

Open Range Consulting

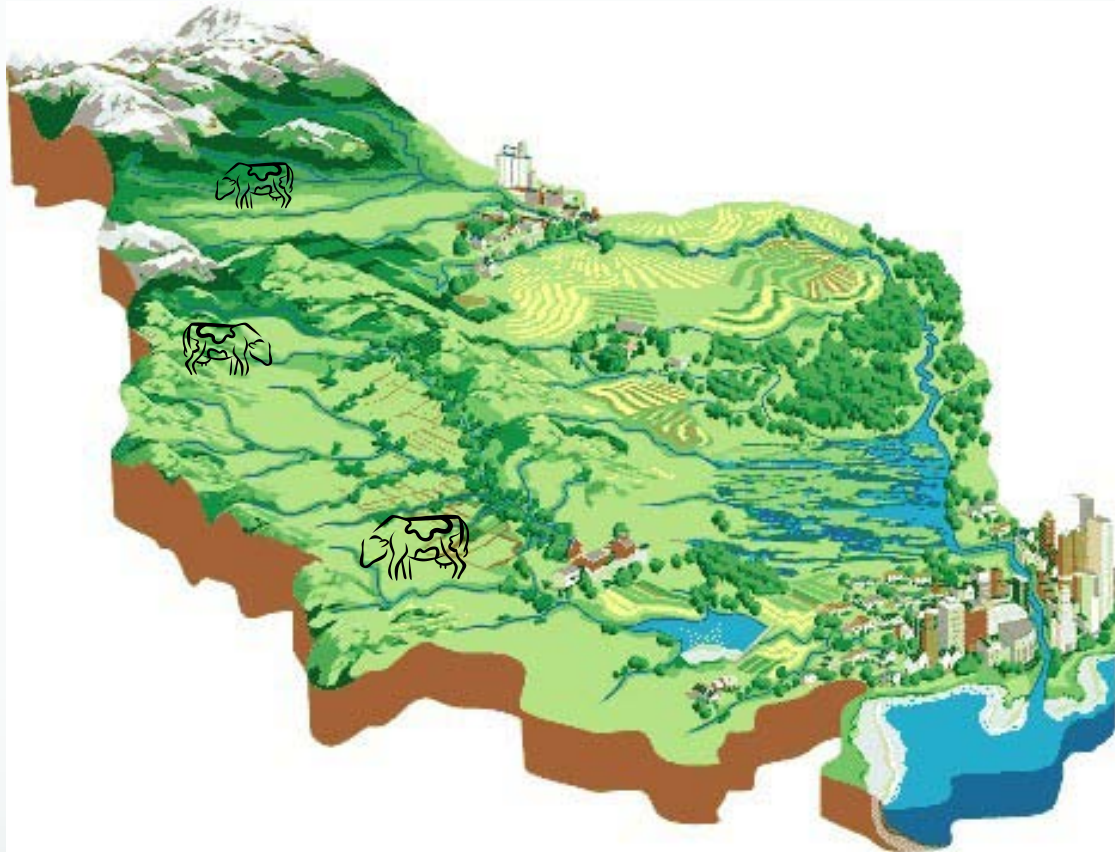
Gregg Simonds & Eric Sant





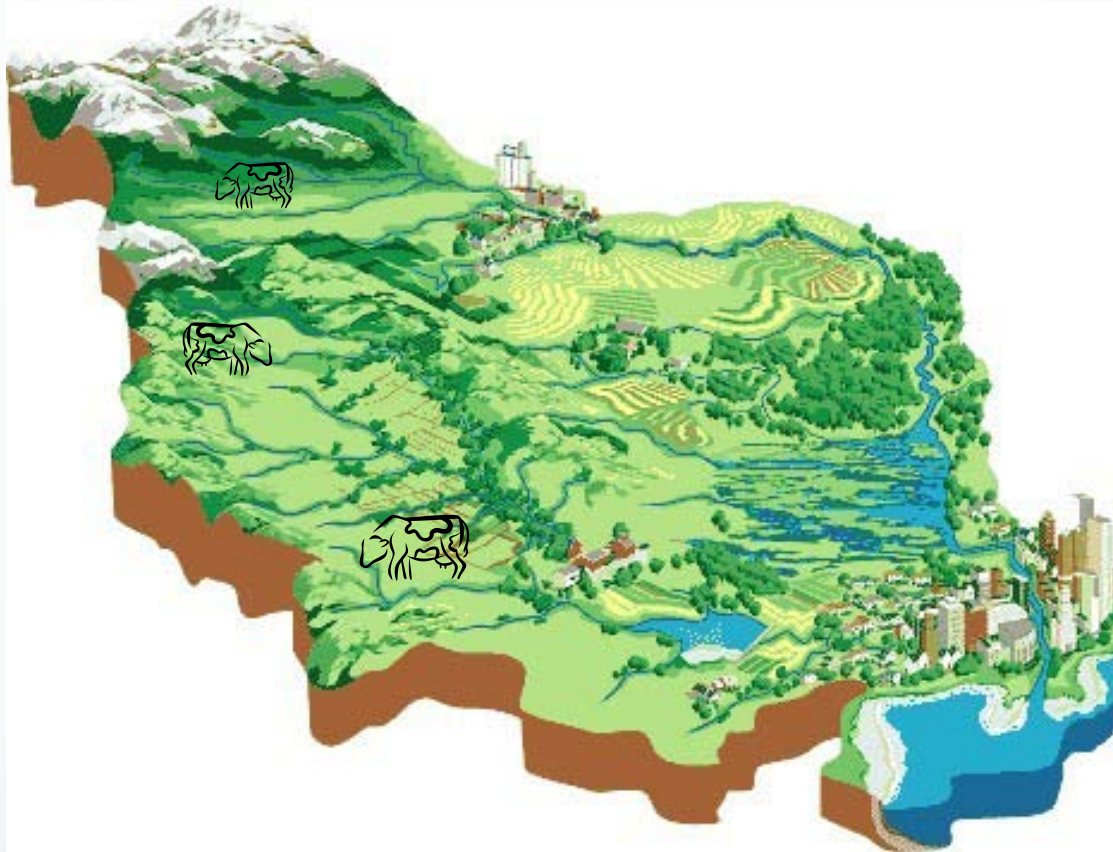
70% of the earth is covered with water but only 1% of this water is available as fresh water for supporting life on earth, including us

Watershed



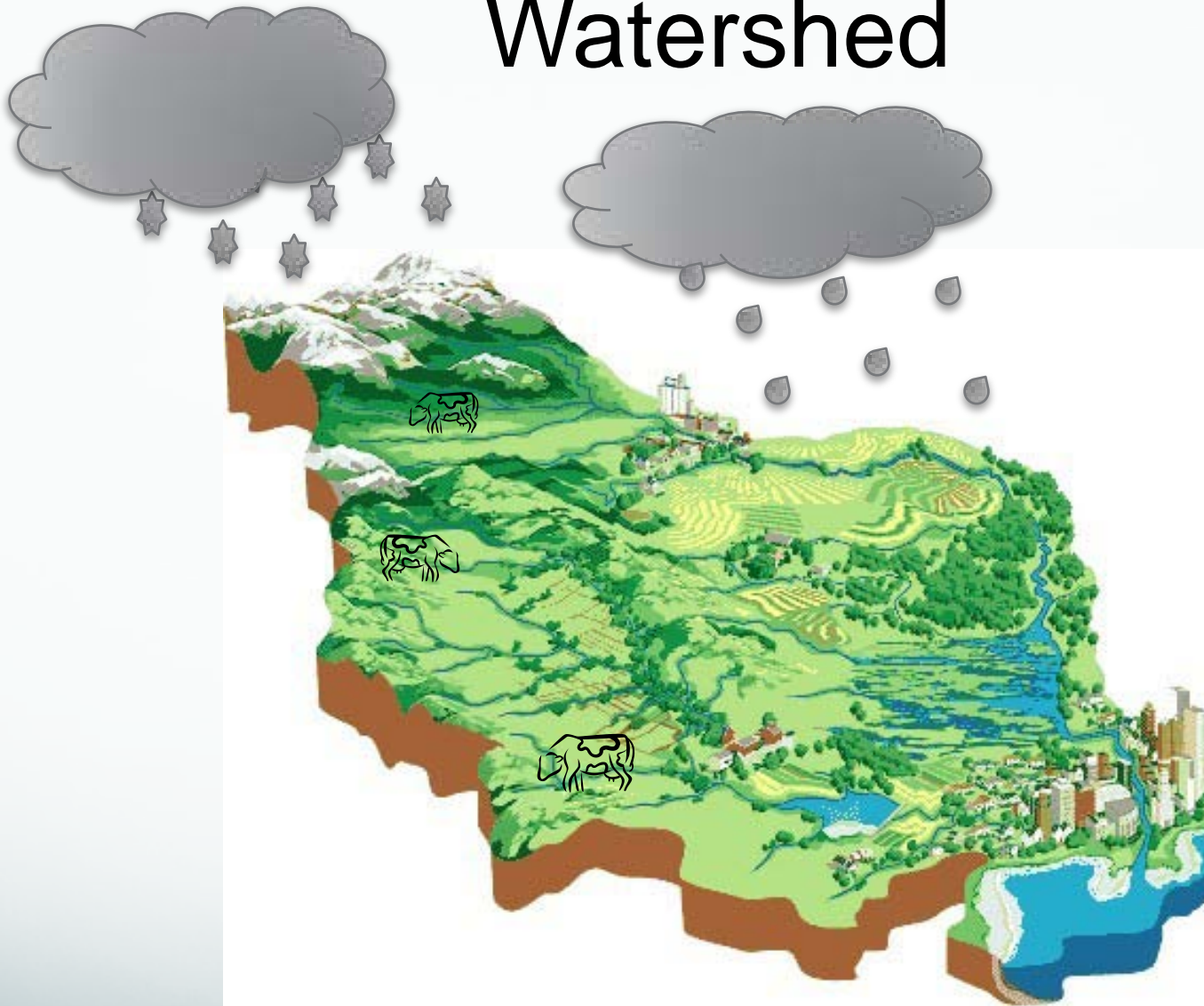
Is the area of land where surface water from rain and snow converges to a single point,

