

Disparate Stakeholder Management: A case study on how to avoid being buffaloed by competing interests.

Lynne Koontz
USGS Fort Collins Science Center
Policy Analysis & Science Assistance Branch

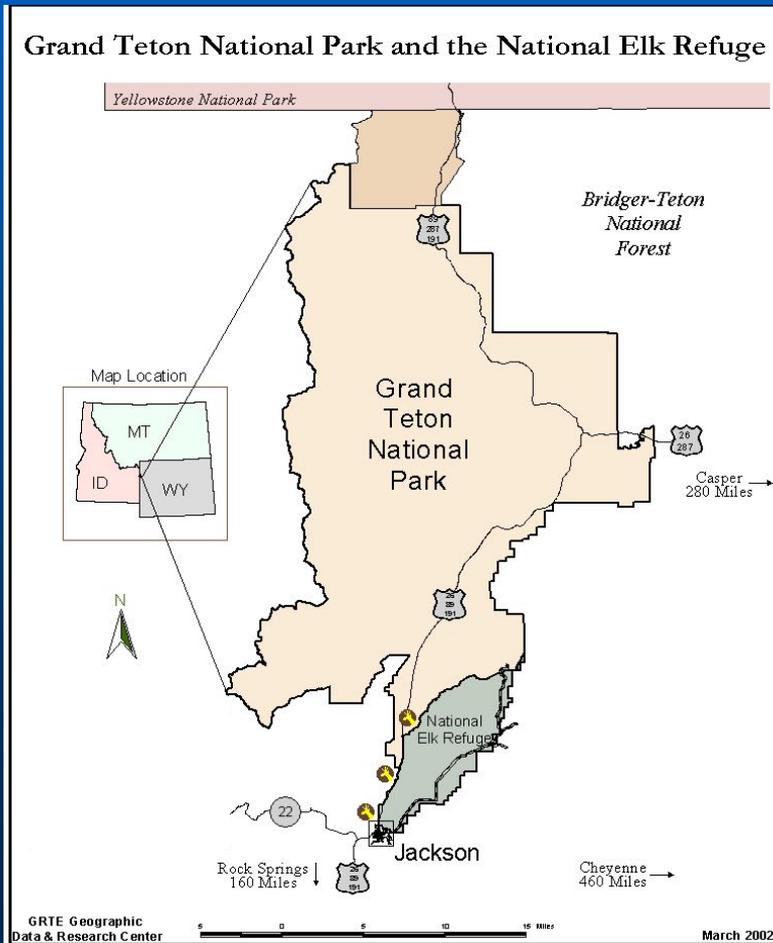


Presentation Points

- Case Study
- Research Objectives
- Methodology
- Key Results
- Implications for managers

Case Study

Elk & Bison Management Planning Process Grand Teton National Park and the National Elk Refuge



