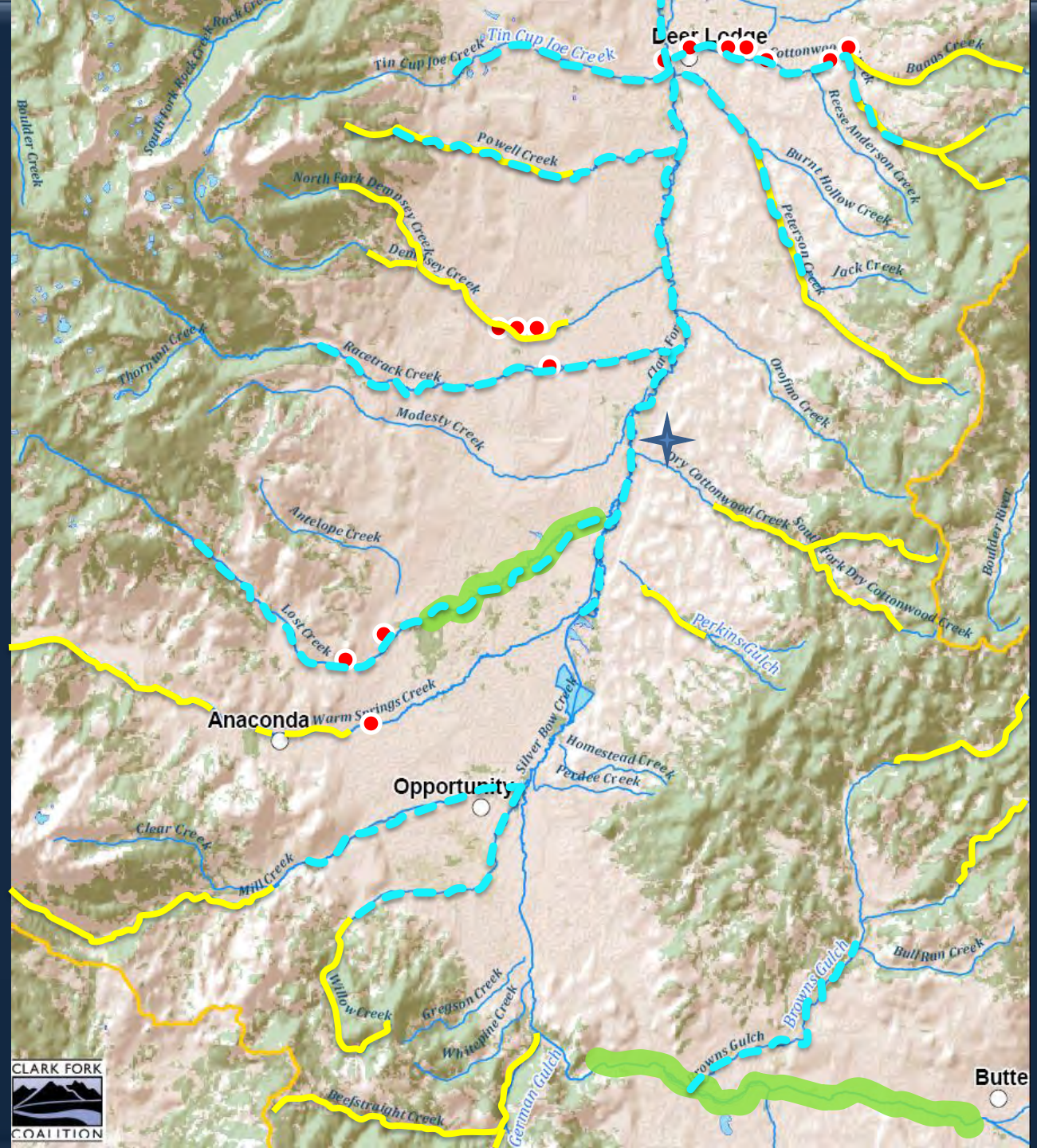
Rewater, restore & reconnect.....
ecological and social opportunities in
a contaminated landscape

2010

Aquatic resource indicators in UCF landscape

Legend

- Native Trout Stronghold
- Irrigation Fish Barrier
- Riparian Restoration Projects
- Dewatered Stream



DCC RANCH--- taking stock 2009:

contaminated floodplain + old infrastructure
semi-arid uplands + intermittent stream



**A central
feature of
DCCR:
intermittent
creek, flows in
spring time**



APRIL, 2012



RE-WATER:

How do we
re-water an
intermittent
stream?