Watershed



"that area of land, a bounded hydrologic system, within which all living things are inextricably linked by their common water course and where, as humans settled, simple logic demanded that they become part of a community." John Wesley Powell.

Watershed



Water Sequestration

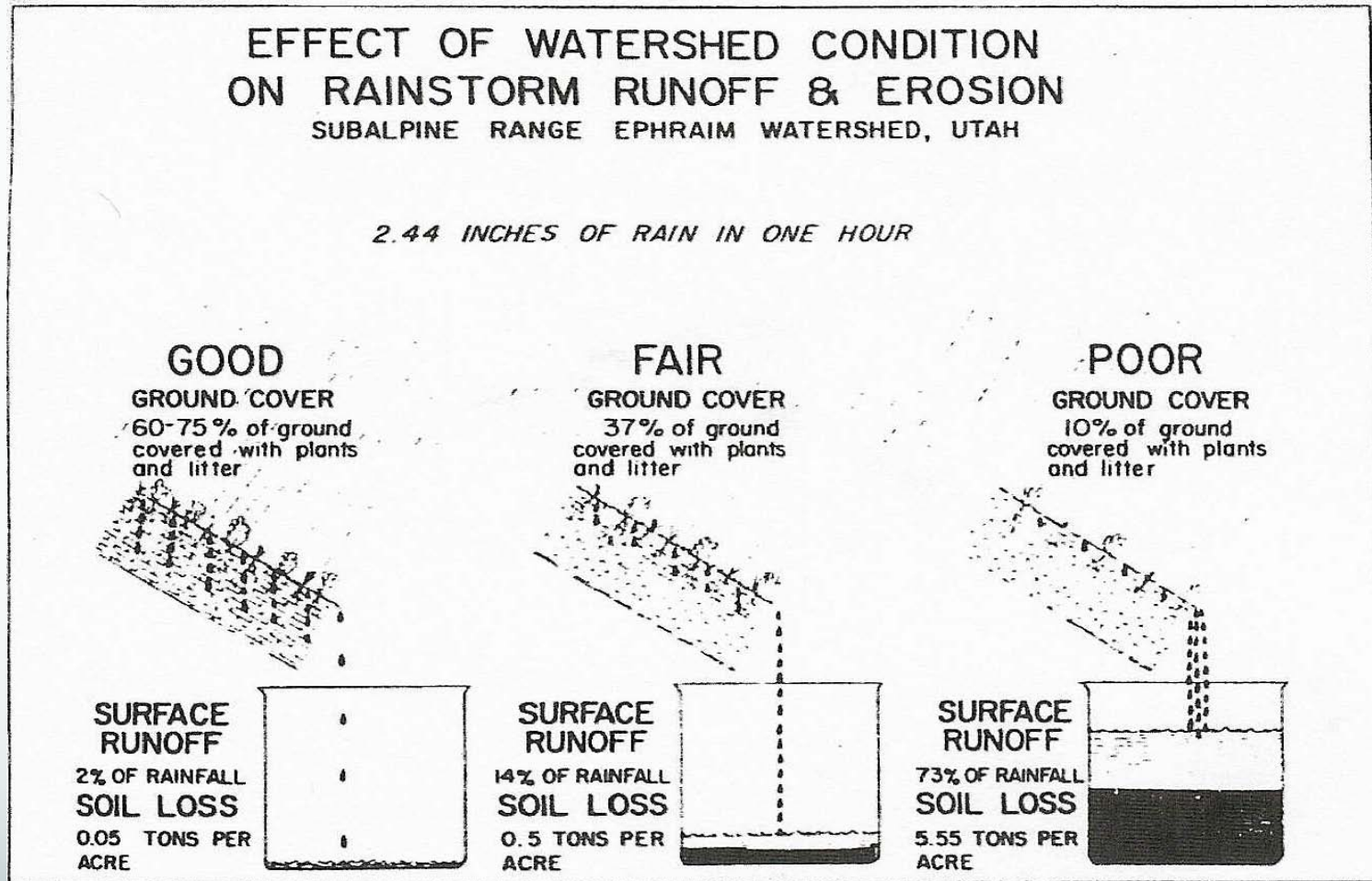
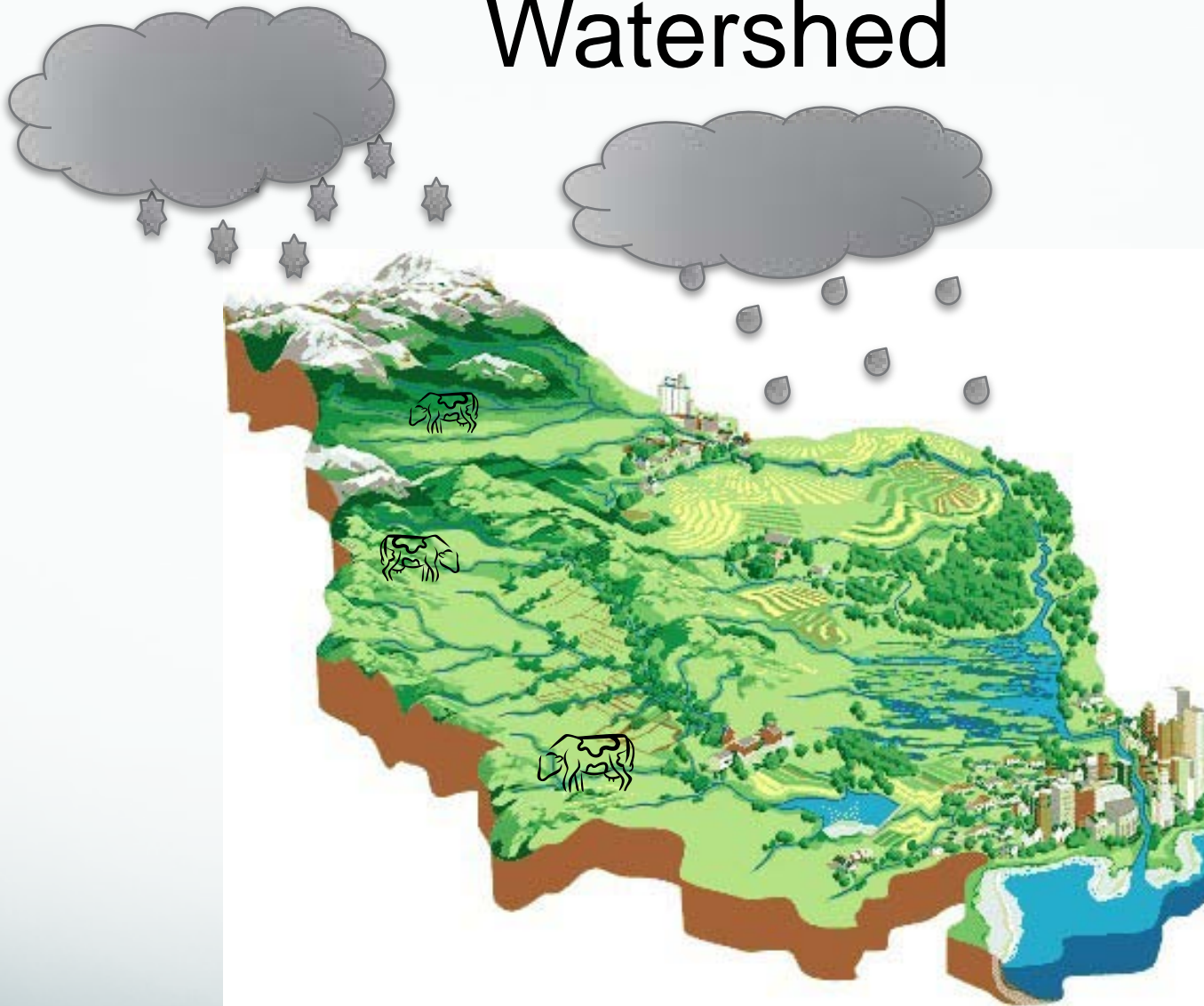
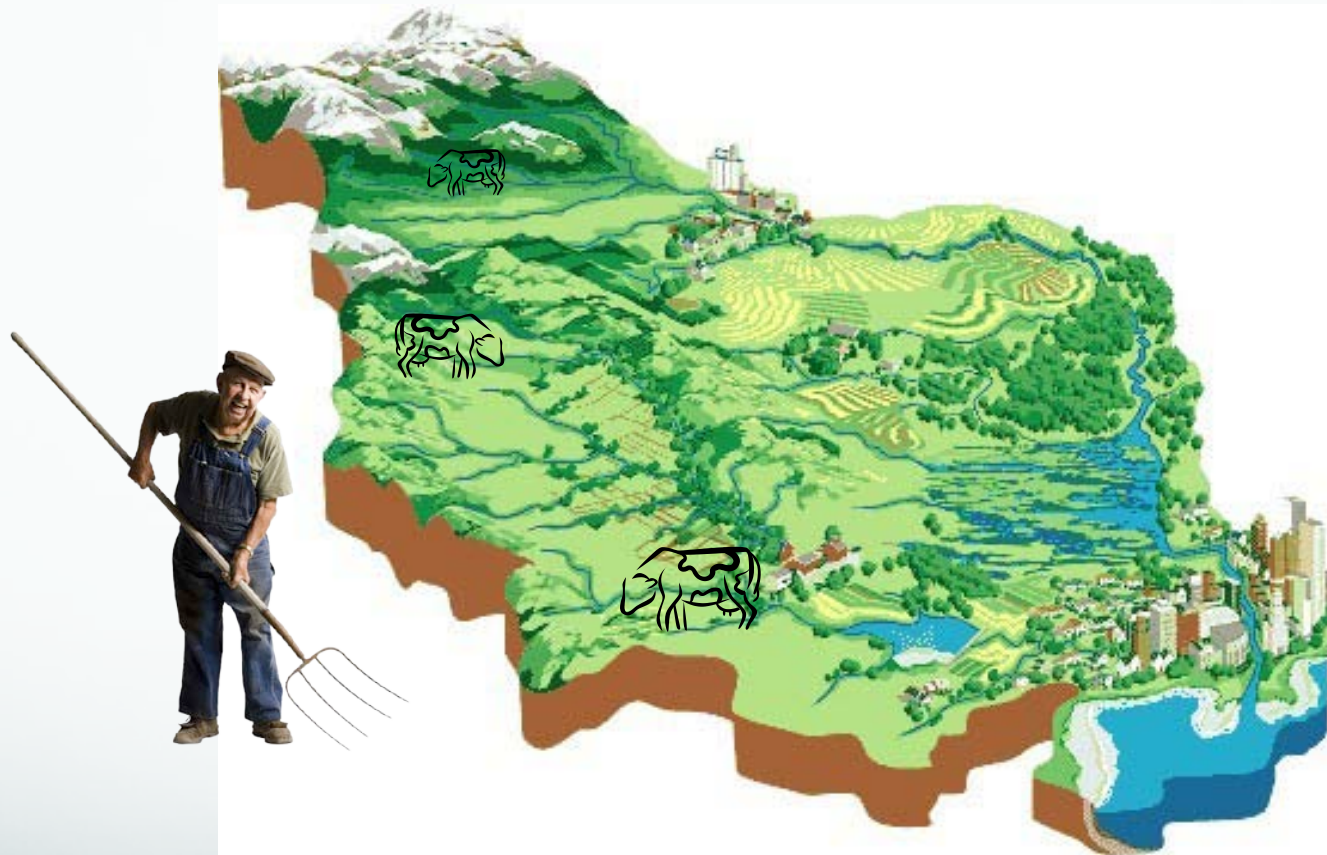