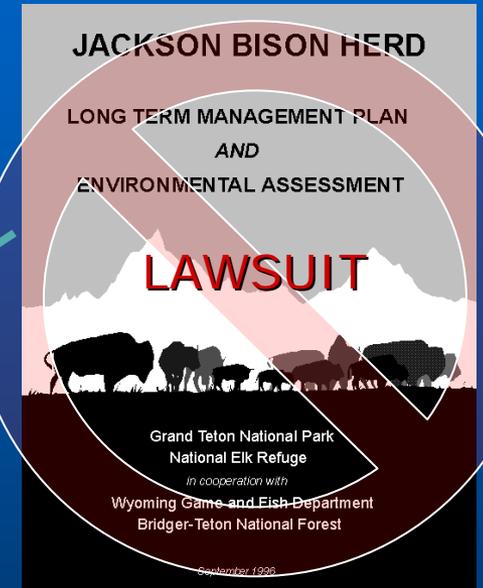
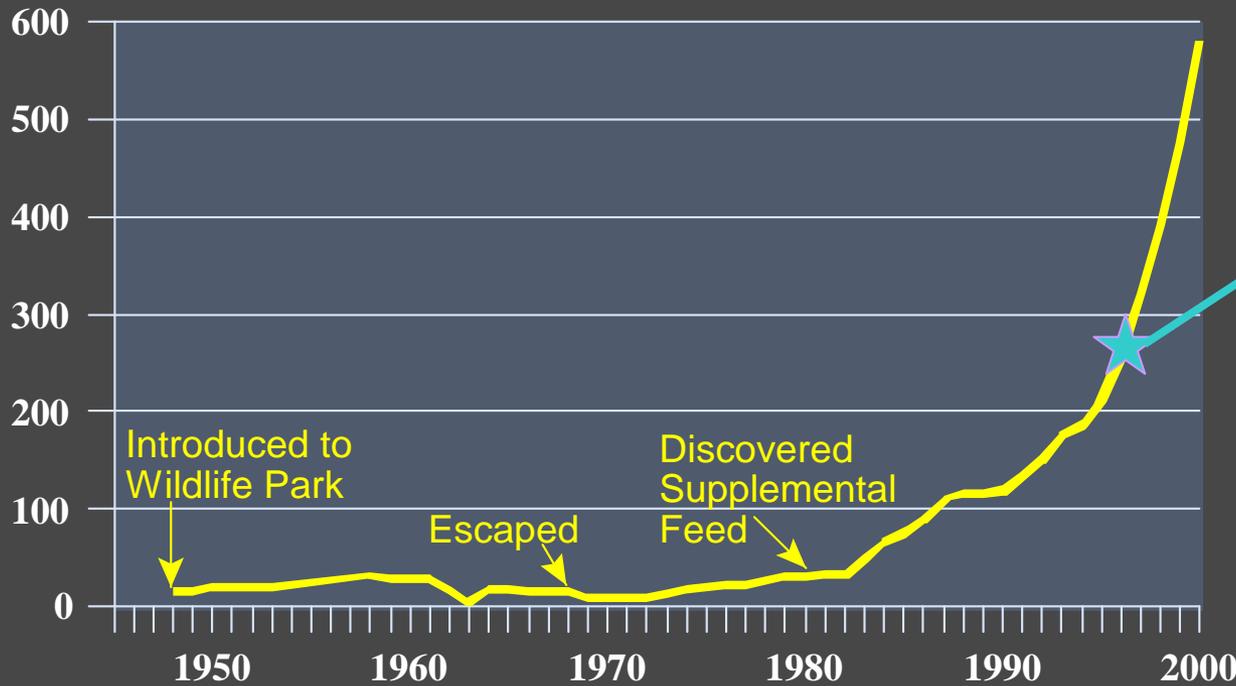
Winter Feeding on the National Elk Refuge

Initiated to mitigate for the loss of winter range. Currently there are 13,500 elk in the Jackson herd, with half wintering on the Refuge.



Need for the Elk and Bison Management Environmental Impact Statement (EIS)

Bison Population in Jackson Hole





Challenges with the Elk & Bison Decision Making Process

Soliciting public input for an Environmental Impact Statement (EIS)

- Diverse preferences for each issue
- Discussion quickly becomes polarized
- Impossible to look at how important each issue is in the overall decision
- Looking at the overall context
 - Makes it easier to find common ground among stakeholders
 - Develop compromised solutions
 - Reduce litigation

Research Objective

Develop an approach, called Disparate Stakeholder Management (DSM) that **helps decision makers** better describe, measure, communicate and resolve management issues with disparate stakeholders.

Predict the level of support and conflict for all relevant policy decisions, and identify who would support or oppose each decision.

Methods: Constructing the DSM

- 1) Used **Decision Analysis** (Analytic Hierarchy Process (AHP))
 - organize and describe the management problem
 - measure stakeholder preferences for elk and bison issues
- 2) Used Economic Public Choice Theory to understand the level of conviction each stakeholder group holds for a particular management issue to determine possible **compromised solutions**.
- 3) An Institutional Analysis model was incorporated to account for stakeholders' **political influence** in the decision making process.

Stakeholder Interviews

Interviewed 47 individuals representing 30 organizations:

- ◆ Local, State, & Federal government agencies;
- ◆ Native American tribes;
- ◆ Local businesses;
- ◆ Agricultural and ranching interests;
- ◆ Hunting and outfitting;
- ◆ Environmental and wildlife conservation;
- ◆ Animal rights.

To collect the information we needed for the DSM each stakeholder representative completed three surveys (*one on stakeholder preferences & two on political influence*).

