

The FRI Natural Disturbance Program

FRI ND Program Information Session

Edmonton, Alberta

December 9th, 2009

David Andison



The FRI Natural Disturbance Program

**Understand patterns and process of natural disturbance,
and help partners integrate them into
management & planning.**

***Partner-driven, science-based, &
solutions, not just answers.***

ND Partnership Options:

- 1. The FRI Board.**
- 2. The Natural Disturbance Program Activity Team.**
- 3. ND Project Activity Teams.**
- 4. ND projects.**
- 5. ND tools or products.**

Organization of The FRI Natural Disturbance Program

Program Lead - David Andison, Bandalooop

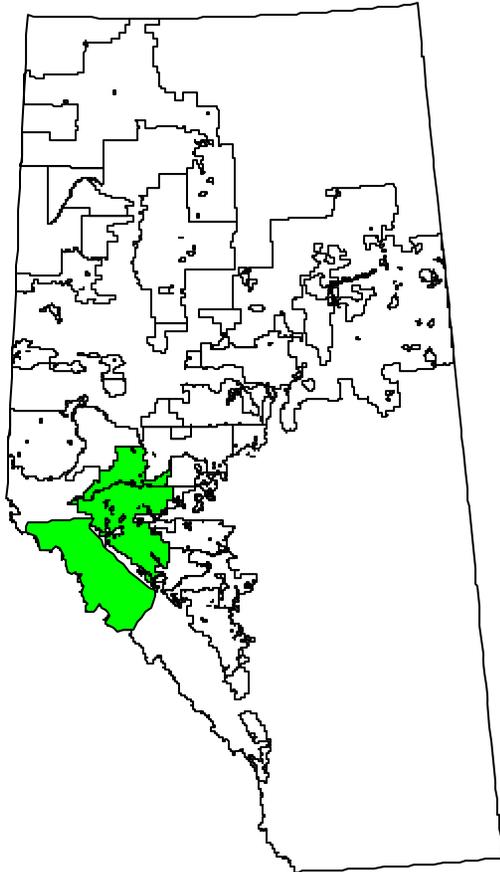
Activity Team:

- Rick Bonar, West Fraser Mills
- Tom Archibald, FRI
- Greg Branton, ANC
- Dave Smith, JNP
- Kevin Quintilio, Alberta SRD
- John Stadt, Alberta SRD