Fig. 6-9. Effects of various densities of ground cover in controlling overland flow and soil erosion (from Bailey and Copeland 1961). (Multiply t/acre by 2,250 to obtain kg/ha).

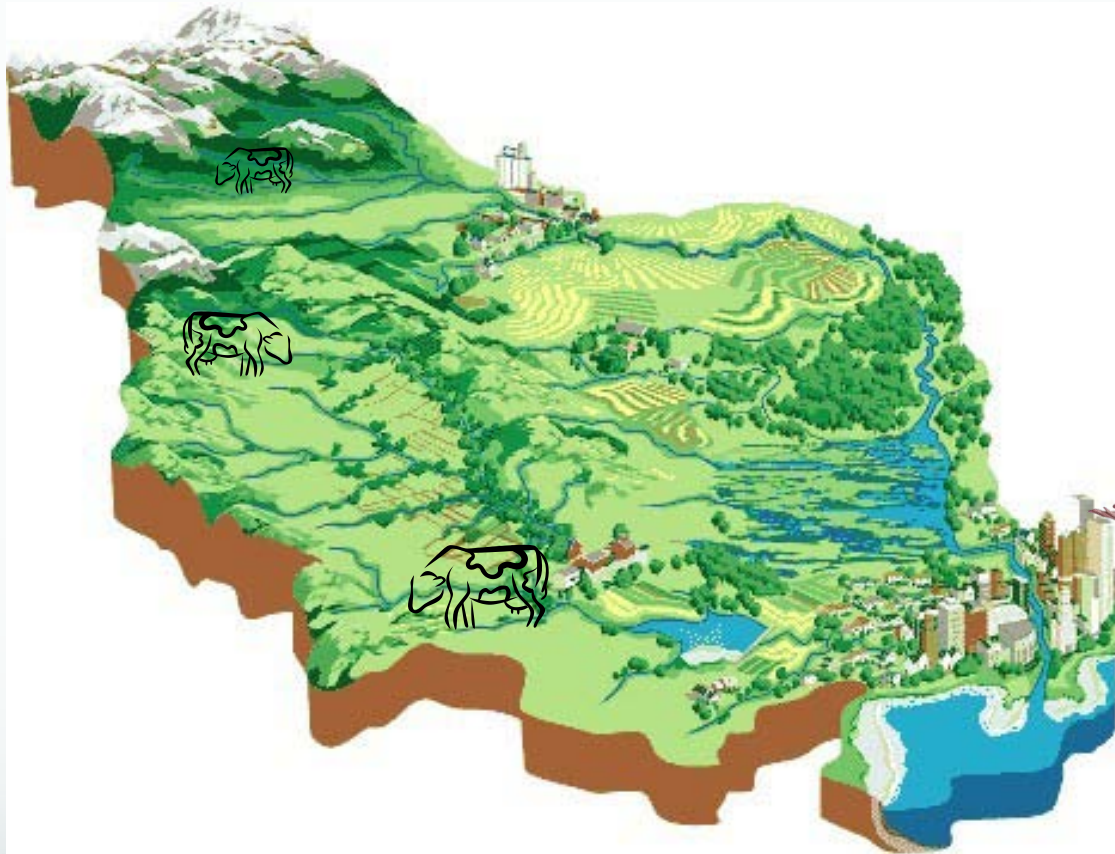
Watershed



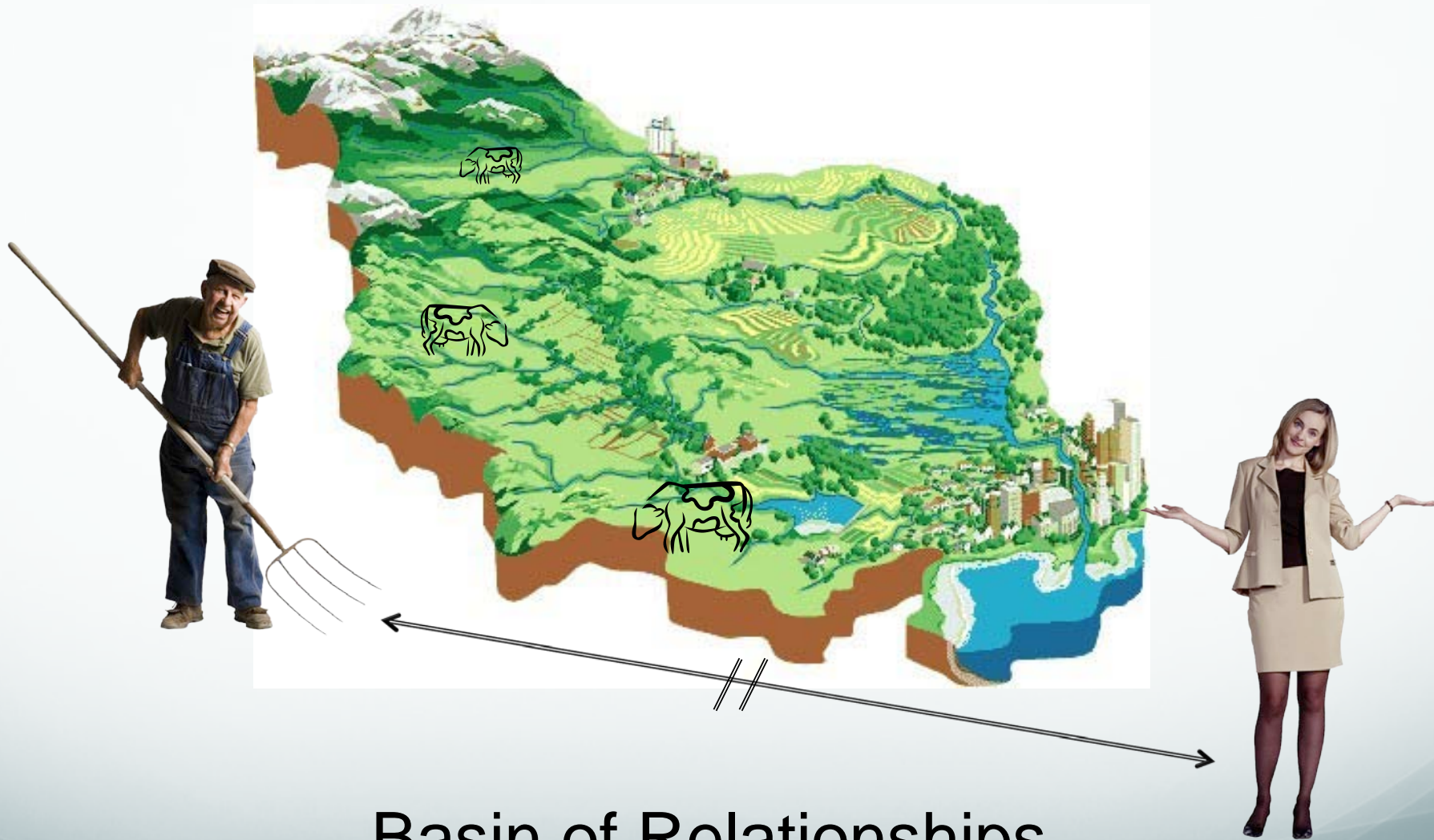
Watershed



Watershed

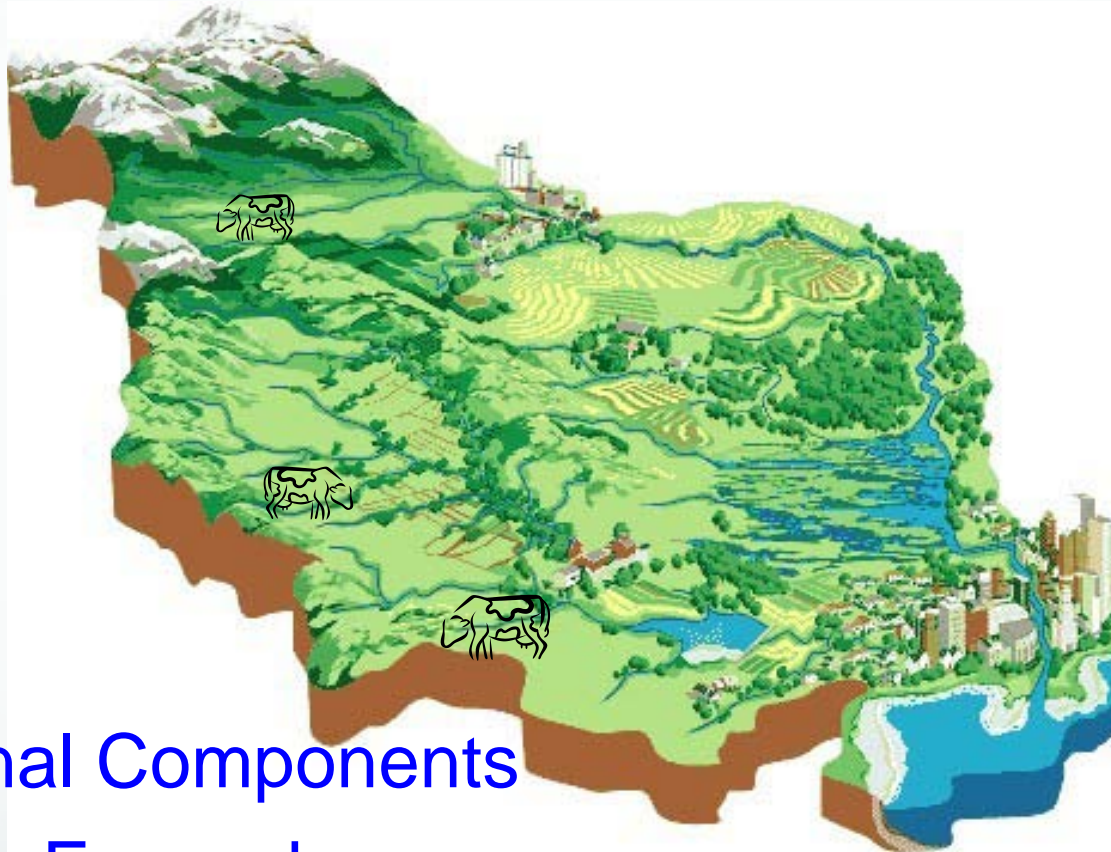


Watersheds