Benefits of using Decision Analysis (AHP)

- Organizes and describes the management problem in a hierarchy framework
- Allows for the weighting of factors influencing the decision (decision makers & other stakeholders)
- Provides **traceability** for every management issue in the overall context



Constructing the AHP Hierarchy

Main Management Issues

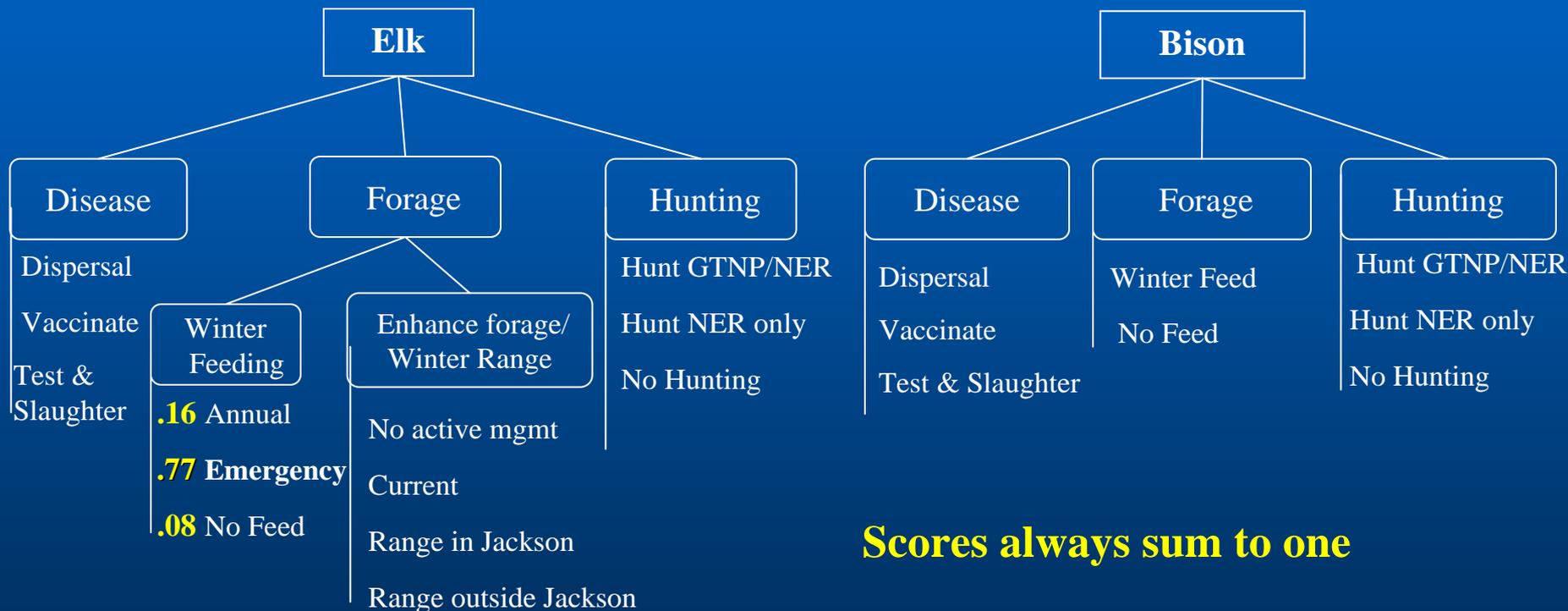
- ***Disease Management*** (dispersal, vaccination, or test & slaughter)
- **Forage Management**
 - Winter Feeding (no feeding, emergency basis, or annually)
 - Restore Historic Migration Corridor
- ***Hunting*** (no hunting, on NER only, both GTNP/NER)

Separate hierarchies due to different preferences for elk and bison issues.