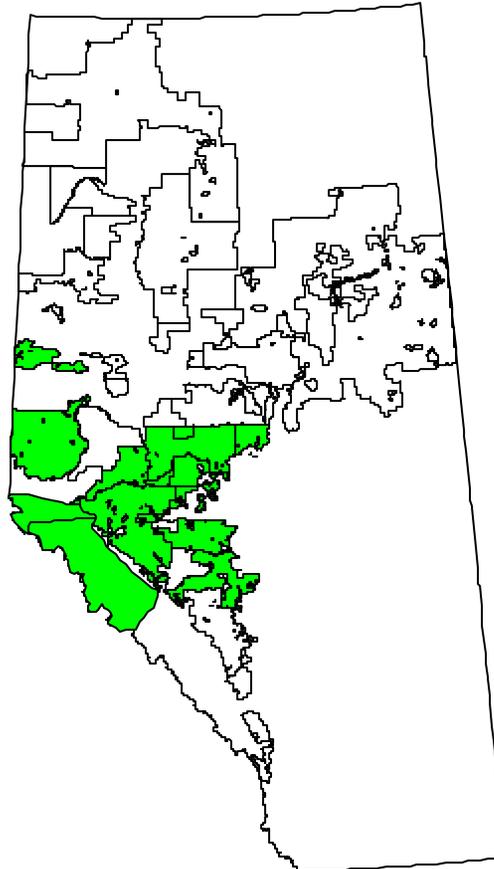


Project Partnerships

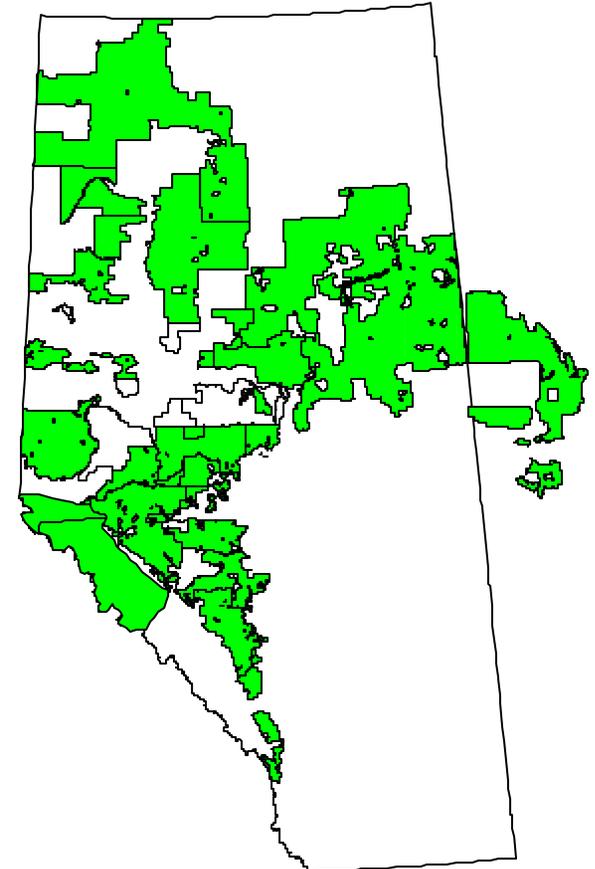
1998



2002

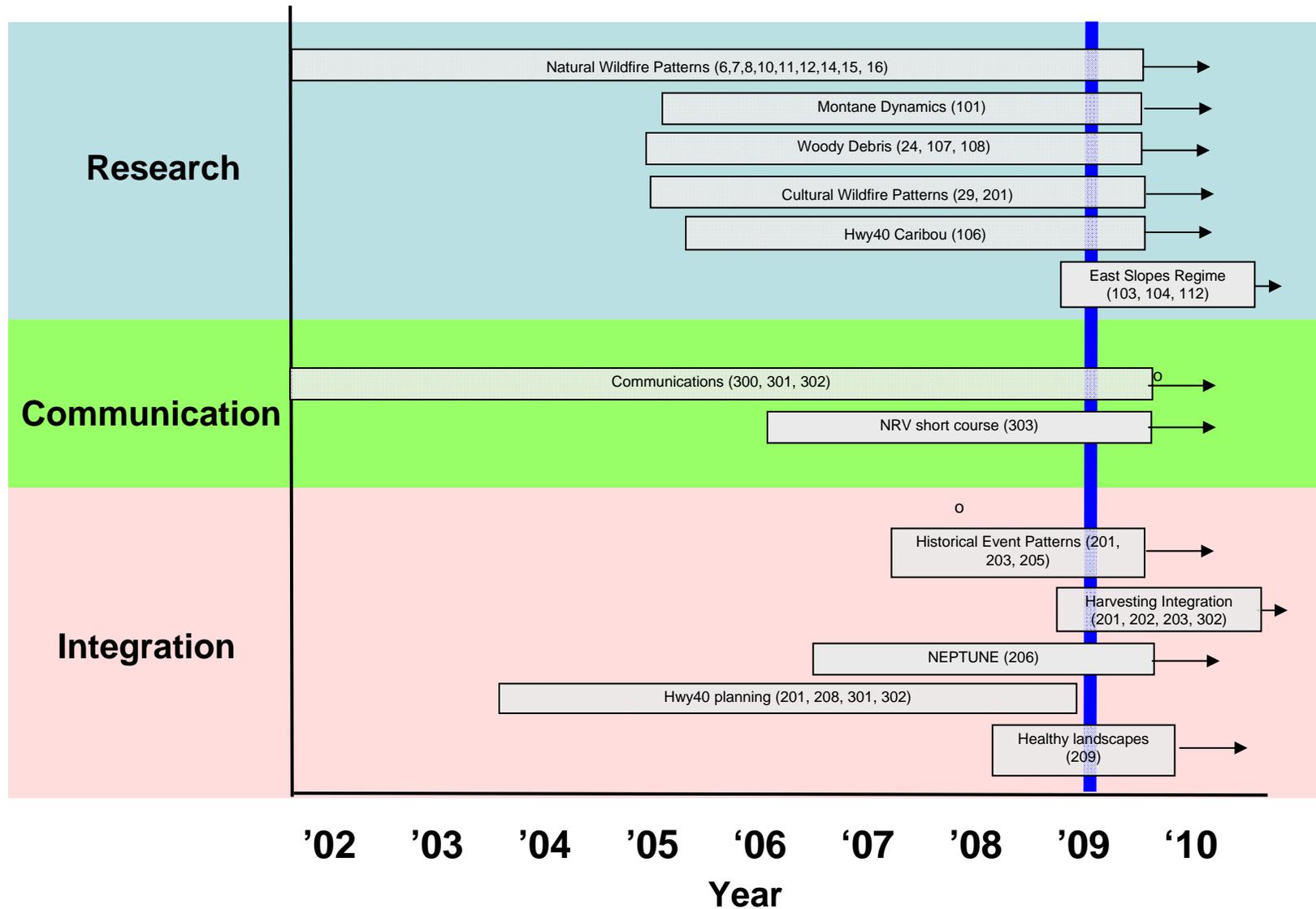


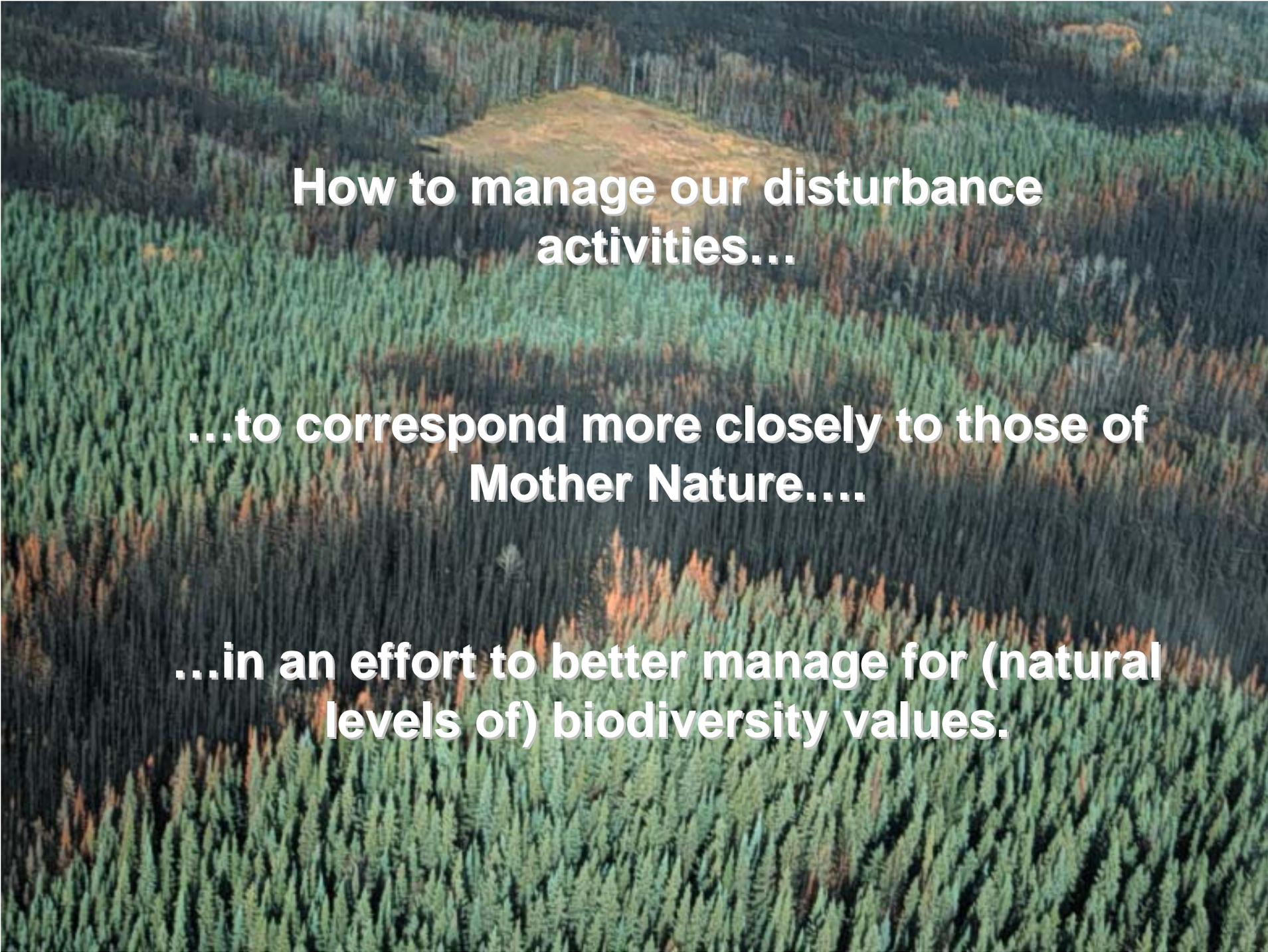
2009



+ Saskatchewan

Current FRI ND Projects



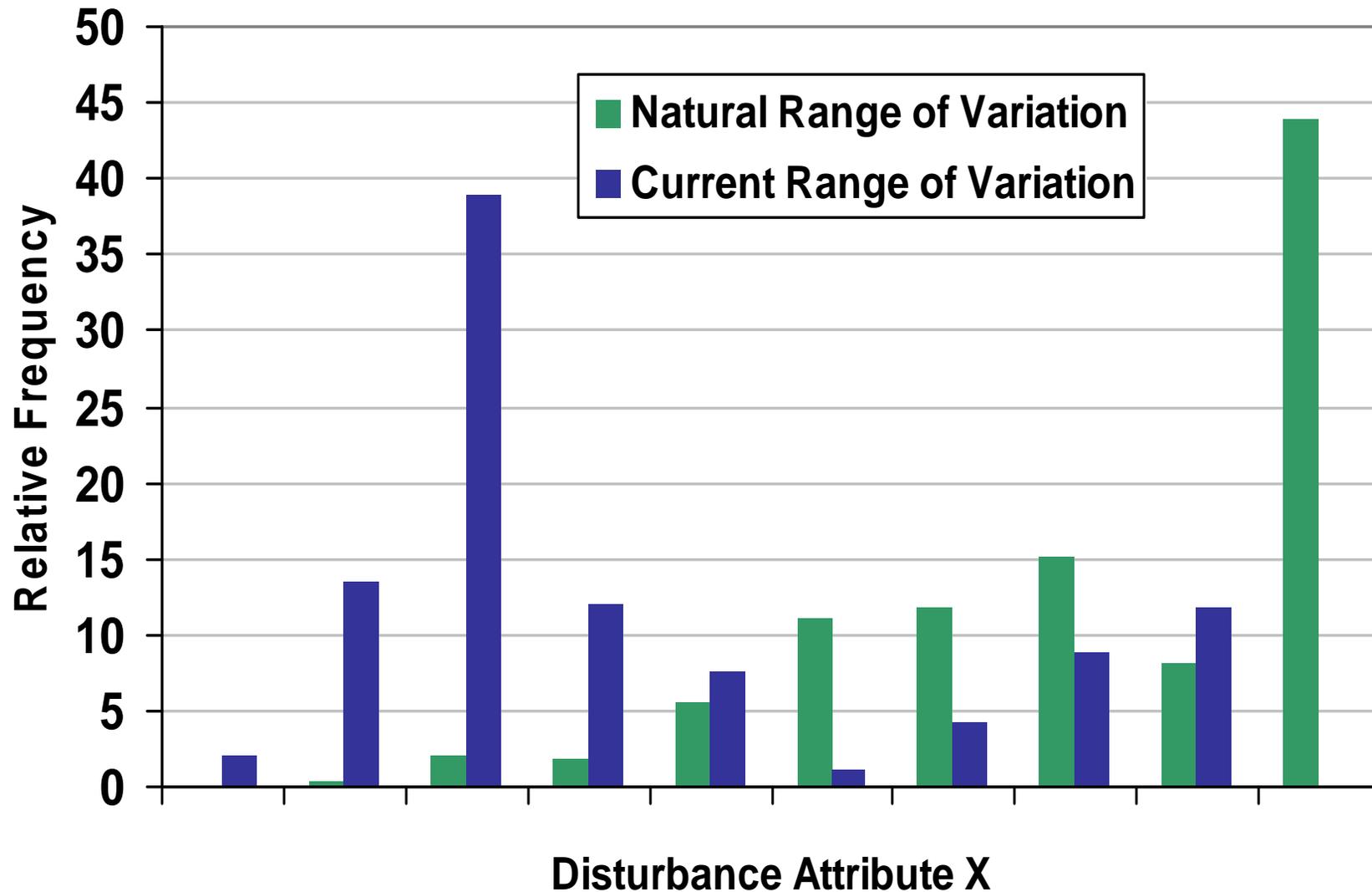
An aerial photograph of a forest landscape. In the center, there is a large, irregularly shaped clearing with a mix of green and brownish-yellow vegetation. Surrounding this clearing is a dense forest of tall, thin trees, likely conifers, with a mix of green and brownish-orange foliage. The overall scene is a natural, undisturbed forest environment.

How to manage our disturbance activities...

...to correspond more closely to those of Mother Nature....

...in an effort to better manage for (natural levels of) biodiversity values.

NRV versus CRV for Disturbance Attribute X





The Political Birth of EBM?

“To avoid *national train wrecks*, the Clinton administration will shift federal policy away from a single species approach to one that looks at entire eco-systems.”

(James Babbitt)



Ecosystem Management integrates scientific knowledge of ecological relationships within a complex socio-political and values framework towards the general goal of protecting native ecosystem integrity over the long term. (Grumbine, 1994)

Ecosystem-Based Management is an integrated, science-based approach to the management of natural resources that aims to sustain the health, resilience and diversity of ecosystems, while allowing for sustainable use by humans of the goods and services they provide. (Kappel, 1994)

Historical “natural” patterns....

