

RELOCATING and TRACKING BEAVER

2007 Pilot Project



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South Central Washington Resource Conservation & Development
(RC&D) Council - Program Coordinator

Shrub steppe vegetation



Dry side - Invading Conifers

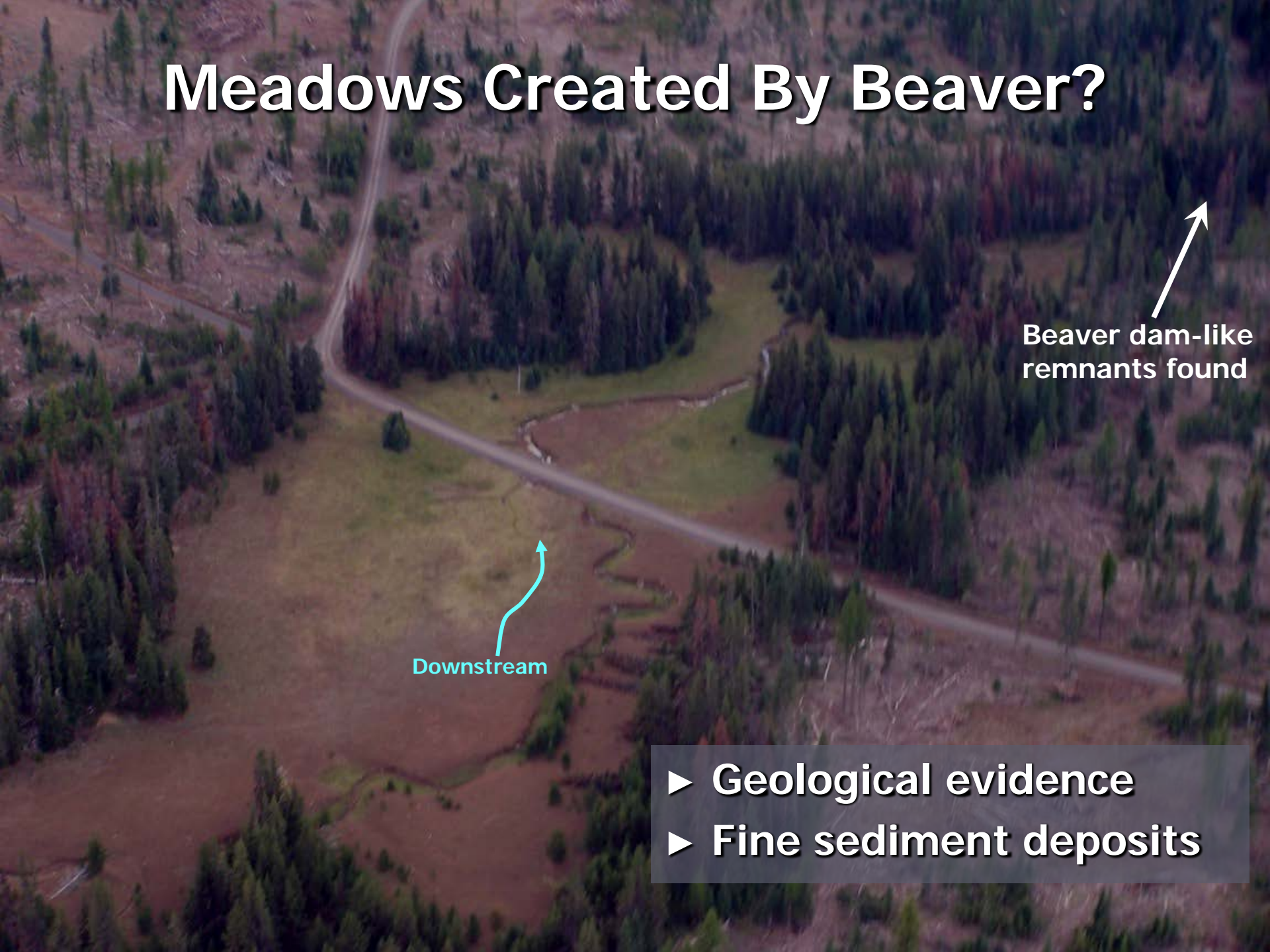


Calochortus longebarbatus

Wetter side – Wetland Plants



Meadows Created By Beaver?