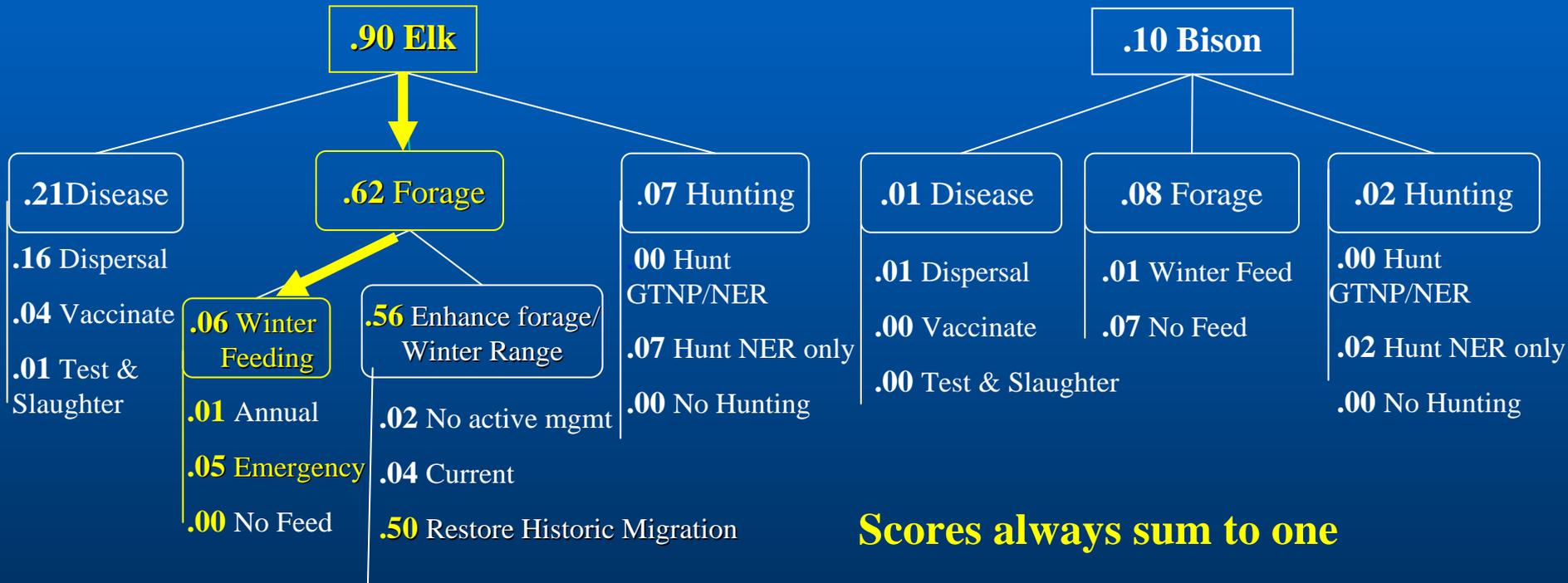


AHP Hierarchy Survey

Example: Conservation Group's Feeding Scores



Traceability of Conservation Group's Scores



Viewing Stakeholder Preferences



Placed options within spectrum of management practices

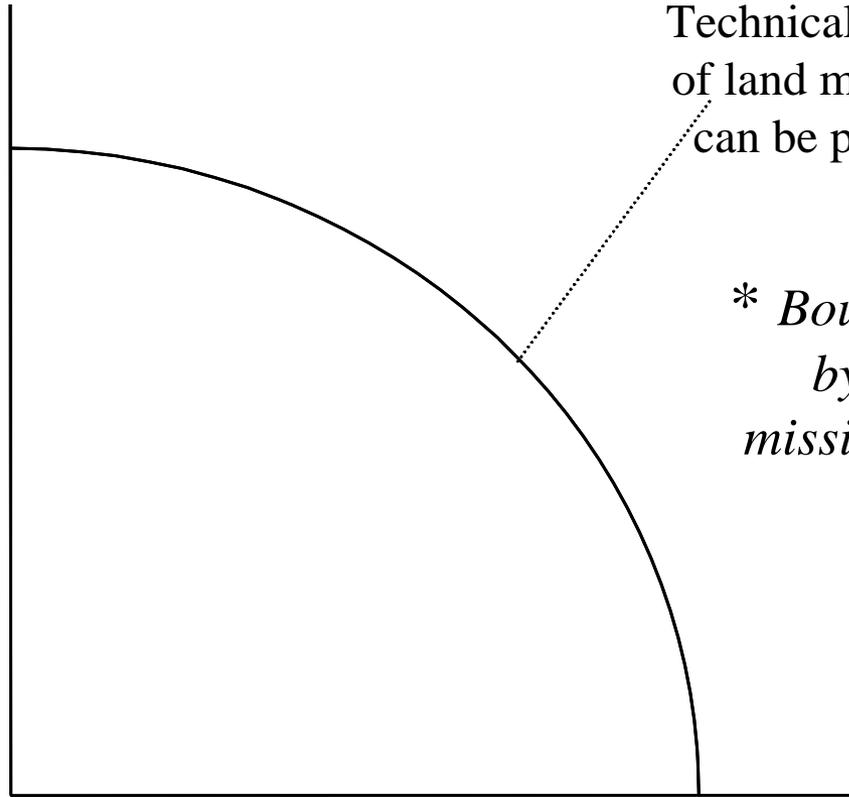
“Hands Off” ----- vs ----- “Managed”

Dispersal
No Winter Feeding
No Hunting

Test & Slaughter
Annual Feeding
Hunt GTNP & NER

Policy Possibilities Frontier

“Hands off”
Land Use Management
Practices



Technically efficient combinations
of land management practices that
can be produced using available
resources