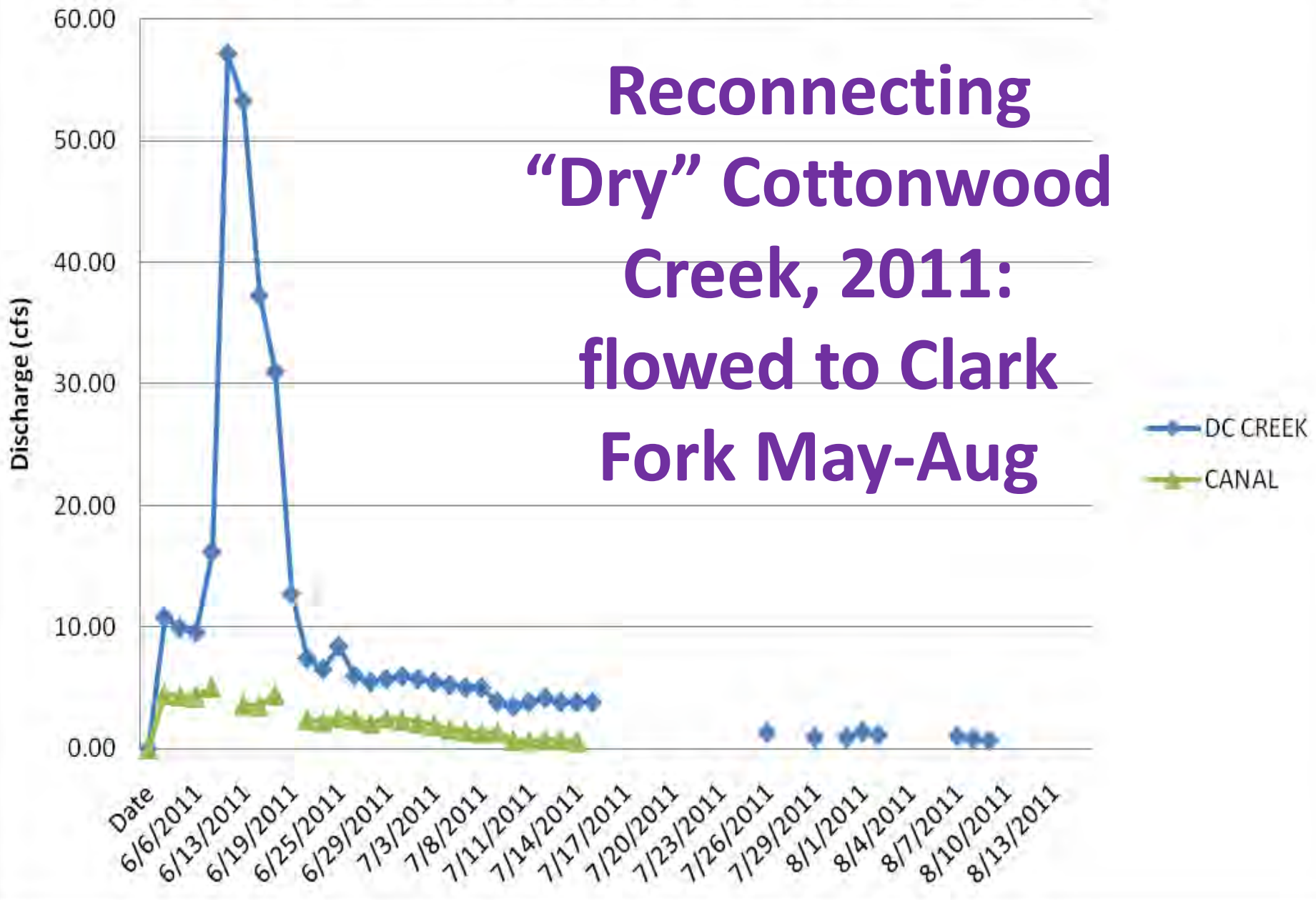
Why?

A photograph of a stream bed. The ground is covered with dark, silty sediment and numerous small, light-colored rocks of various sizes. A large, brownish-orange fish, likely a trout or salmon, lies horizontally in the center-left. Several smaller, silvery fish are scattered around, some near exposed tree roots on the right side. A small, orange-handled tool, possibly a knife or a small saw, lies horizontally below the large fish. The text "Are there fish in it?" is overlaid in yellow at the top.

Are there fish in it?