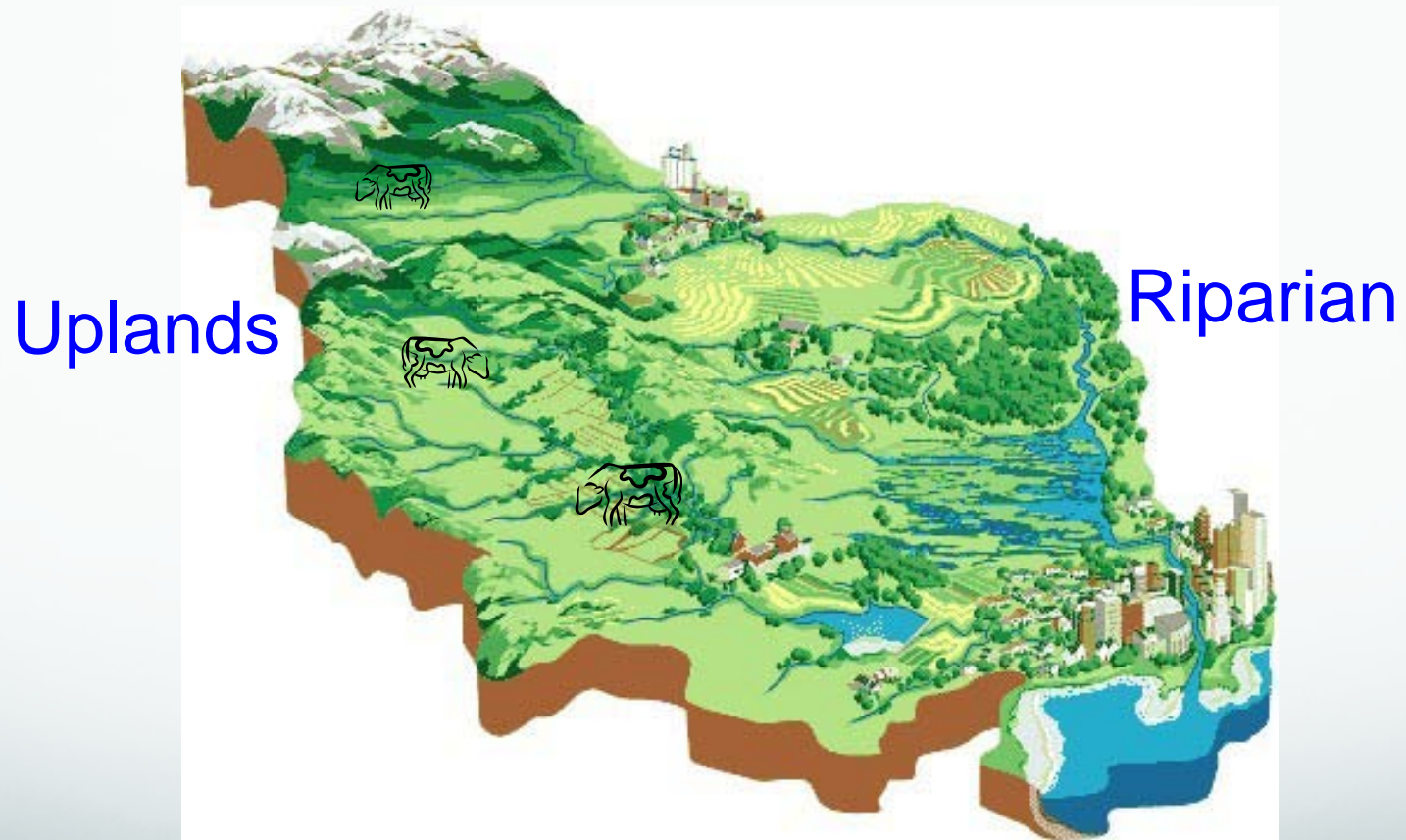
Basin of Relationships

New Methods for Assessing Watersheds



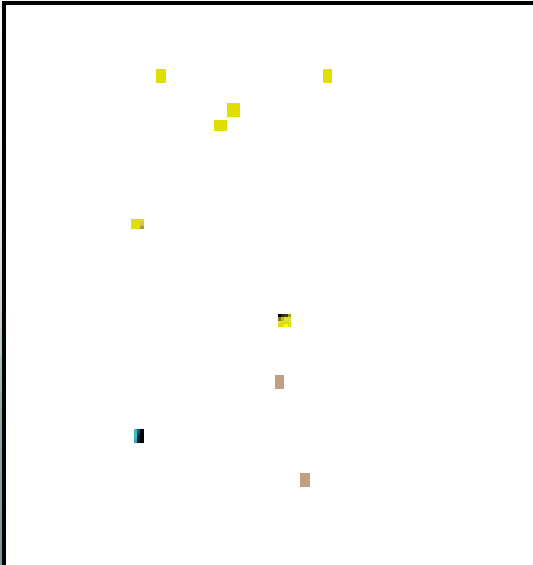
- Functional Components
- Measure Everywhere
- Go back in time (40yrs)
- Valid
- Cost Effective

New Methods for Assessing Watersheds



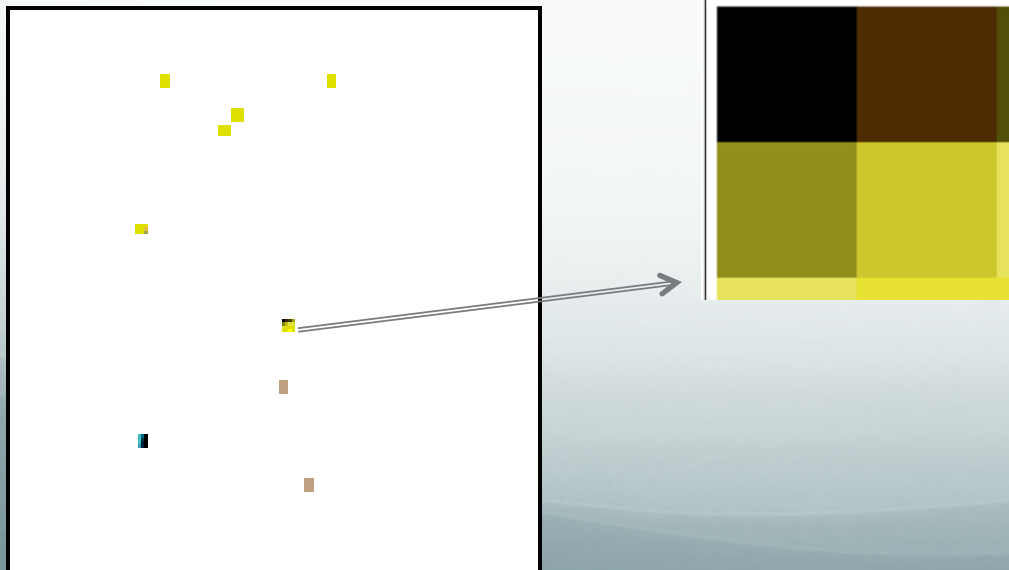
ORC's Landscape Assessment