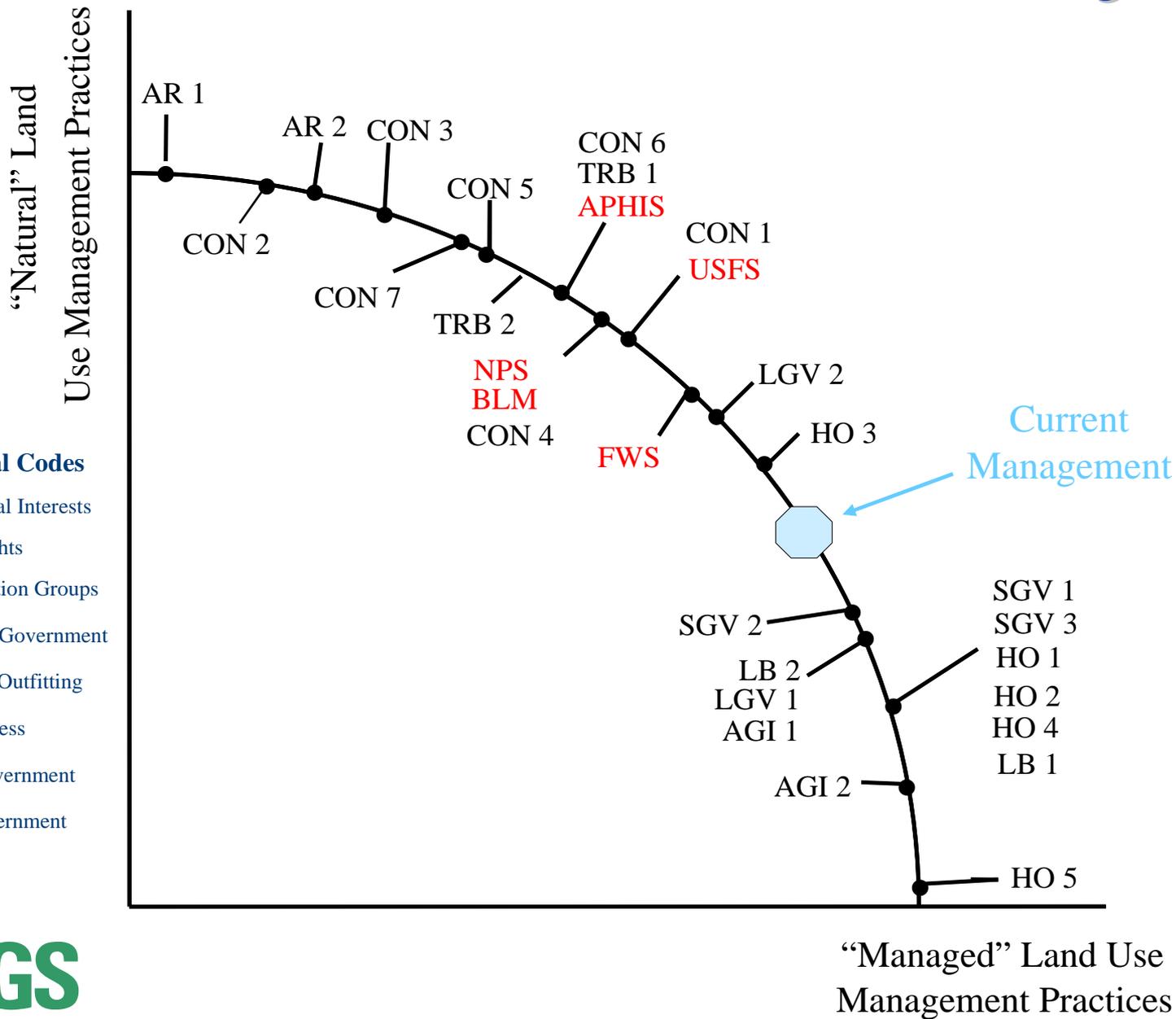
* *Boundary constrained
by EIS agencies'
missions and mandates*

Represent the multiple objectives associated
with each resource management practice