Beaver dam-like
remnants found

Downstream

- ▶ Geological evidence
- ▶ Fine sediment deposits

Unsuitable Relocation Sites



- ▶ Too steep
- ▶ Too fast
- ▶ Too little riparian vegetation



Suitable Relocation Sites



► Need

- Riparian Vegetation (Food)
- Trees (Building Material)
- Deep pools (Hiding)
- Low gradients

Project Goals – Short Term

- 1) Locate stream with high restoration potential and suitability for beaver
- 2) Relocate 50 beavers throughout stream
- 3) Achieve 50% survival and establishment
- 4) Use Radio-telemetry to
 - track movement
 - site fidelity, and
 - establishment success

Step 1: Choose Release Site – upstream of degraded areas



Lots of Hardwoods (cottonwood, aspen)



Step 2: Photo Points

Upstream – Release Sites



Downstream – Degraded Sites



Step 3: Trap Beavers



Problems:

- Trappers don't want to catch beavers if they aren't getting paid!
- Mortality

Step 4: Transition Phase



Problems:

- Beavers can chew through metal!
- Use horse panel, sheet metal, or concrete.

External Radio Transmitters for Beaver

- Radio neck collars don't work (no neck)
- Internal transmitters don't work (very well)
- Mortality Signal worth the \$\$\$



Modified Ear Tag

- Designed by:
Wendy Arjo
(360) 956-3925, x3
- Made by:
ATS Inc.
(763) 444-9267



Step 5: Inserting Radio Tag

1) Anesthetize

- Ketamine/Xylazine



2) Drill Hole



3) Insert Tube, Cut Tube



4) Insert Tag, Tighten Bolts

5) Check Frequency!



Wildlife Handling and Chemical Immobilization Training

- ▶ November 2008
- ▶ Mark Johnson, DVM
- ▶ Wolf Haven - Tenino, Washington
 - <http://www.wolfhaven.org/lectures.php>
 - <http://wildliferesources.org/seminar.html>



Step 6: Moving Beavers



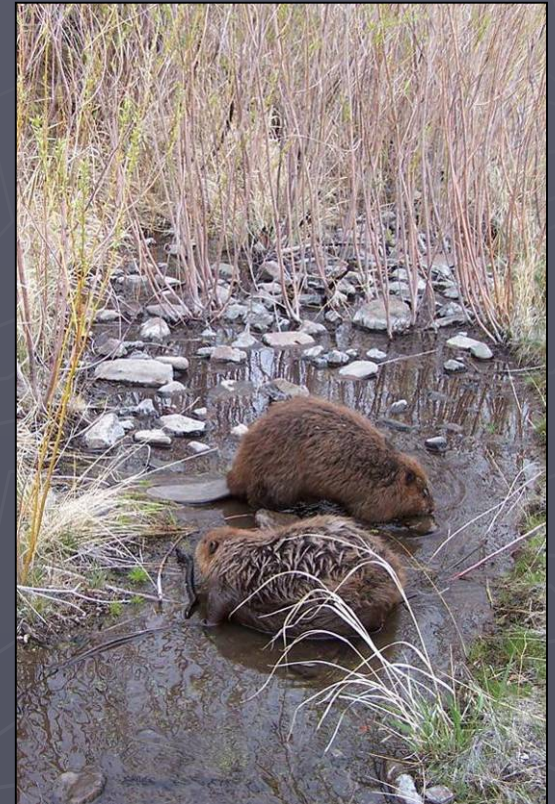
ISSUES:

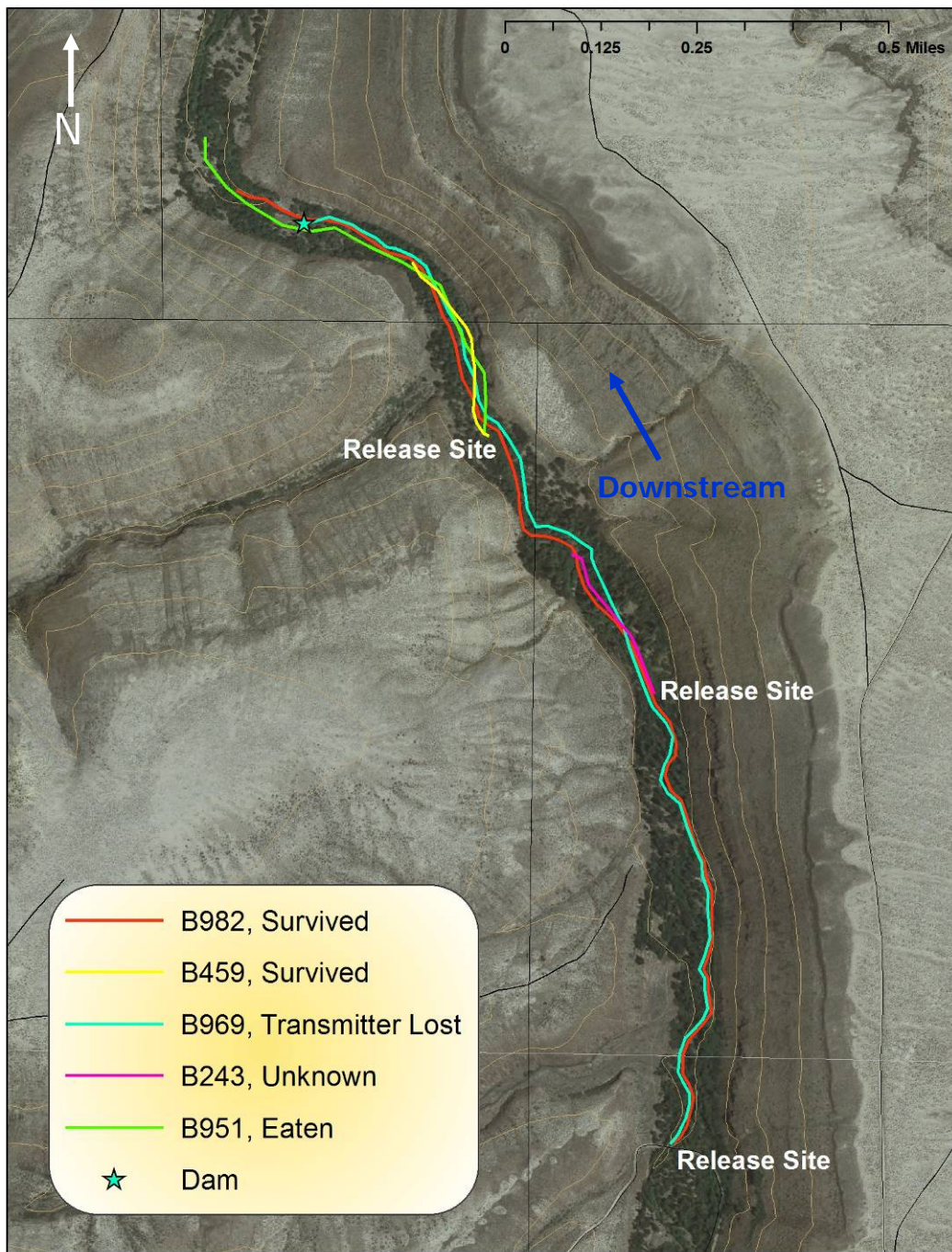
- First 48 hours critical!
- Don't release beavers on same day drug given!
- Transmitters fail
- Bears like to eat beavers



Results

- ▶ 11 beavers trapped and brought to holding cages
- ▶ 8 relocated (3 died during handling)
 - 3 died – predation
 - 2 lost signals
 - 1 recovered transmitter – fate unknown
 - 2 assumed alive and settled
- ▶ 25% success – TOO LOW!





Movement Distances

- ▶ Longest distance ~ 1.5 miles
- ▶ Overall movement was downstream
- ▶ Mortality signal very useful

2008 - Changes To Project

- ▶ Create petty fund to pay trappers.
- ▶ Keep beaver 2-3 days after trapping and tagging.
- ▶ Predator control?



A photograph of a pond with a large pile of driftwood and reeds in the foreground, and a dense forest in the background. The water is dark and reflects the sky. The foreground is dominated by a large, tangled pile of driftwood and reeds. The background shows a dense forest of evergreen trees.

Questions?