Historical Landscape Assessment



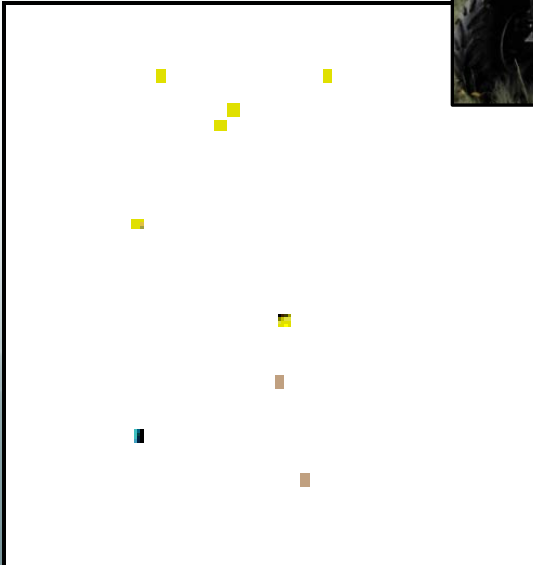
ORC's Landscape Assessment

Historical Landscape Assessment



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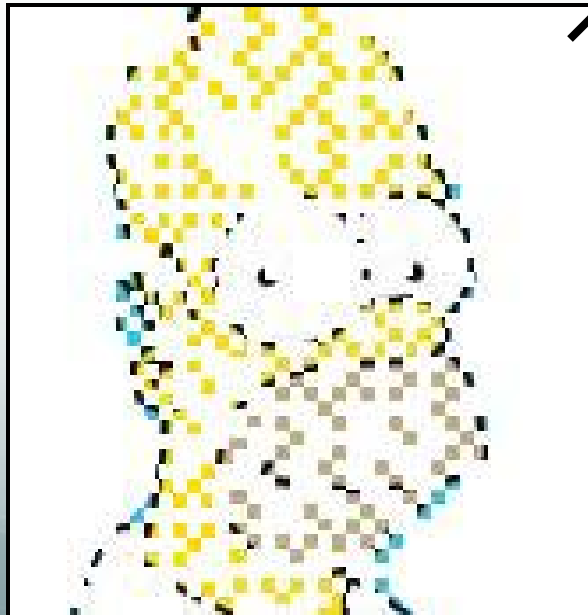
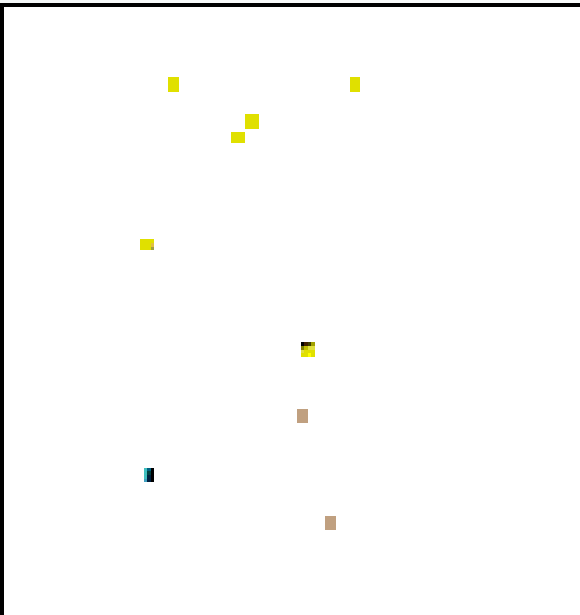
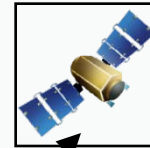
Historical Landscape Assessment