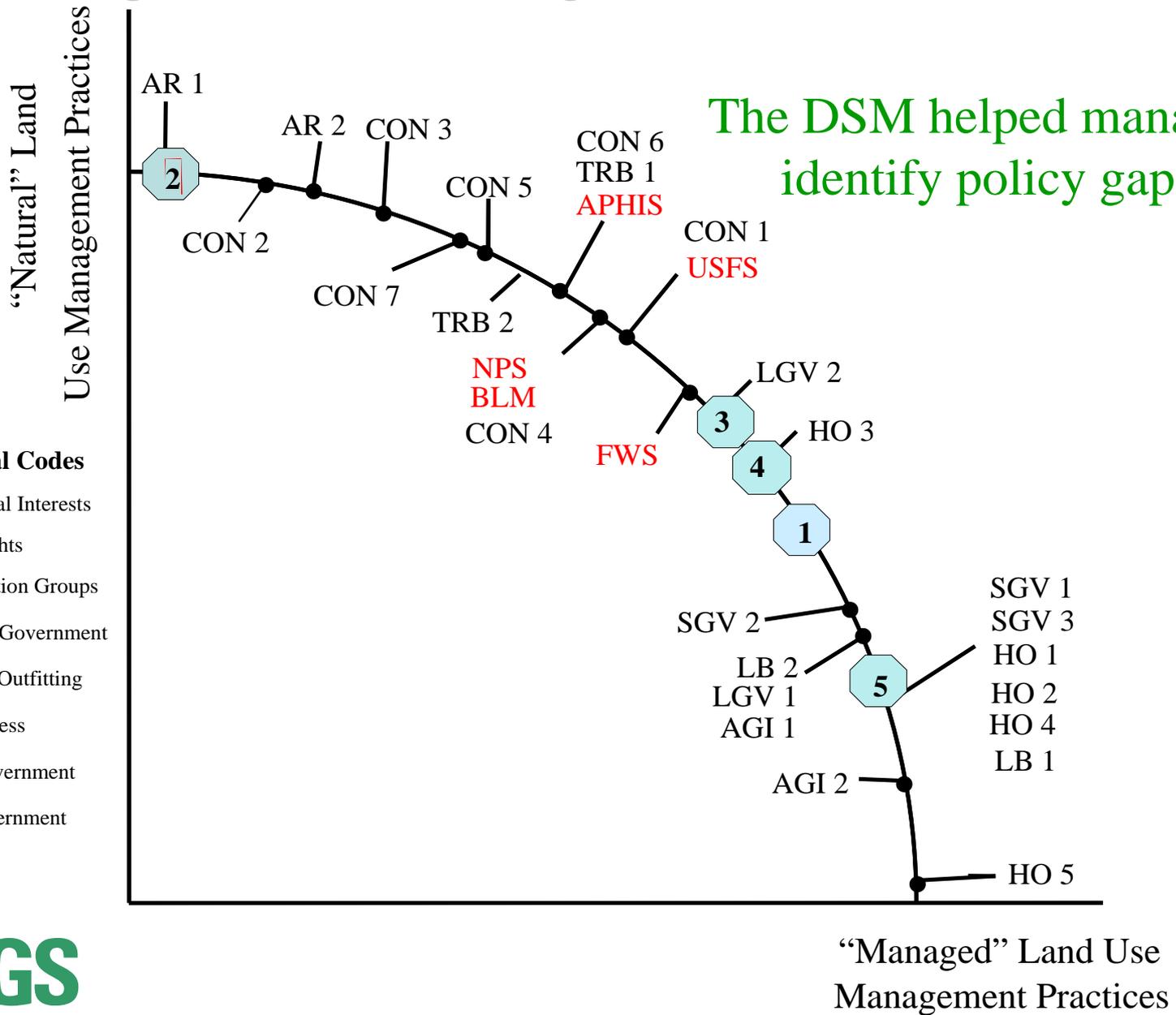


“Managed” Land Use
Management Practices

Results: Stakeholder Preferences & Current Management



Original EIS Management Alternatives



The DSM helped managers identify policy gaps.