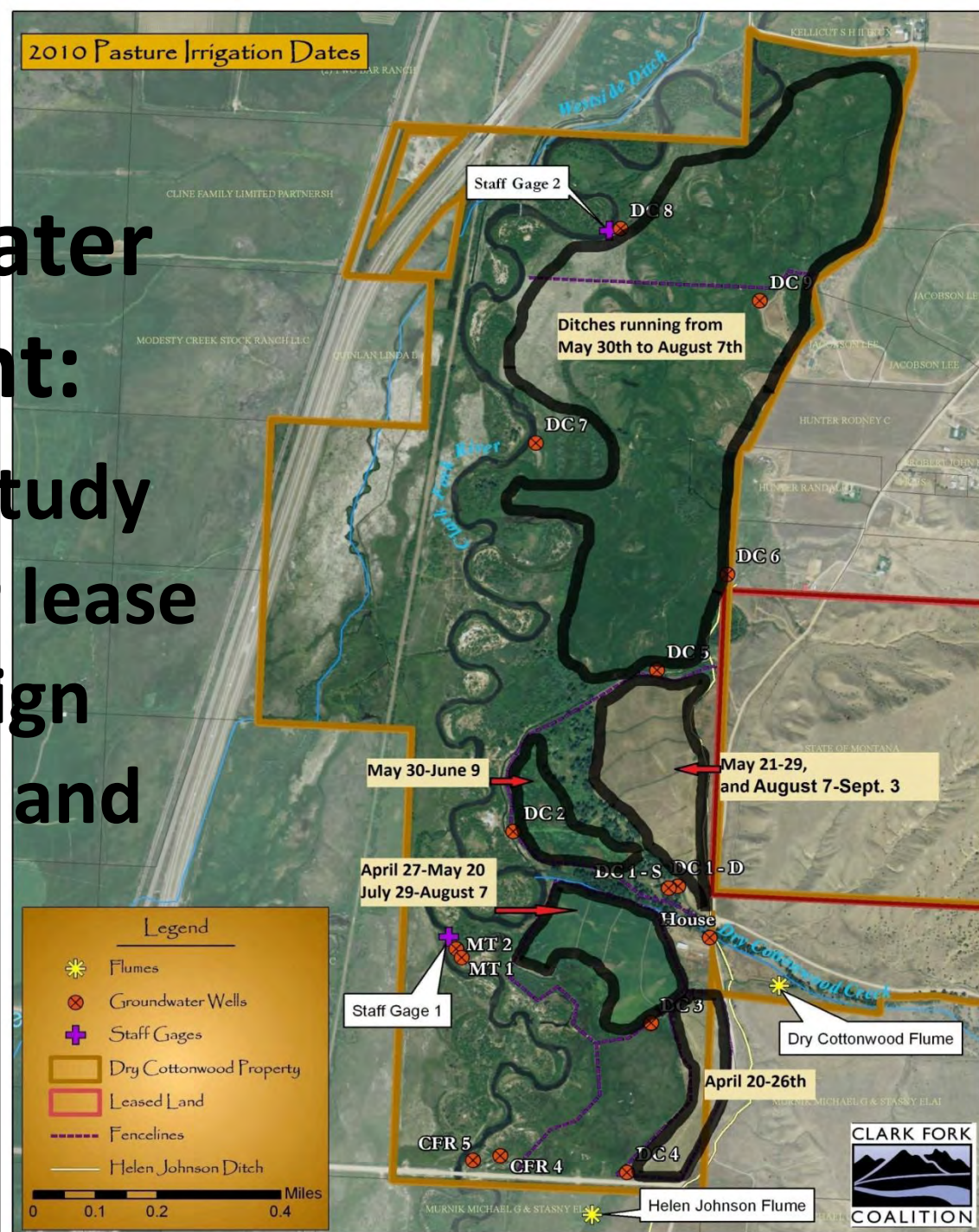
This monitoring technique is not endorsed by MT FWP