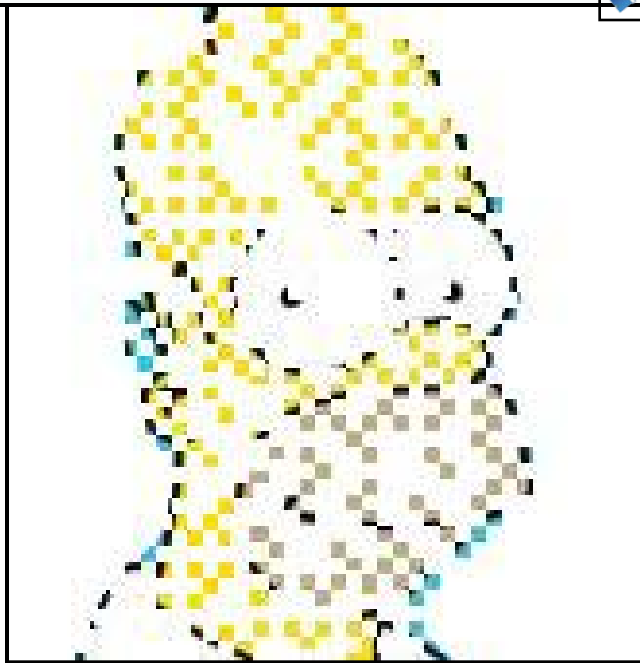
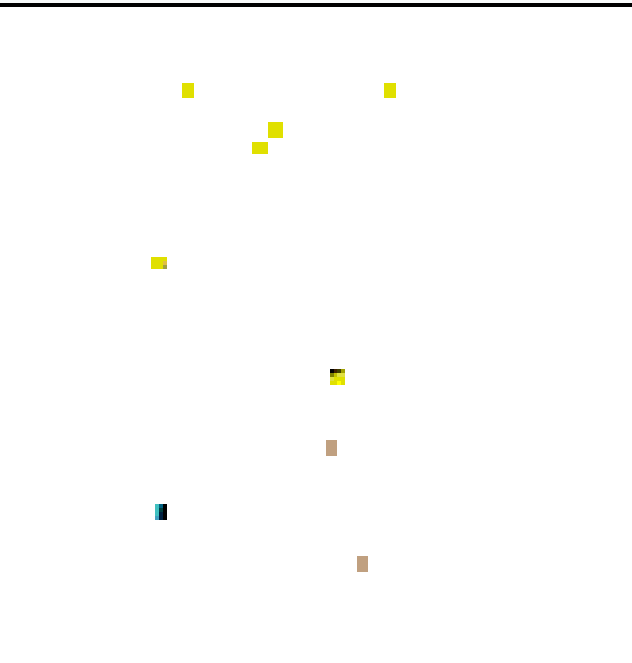
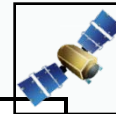
ORC's Landscape Assessment



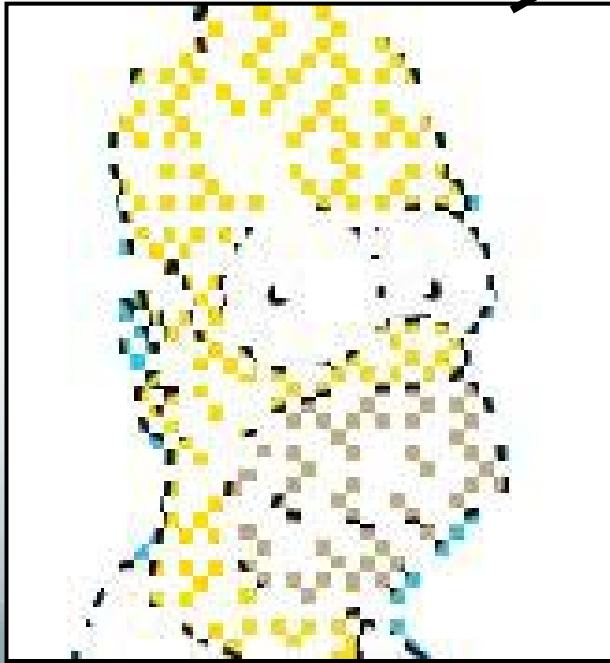
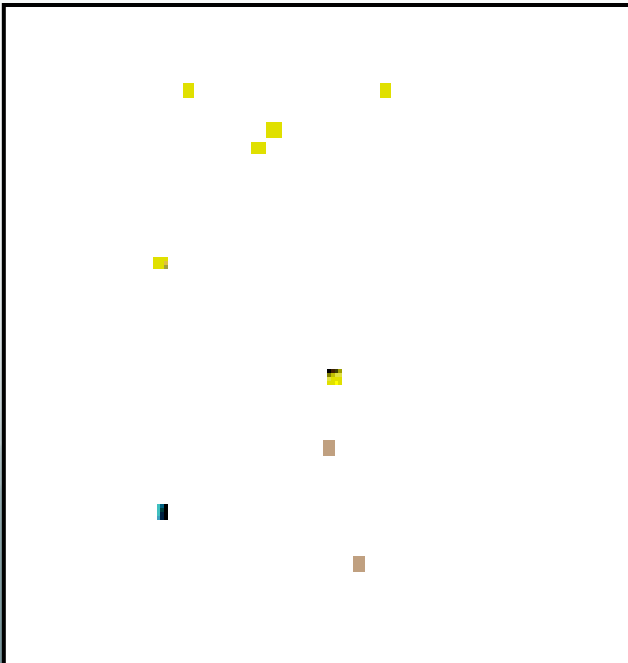
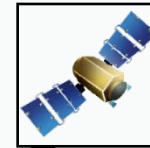
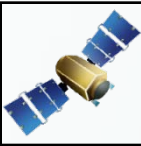
ORC's Landscape Assessment



ORC's Landscape Assessment



ORC's Landscape Assessment



Riparian Methodology

Important Functional Cover Groups

Upland Veg.

Bare Ground

Riparian Veg.

Water

Monitoring Watershed Change



Potential Riparian Area (PRA)