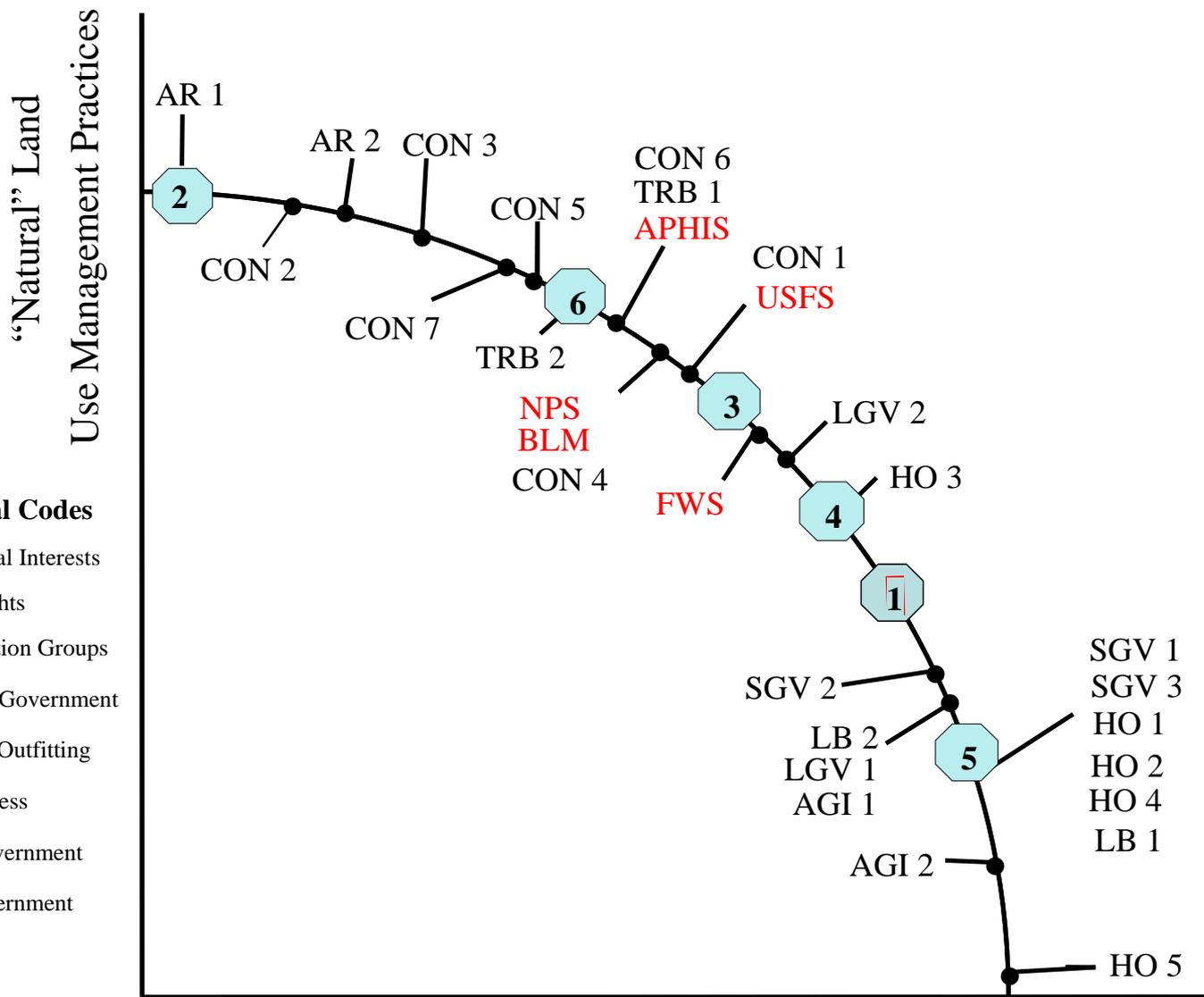
Organizational Codes

- AGI = Agricultural Interests
- AR = Animal Rights
- CON = Conservation Groups
- In Red** = Federal Government
- HO = Hunting & Outfitting
- LB = Local Business
- LGV = Local Government
- SGV = State Government
- TRB = Tribal