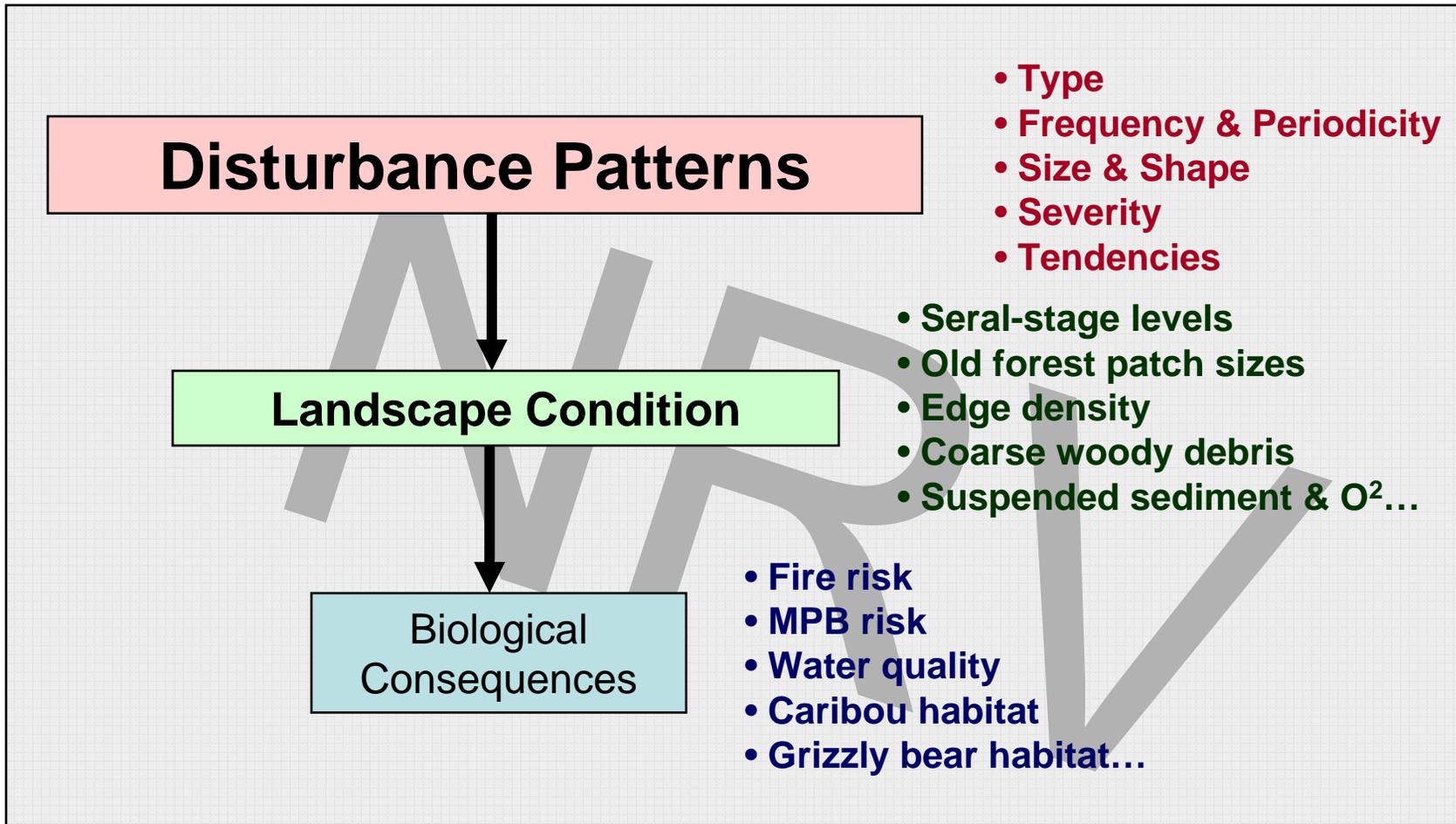
*(of disturbance, climate, soil morphology,
species interactions,)*

are responsible for....