Dry Cottonwood Creek Flow and Diversion 2011

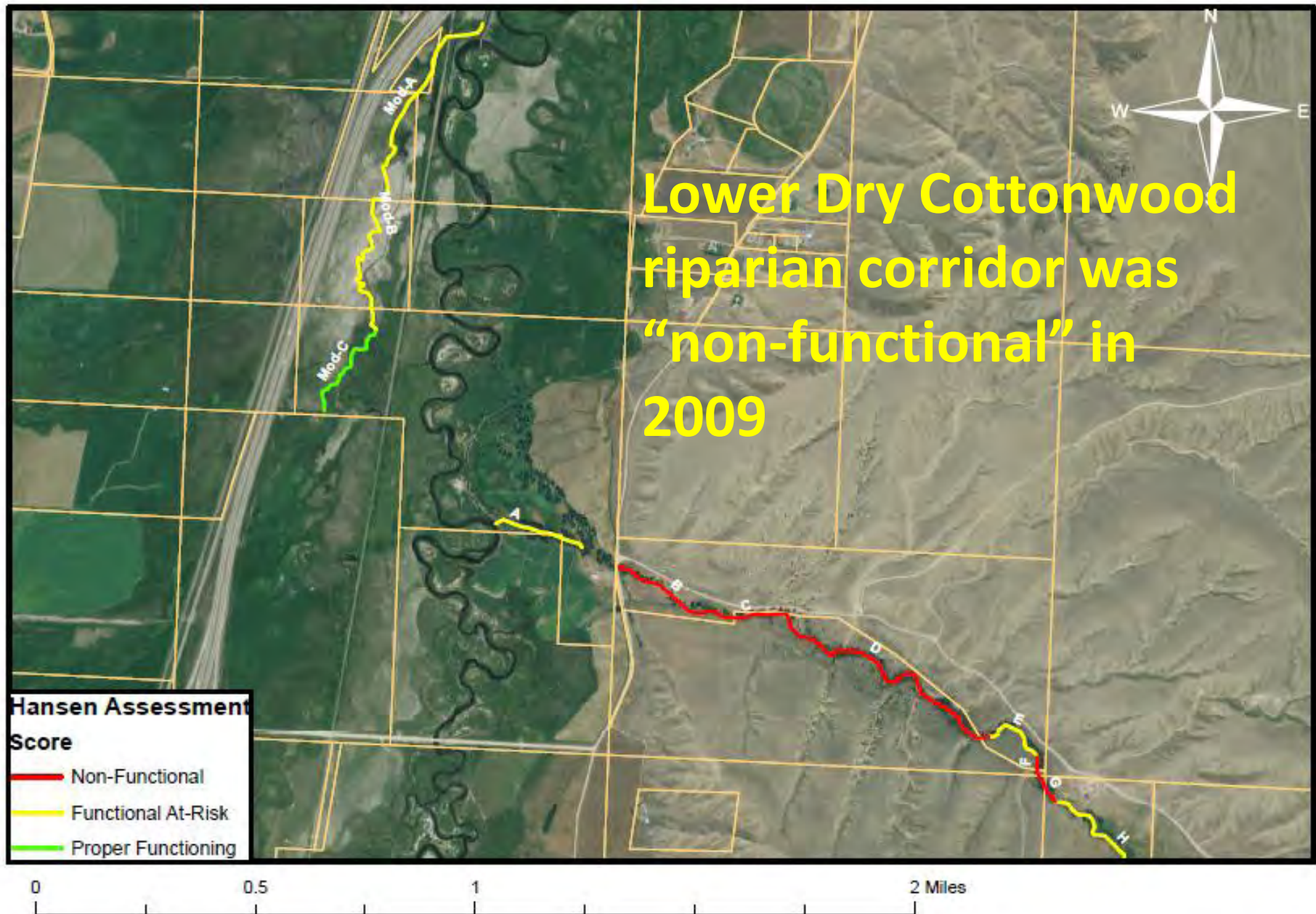


DCC Ranch Water Management:

- *2009-2010: Study
- *2011-12: Water lease
- *2013-14: Design pumping system and lease?