Alternatives in Draft EIS



Organizational Codes

AGI = Agricultural Interests

AR = Animal Rights

CON = Conservation Groups

In Red = Federal Government

HO = Hunting & Outfitting

LB = Local Business

LGV = Local Government

SGV = State Government

TRB = Tribal

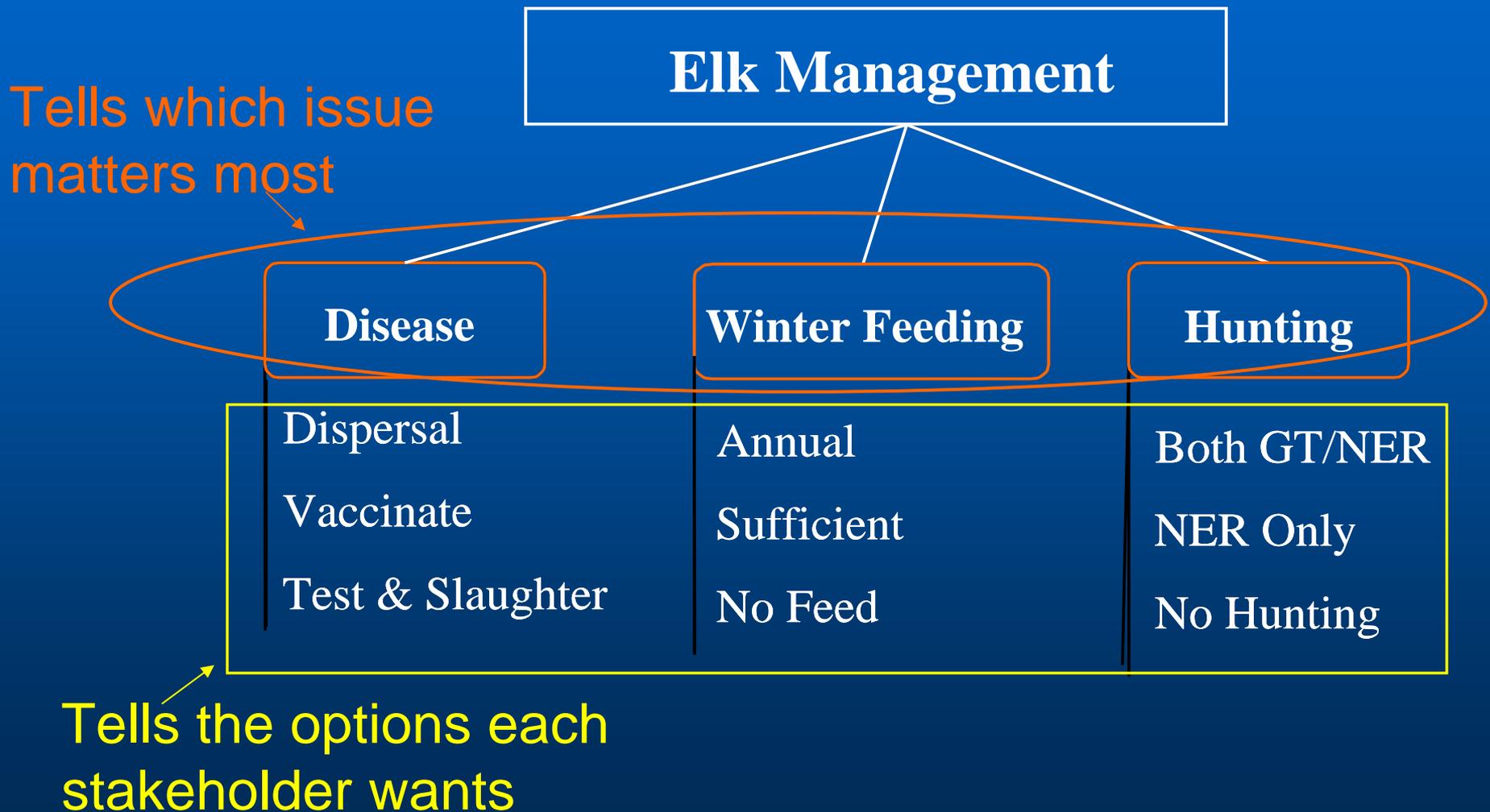
*More defensible EIS analysis

“Managed” Land Use Management Practices



Potential Compromised Solutions

How Important are the Issues?



Compromise Ratings for each Management Alternative by Stakeholder Group

	Federal Gov't	State Gov't	Local Gov't	Tribes	Local Business	Ag & Ranch	Hunting & Outfitting Groups	Animal Rights Groups	Conservation Groups
Alt. 1	45%	60%	39%	36%	61%	66%	57%	13%	31%
Alt. 2	51%	9%	11%	60%	11%	5%	7%	62%	61%
Alt. 3	70%	53%	66%	76%	45%	44%	59%	58%	72%
Alt. 4	60%	62%	68%	69%	52%	50%	66%	30%	53%
Alt. 5	49%	83%	77%	44%	86%	81%	74%	21%	38%
Alt. 6	64%	46%	59%	75%	35%	36%	48%	54%	69%



Implications for managers

Assisted EIS Team:

1. Reduced polarity in stakeholder preferences by breaking problems down into smaller pieces where acceptable compromises were more likely;
2. Identified many dimensions of the problem, which gave decision makers more alternatives to choose from;
3. Assured decision makers that alternatives offered for consideration covered the gambit of stakeholder preferences;
4. Portrayed the relationships between alternatives and stakeholder preferences, including the balance struck by Alternative 4, in regional and national briefings;
5. Promoted inclusion and equity for stakeholders by applying a consistent process to develop the PPF.

Contact information:
koontzl@usgs.gov
970-226-9384