1994

2006

Legend

 PRA

 Pastures



0 0.05 0.1 0.2 0.3 0.4 0.5 Miles

1994

2006

Legend

- PRA
- Pastures

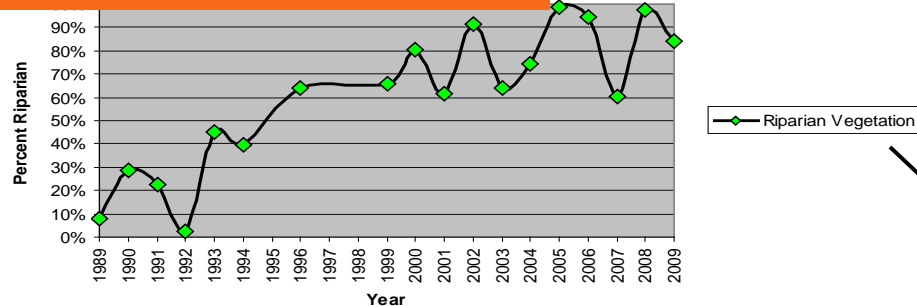
Landcover

- gravel
- rip_veg
- upland_veg
- water



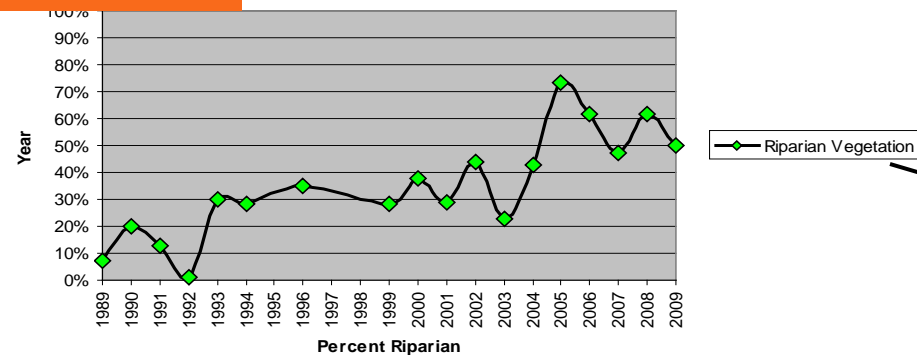
0 0.05 0.1 0.2 0.3 0.4 0.5 Miles

Time Controlled Grazing

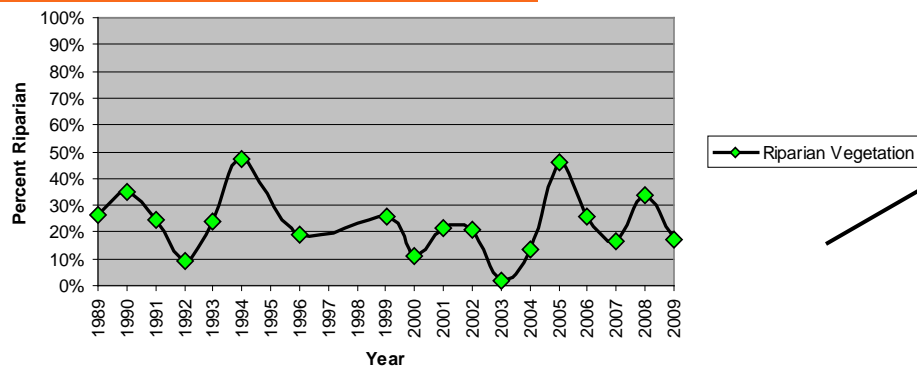


Exclosure

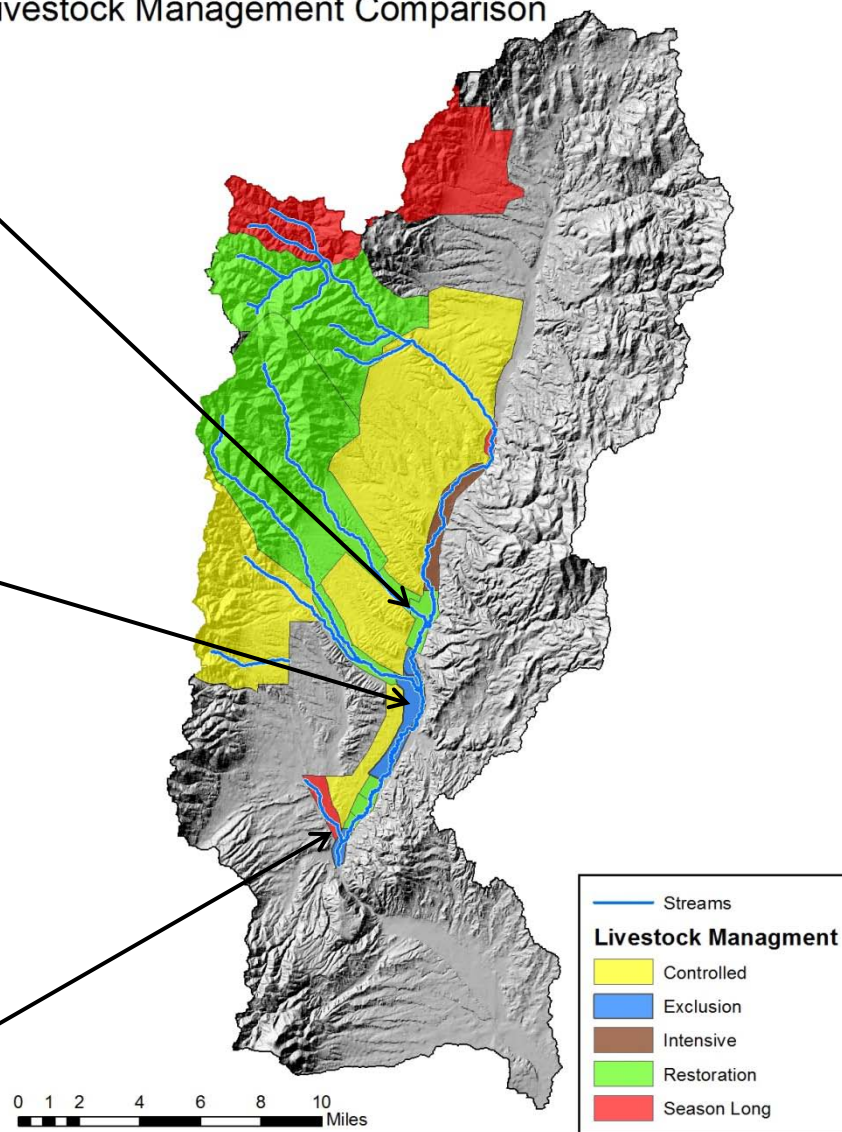
Middle Maggie

