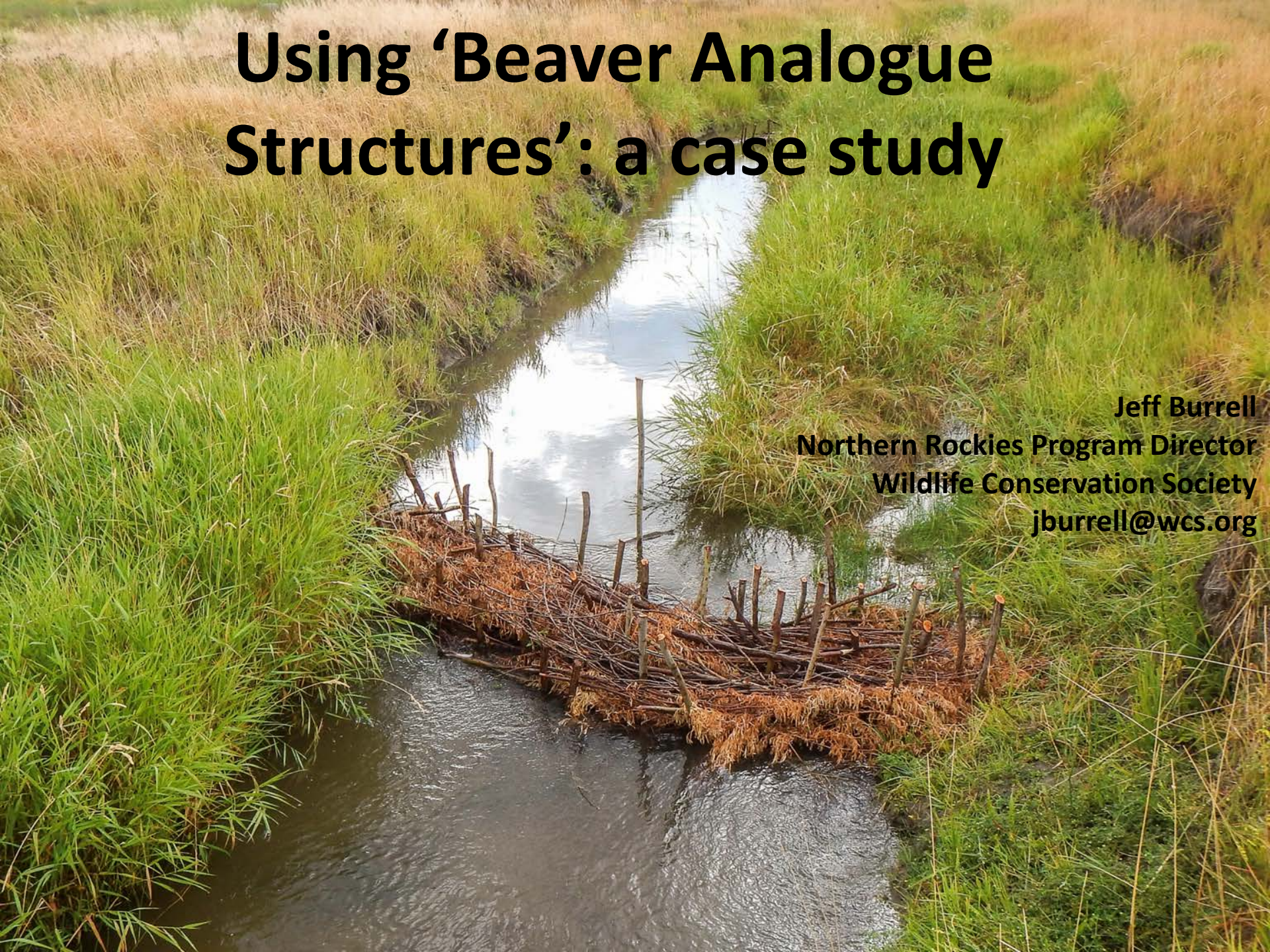
Using ‘Beaver Analogue Structures’: a case study