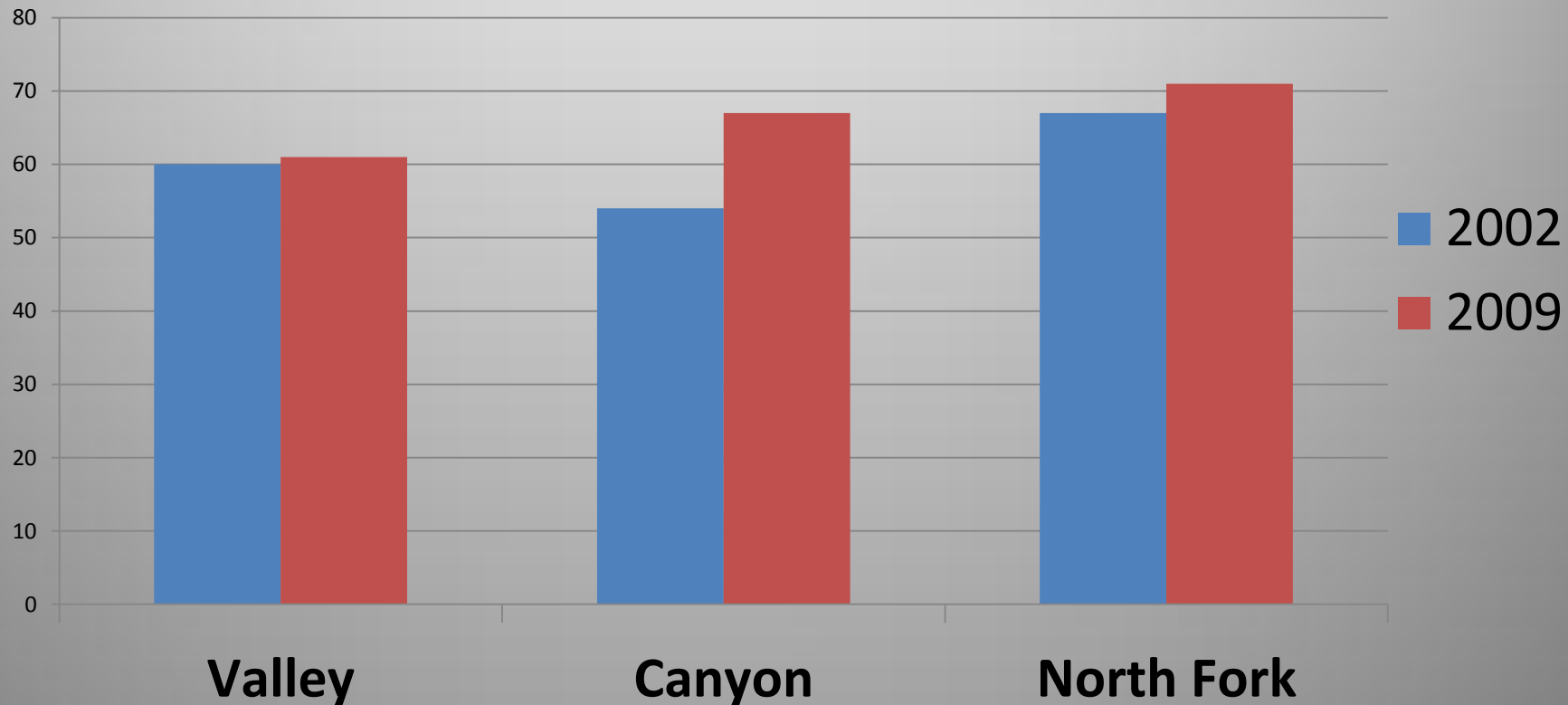


Dry Cottonwood Creek_Hansen Assessment_2009 CFC



2009 Hansen Assessment results

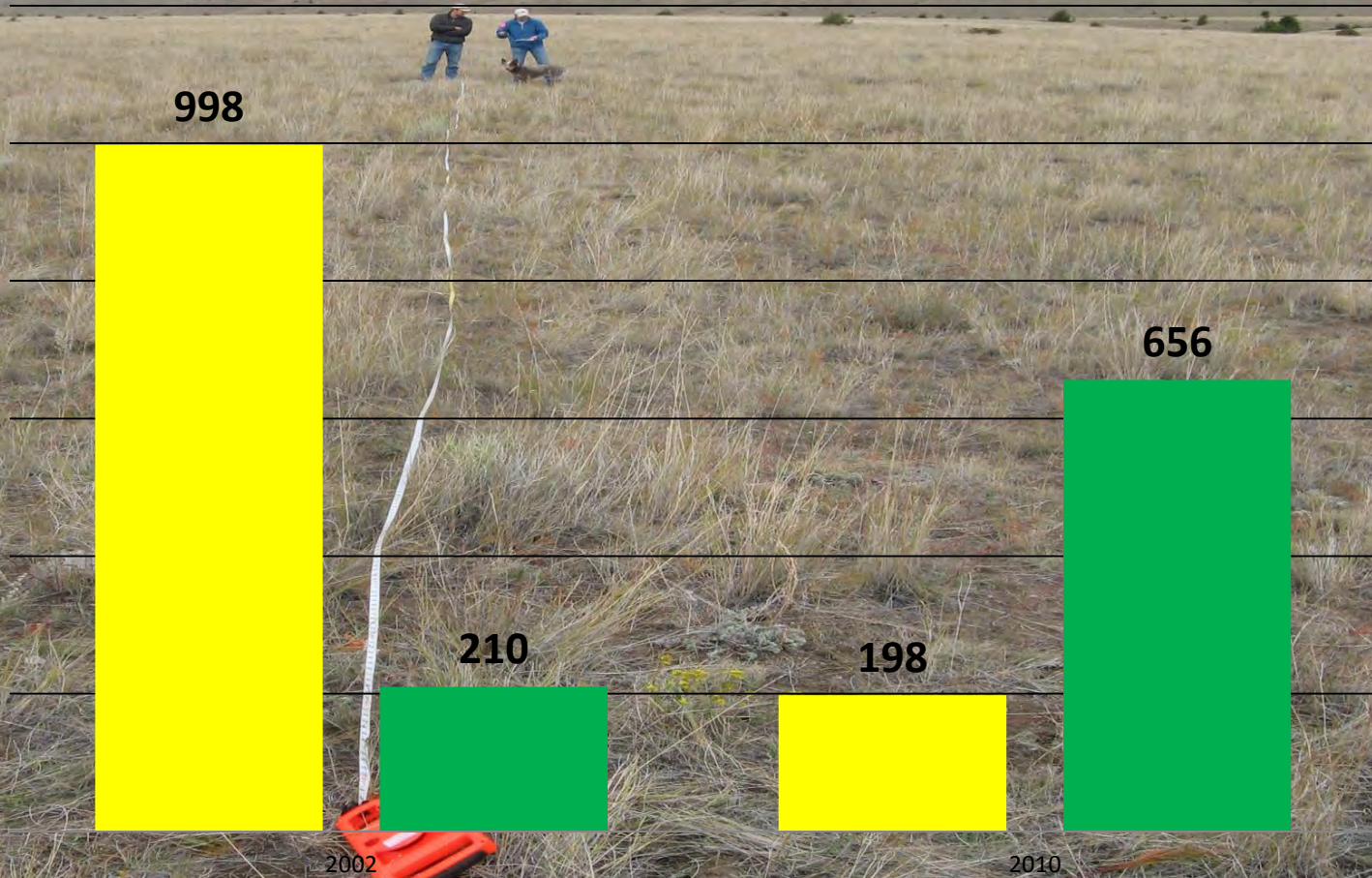
Dry Cottonwood Creek Mean Riparian Assessment Scores 2002 & 2009



Comparison of Weed and Native Grass Productivity: DCCR 2002 to 2010 (lbs/ac)

**UPLAND
HABITAT:**

200
1000
800
600
400
200
0



■ Leafy Spurge

■ BB Wheatgrass

CONCLUSION: Upland grassland recovering from massive weed infestation...but riparian still in tough shape...what to do?



Riparian electric fencing,
revegetation, bring neighbors in....