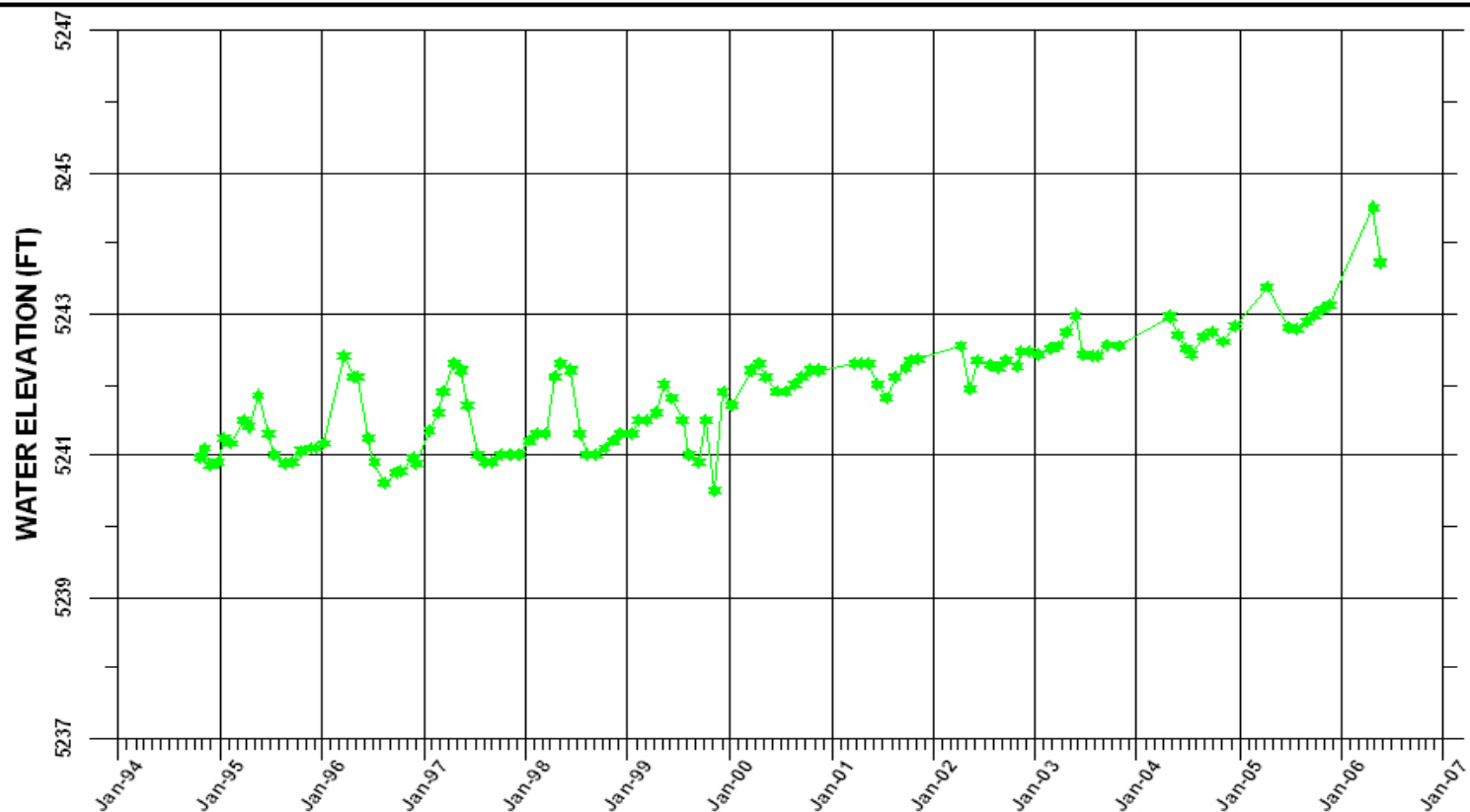


Traditional Grazing



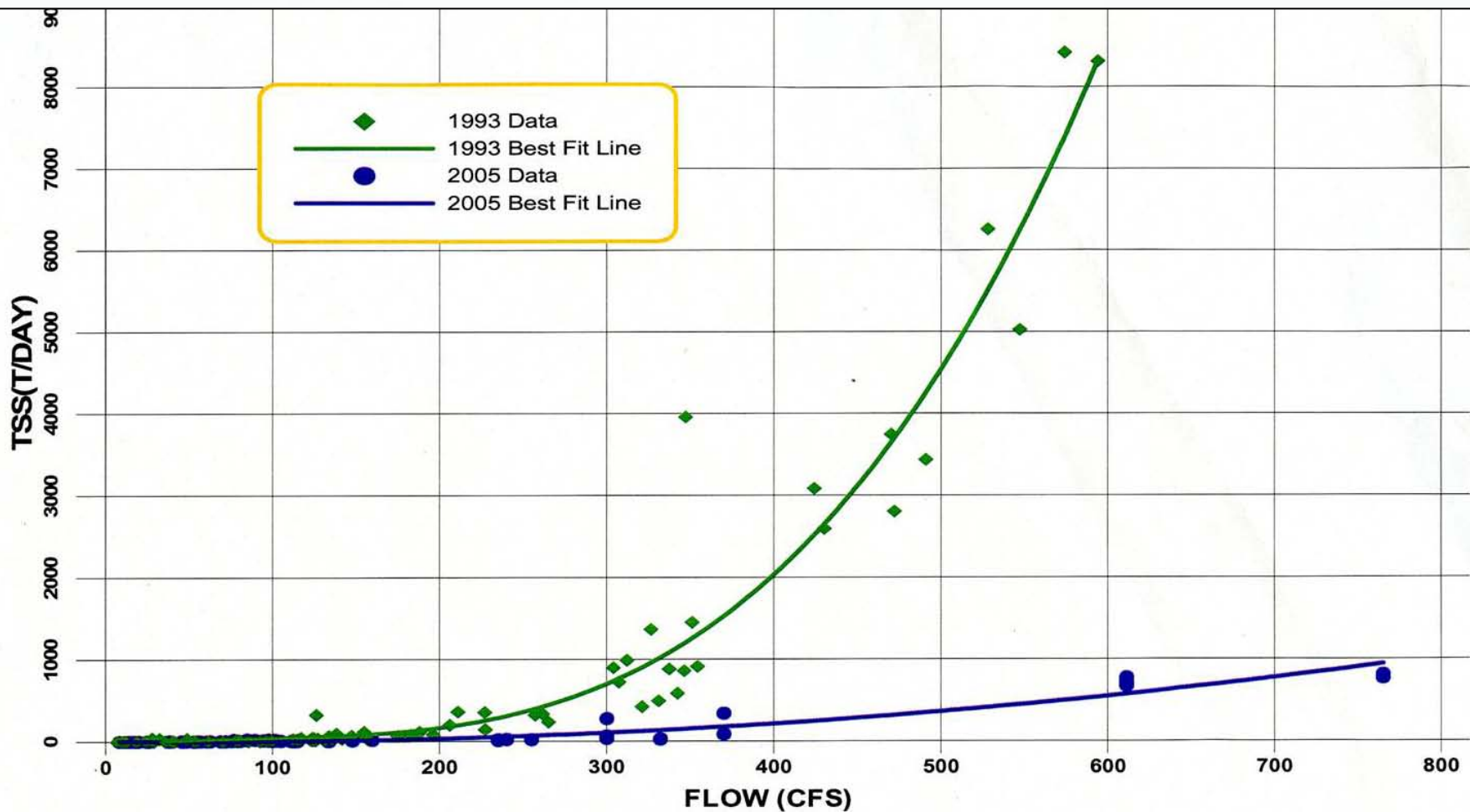
Livestock Management Comparison





DATE: 02 JUNE 06

Monitoring Well
Water Elevations thru Time

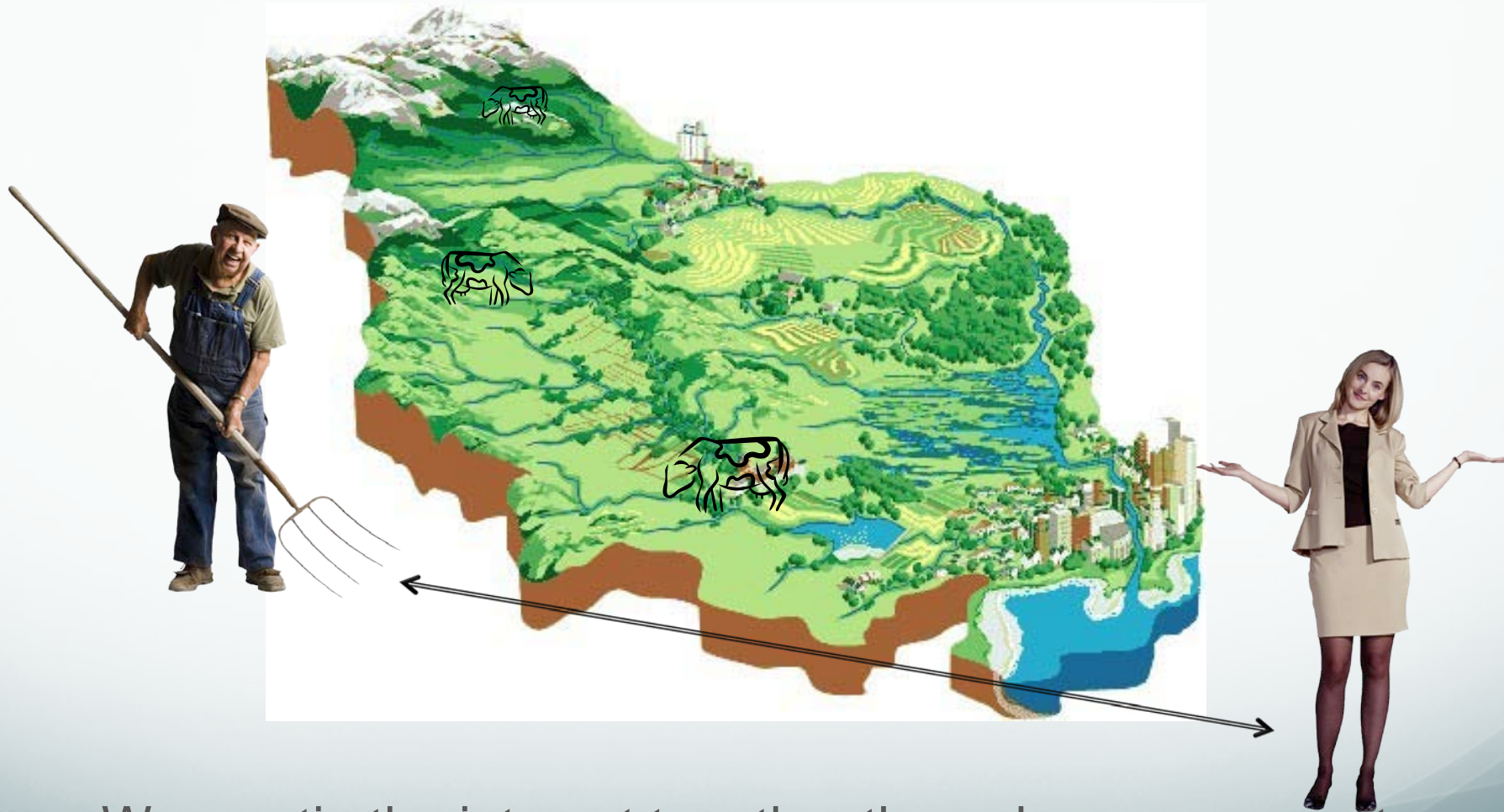


DATE: 27 MARCH 06

MAGGIE CREEK
FLOW vs TSS - 1993 vs 2005

file name: maggieflo

Conclusion



- We can tie the interest together through measurement. Creating a more vital environment and economy