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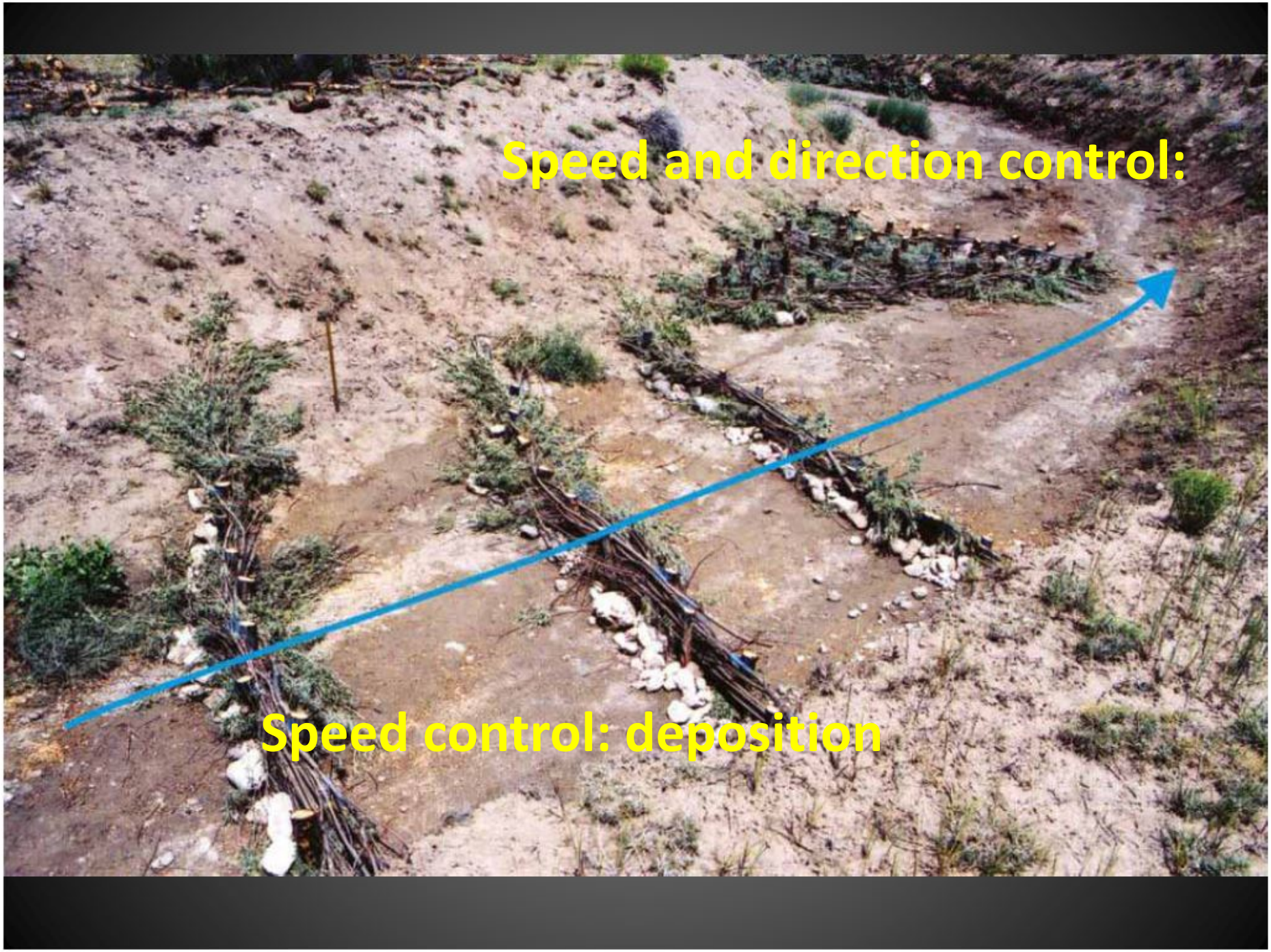

Speed and direction control:
Speed control: deposition

Norwegian Creek: case study

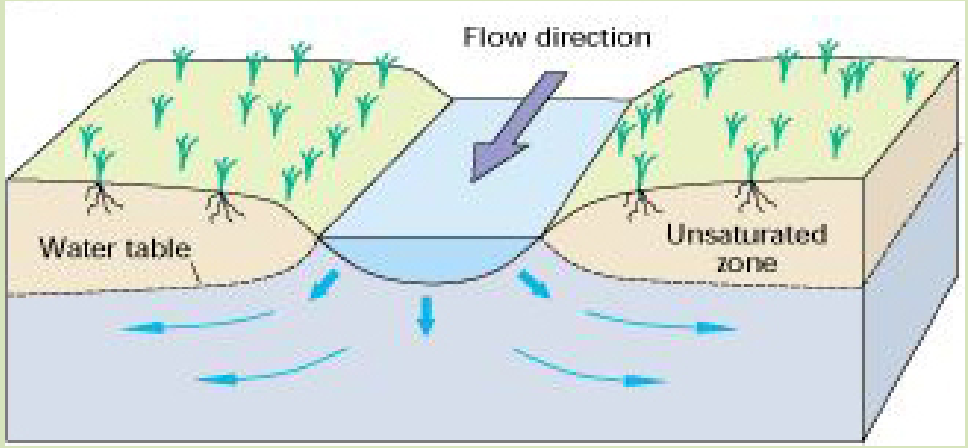
Spring 2013

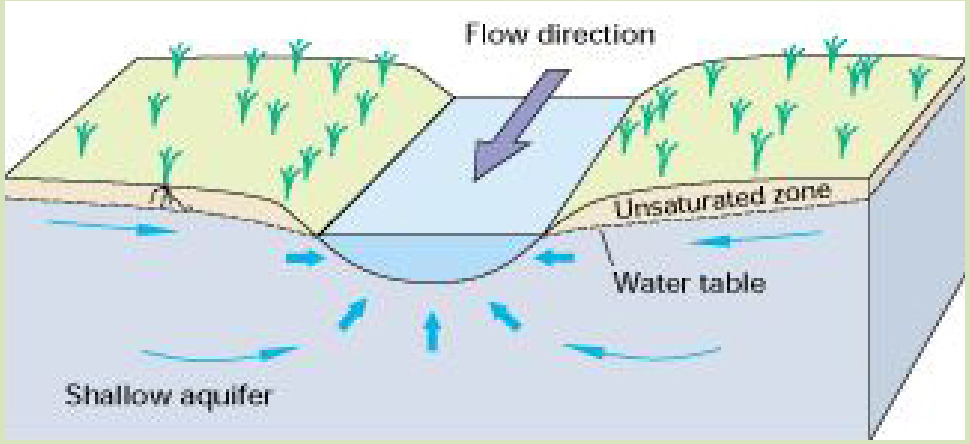
Project objectives

- Reverse channel incision
- Restore riparian vegetation
- Improve fish and wildlife habitats

Considerations

- Substrate – the puzzle
  - High Flow Recharging
  - Low Flow Discharging





http://pubs.usgs.gov/circ/circ1139/index.html

before

progress

Progress
Bed aggradation: +5 ft
Near stream GWT: +5 ft
Flow: +5 cfs (from 3 to 8)
(Late summer flow)

Deep channel
Gravel bed
Point bar deposition

from this

to this

Beaver analogue structures: advantages

- Effective
- Efficient = cheap
- Minimal disturbance
- Incremental: high benefit/problem ratio

Thanks
Questions?