**all historical “natural” levels of
species and biological functions.**

*(species populations, nutrients, filtering,
productivity dynamics,...)*

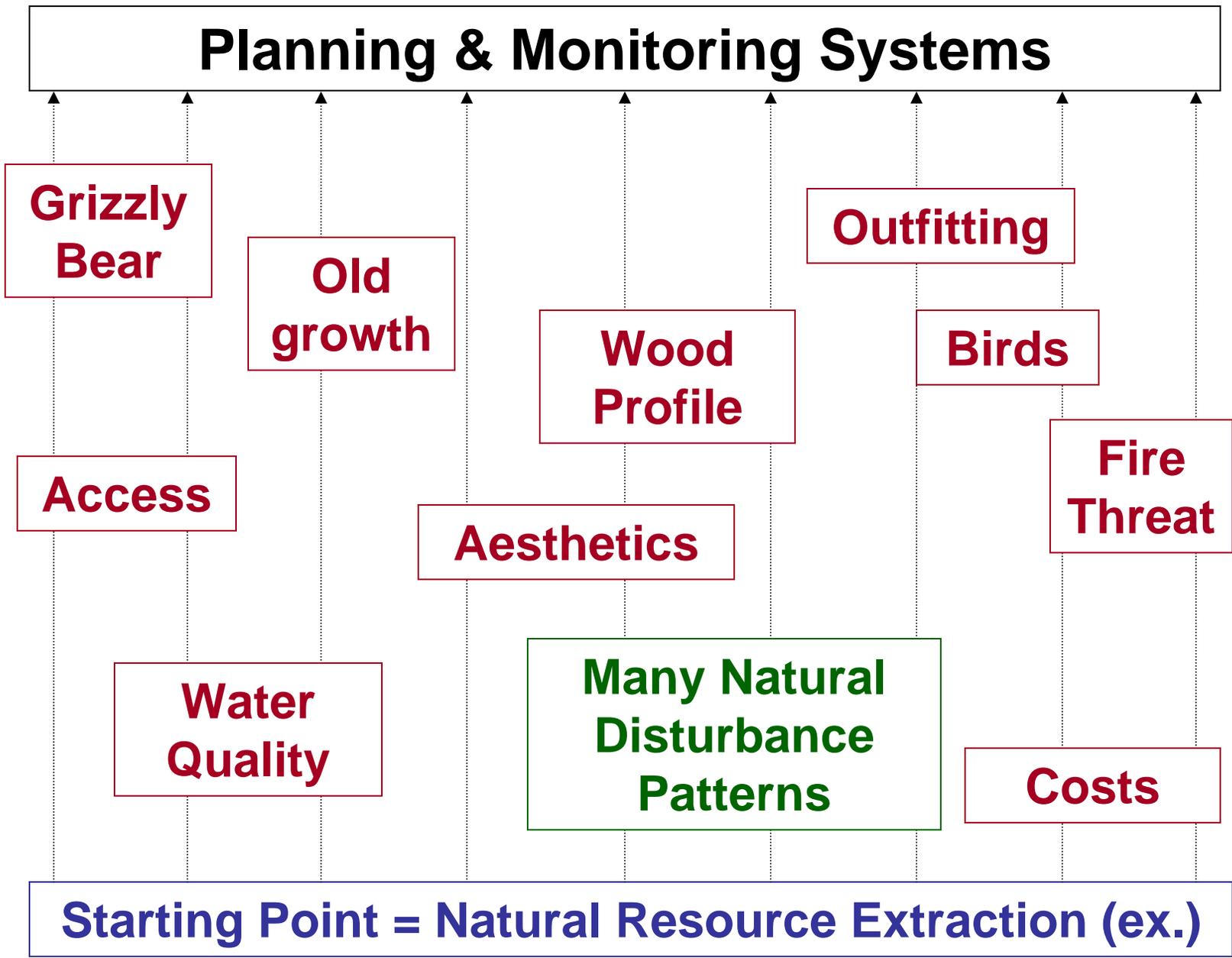


(Adapted from: D.W. Andison, L. Van Damme, D. Hebert, T. Moore, R. Bonar, S. Boutin, and M. Donnelly. 2009. *The healthy landscape approach to land management*. Foothills Research Institute Natural Disturbance program, Hinton, Alberta. January, 2009.)

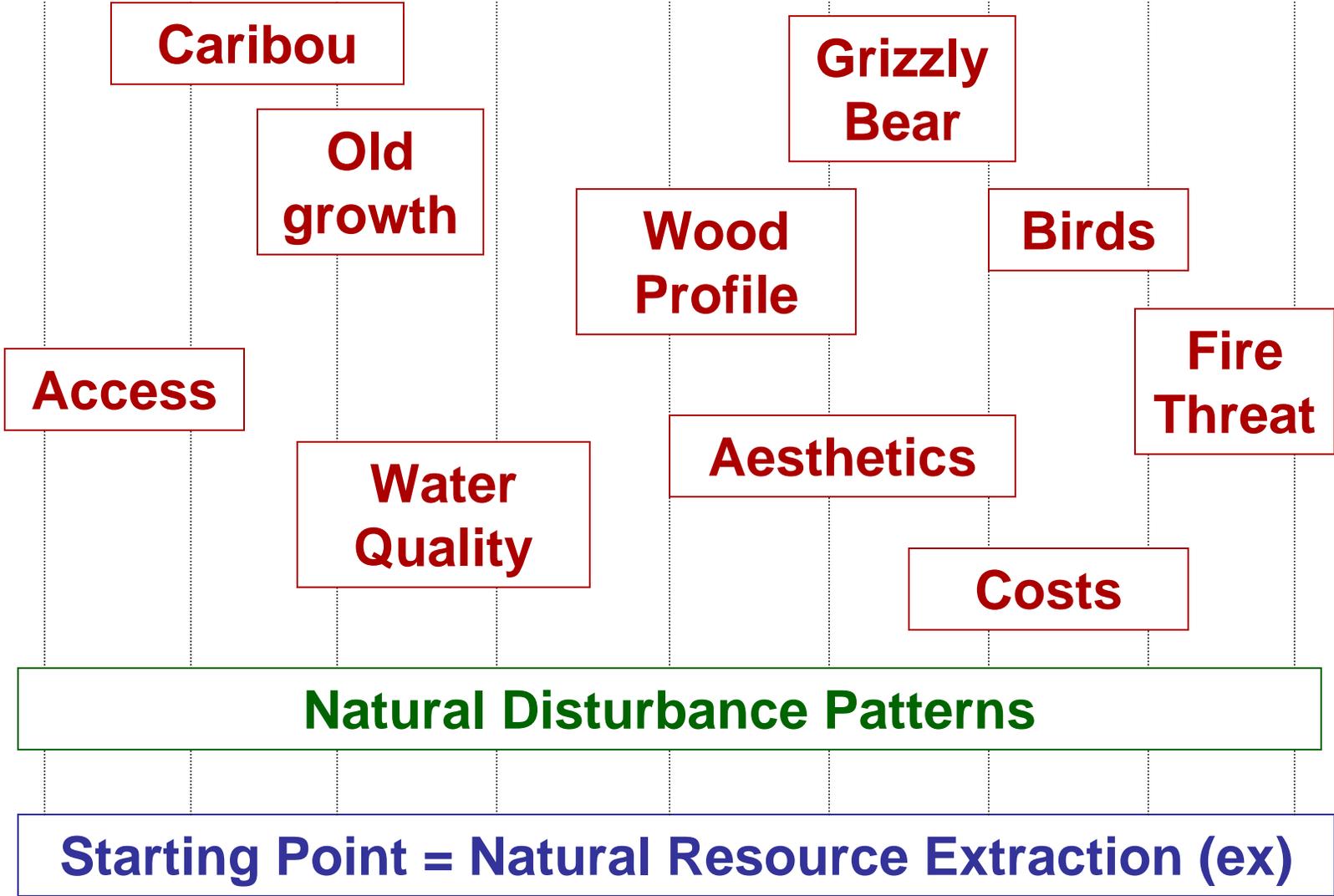
Natural Disturbance Approach Options:

1. Integrate some natural patterns into forest management.
2. Integrate some natural landscape conditions into forest management.
3. Integrate some natural biological consequences into forest management.
4. Integrate some or all forest management activities under an NRV umbrella.
5. Integrate some or all landscape management activities under an NRV umbrella.
6. Adopt NRV as a land use framework.

This is Not Necessarily A Simple Thing!



Planning & Monitoring Systems



Planning & Monitoring Systems

Water
Quality

Costs

Grizzly
Bear

Old
growth

Outfitting

Wood
Profile

Birds

Access

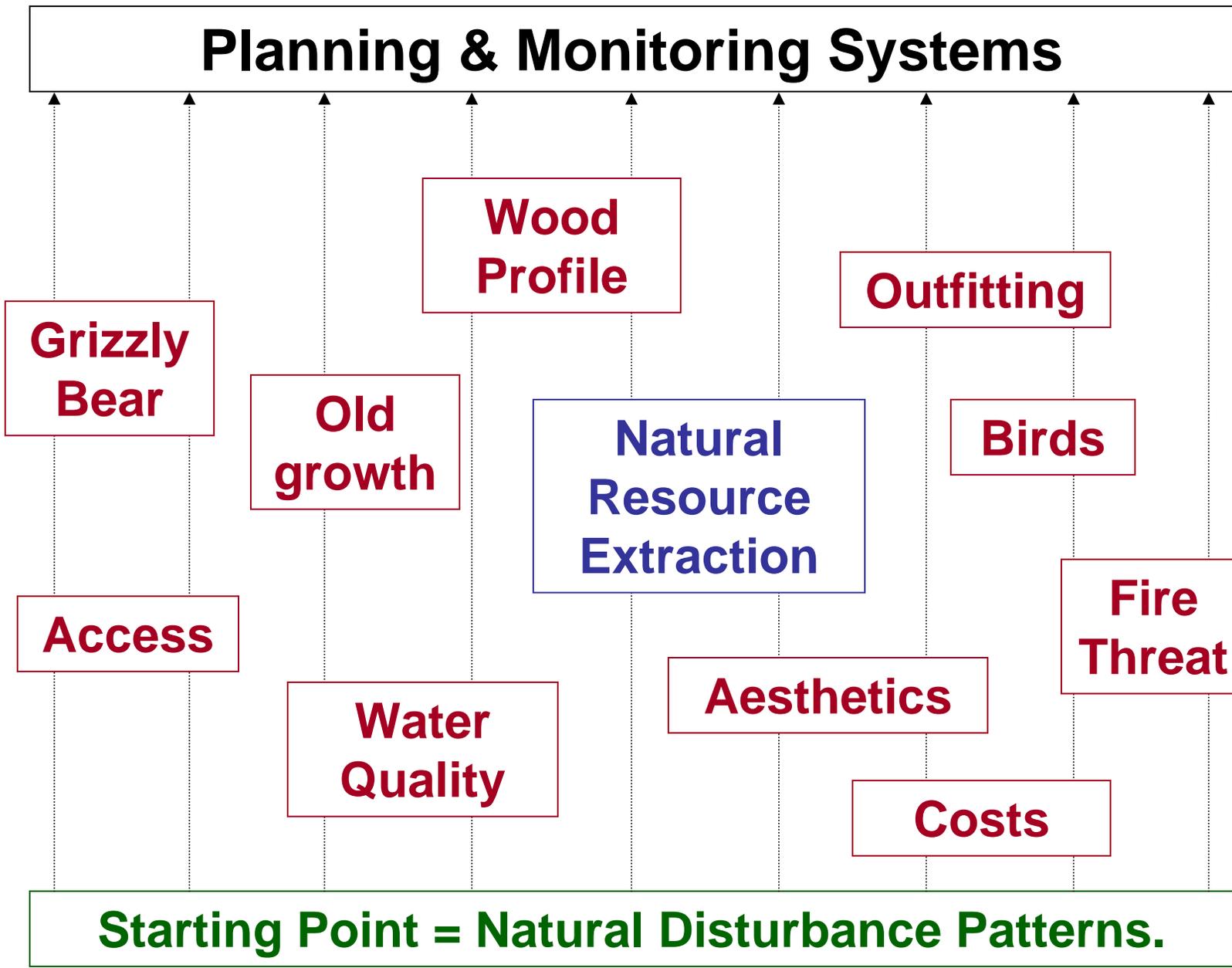
Aesthetics

Fire
Threat

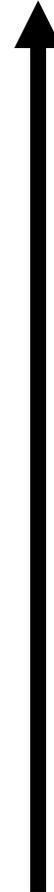
Natural Resource Extraction

Starting Point = Natural Disturbance Patterns.





Tool Buying for Perfectly Rational People:

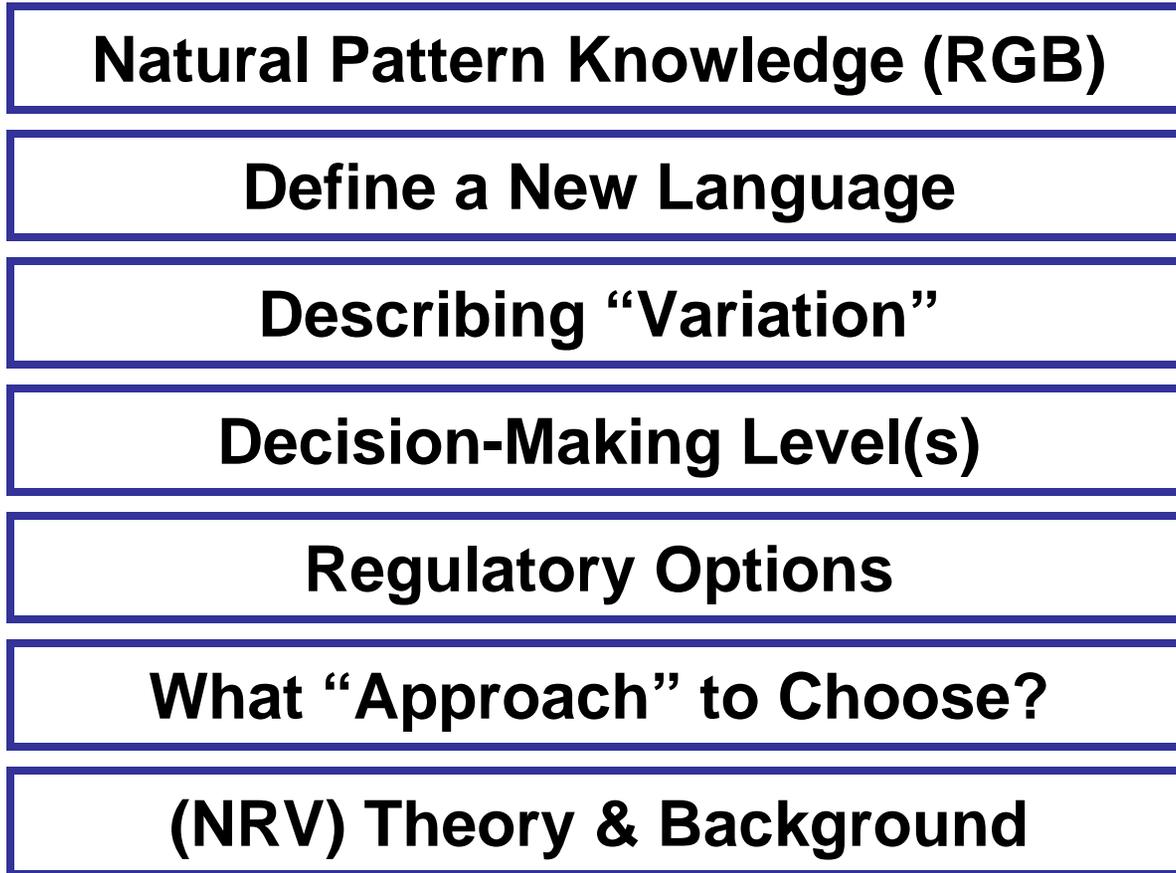


Tool Buying for Home Depot Shoppers:



Ideal vs Reality

Ideal



Reality

The Ultimate Goal of FRI Natural Disturbance Program:

**Helping us avoid becoming Home Depot
shoppers when it comes to NRV.**