### it's a Systems thing





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### Rangelands - and their use by people - is a study in System dynamics

Unpacking the complex "cheatgrass problem" can identify a set of solutions

These may appear to be unique issues with discrete strategies, but once they move from development to implementation, the complexity challenge takes over, interactions result in unintended consequences, failure on one front exposes new issues on others...

# current components of success

- Restoration Science for 21<sup>st</sup> century
- Improved management (grazing and weed treatments)
- Public land rules/regs to match the challenge
- Economic Incentives
- Adaptive management

#### Are we on track?

- Do we dump more money on the current solutions?
- What do we need to do differently?
- We probably have the strategic themes we need...
  - But linear solutions are falling short
- Complex, socio-ecological problems need Transformational Change...
- What is our Theory of Transformational Change?



Awareness
Will/Mobilization
Behavior/Actions



Policy and public/private partnerships can help at each step

## Support and improve existing efforts

### **Encourage and fund innovations**

Coordinate and integrate