© 2009 Google
© 2009 Europa Technologies
Image © 2009 DigitalGlobe

elev 1613 m

Eye alt 11.14 km



Revegetation in riparian area

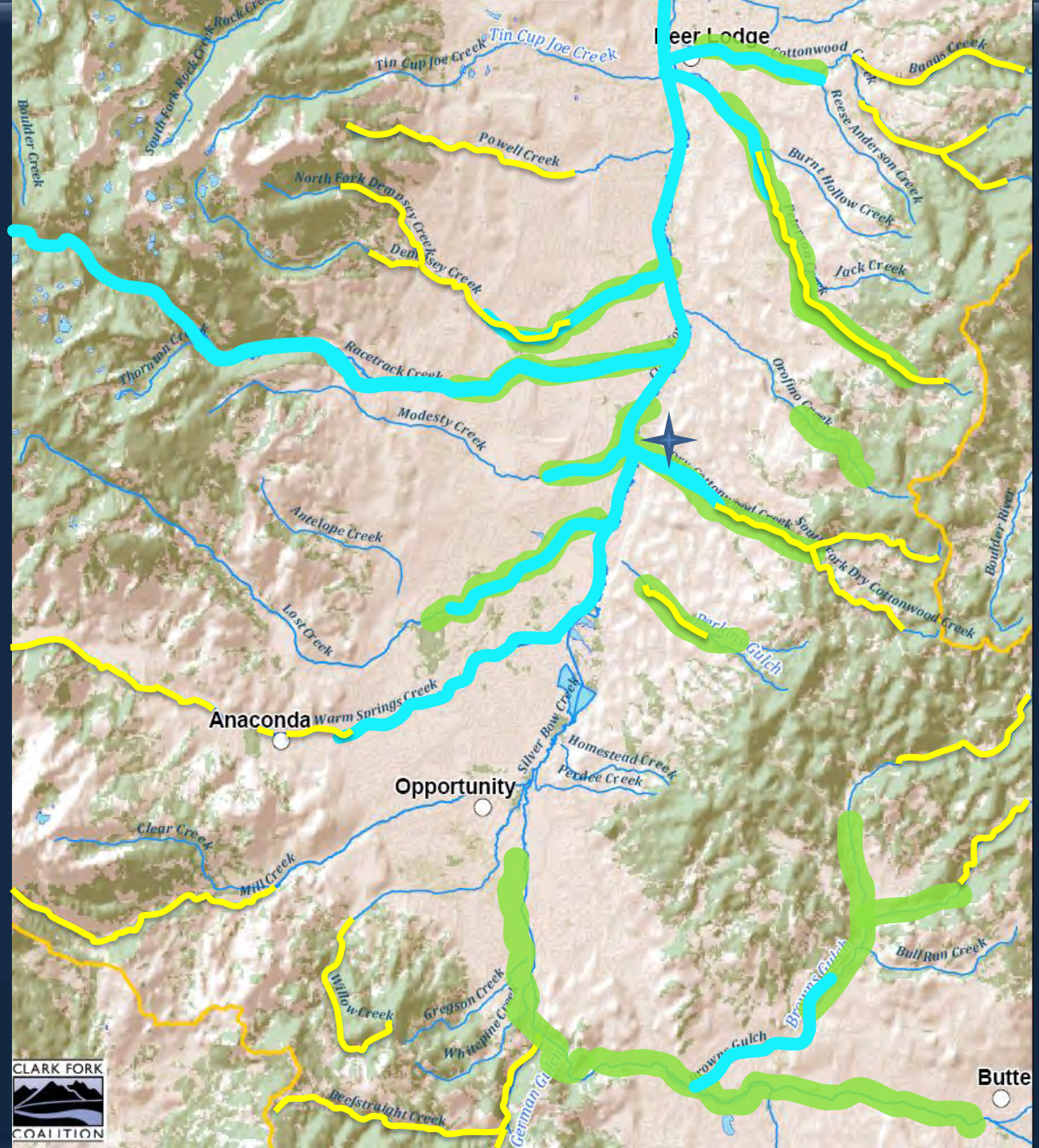


Today

Restoration Opportunities and Activities

Legend

- Native Trout Stronghold
- Irrigation Fish Barrier
- Riparian Restoration Projects
- Dewatered Stream
- Flow Restoration Projects

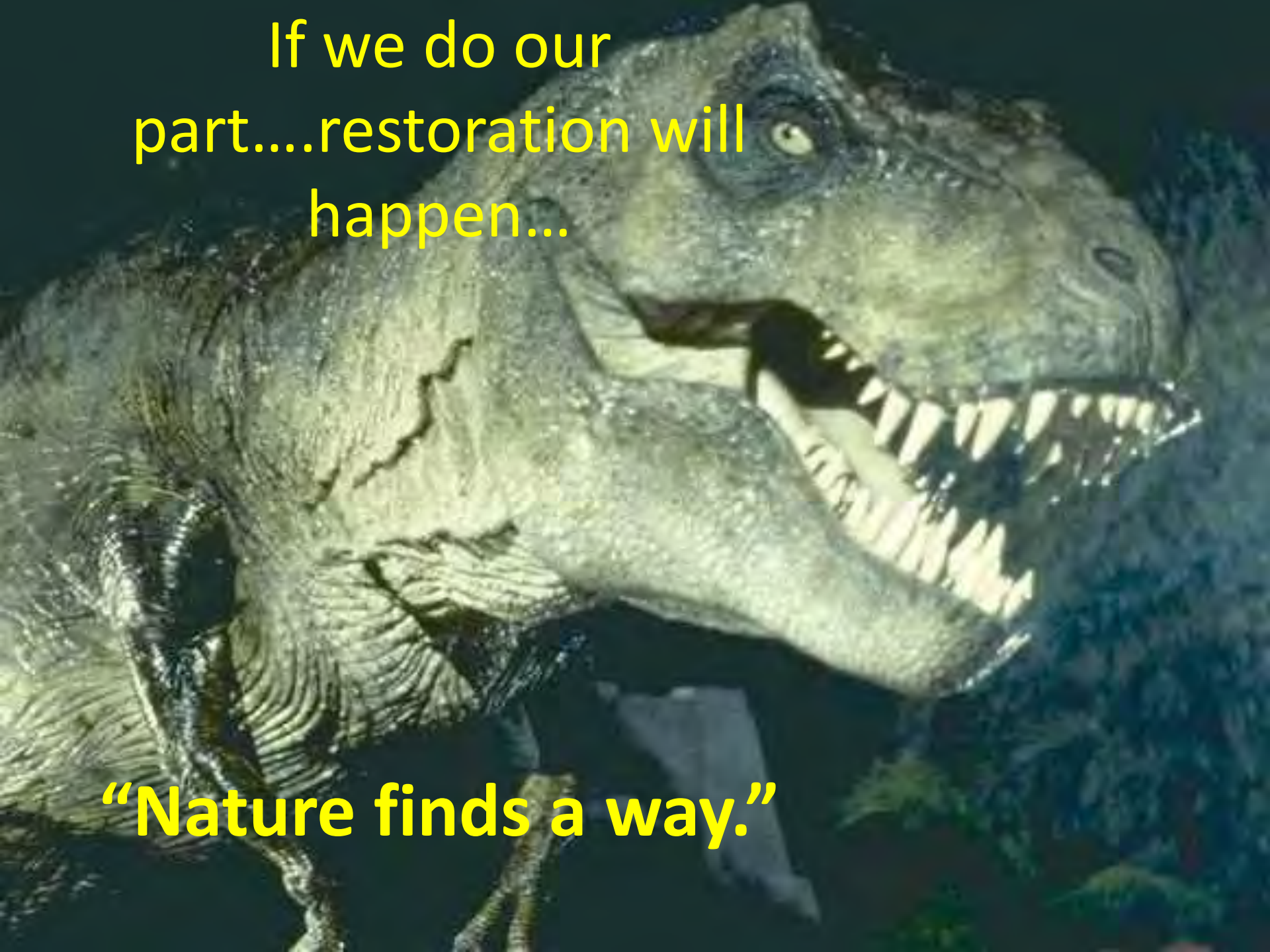


**REWATER, RESTORE *TRIBUTARY* habitat
& RECONNECT** it to the river,
is a goal for Dry Cottonwood Creek Ranch



If we do our
part...restoration will
happen...

“Nature finds a way.”



NATIVE CUTTHROAT RETURN TO SBC!

Where next?



Photo: Matt Vincent, CFWEP

The Home Place:

Social and Economic Realities of Restoration on Private Land



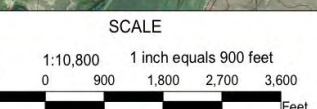
Perspective



Dry Cottonwood Creek Ranch



- Legend**
- Existing Water Development
 - Spring Development
 - Fence
 - Pipeline



Values and Community



Consequences



New Game, New Hand, New Chips



Grassfed Beef



Irrigation/ Water Leasing



Conservation Income



Public Hunting



Mutually Beneficial Partnerships



Noxious Weed Control



Education



Hazardous Materials Certification Courses



The Bottom Line:

- Dry Cottonwood is demonstrating that good land management can be ecologically sustainable and economically solvent at the same time.
- Our agricultural gross income is approximately \$100,000
- Our non-agricultural gross income is approximately \$75,000



- Public Hunting (\$12,000)
- Water Leasing (\$15,600)
- NRCS conservation programs (\$28,000)
- NRCS Cost Share on Infrastructure Projects (\$10,000)
- Grass Fed Beef Sales(\$8,000)

LESSONS LEARNED:

- 1) **Think big, think connectivity**this isn't about projects, it's about a landscape in recovery.
- 2) **"Nature finds a way"**all the parts have potential to recover....even the crappy little degraded ones...do your part and get out of the way.
- 3) **Landowners are not the problem, they are the solution.** They are creative in solving problems and they are the ultimate responsible parties for conservation: irrigation efficiency ...weed management.....and maintaining a healthy landscape

Thanks to the following:



Ted Beck, Wayne and Kathleen Hadley, Don Despain-USFS, Geoffrey Anderson-NRCS, Fred Staedler-DNRC, our partners, and the rest of our neighbors in the upper Clark Fork

