

Activities Update

Mike Pellant- BLM Point of Contact



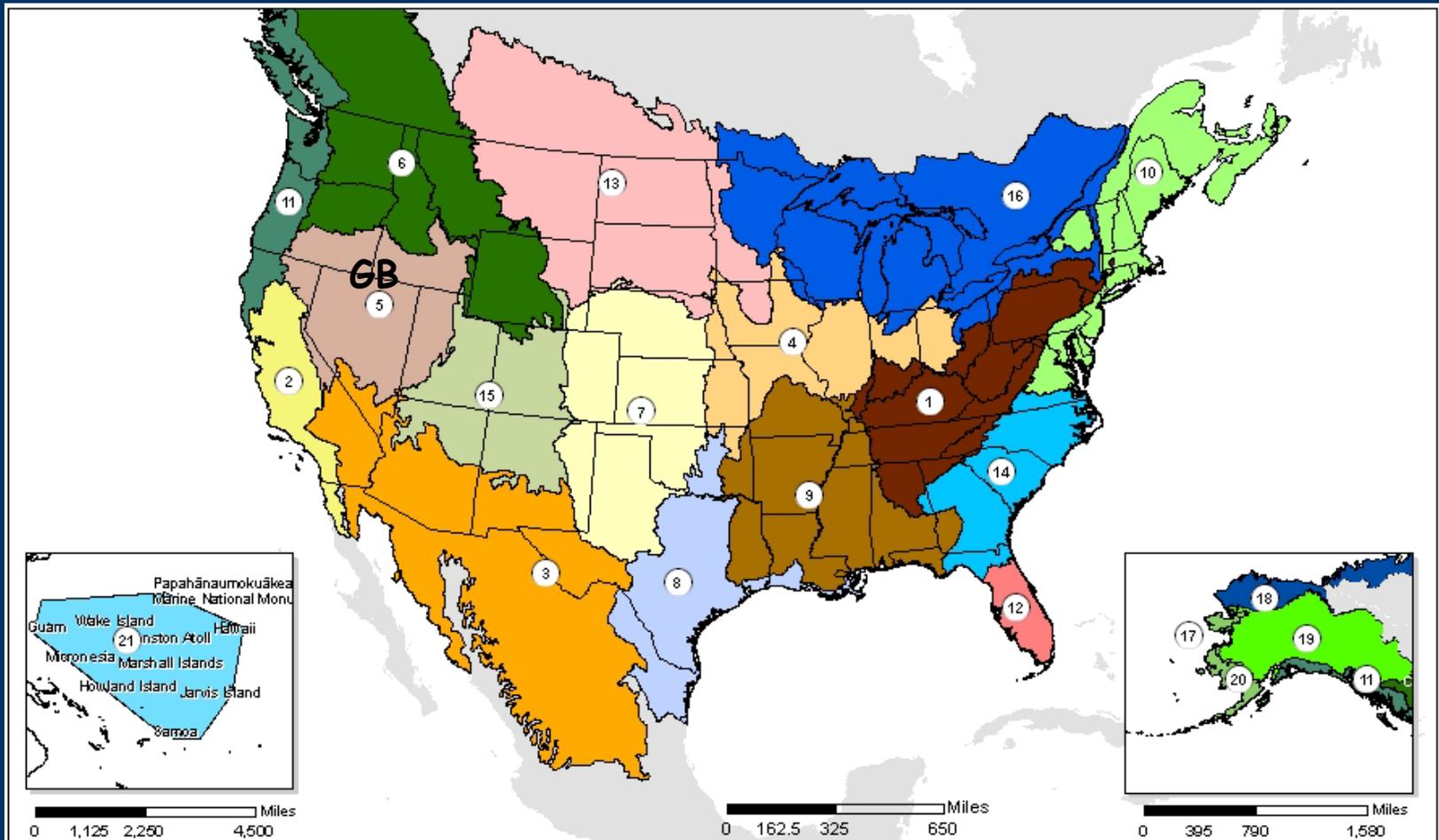
**The Great Basin Landscape
Conservation Cooperative**



Landscape Conservation Cooperatives (LCCs)

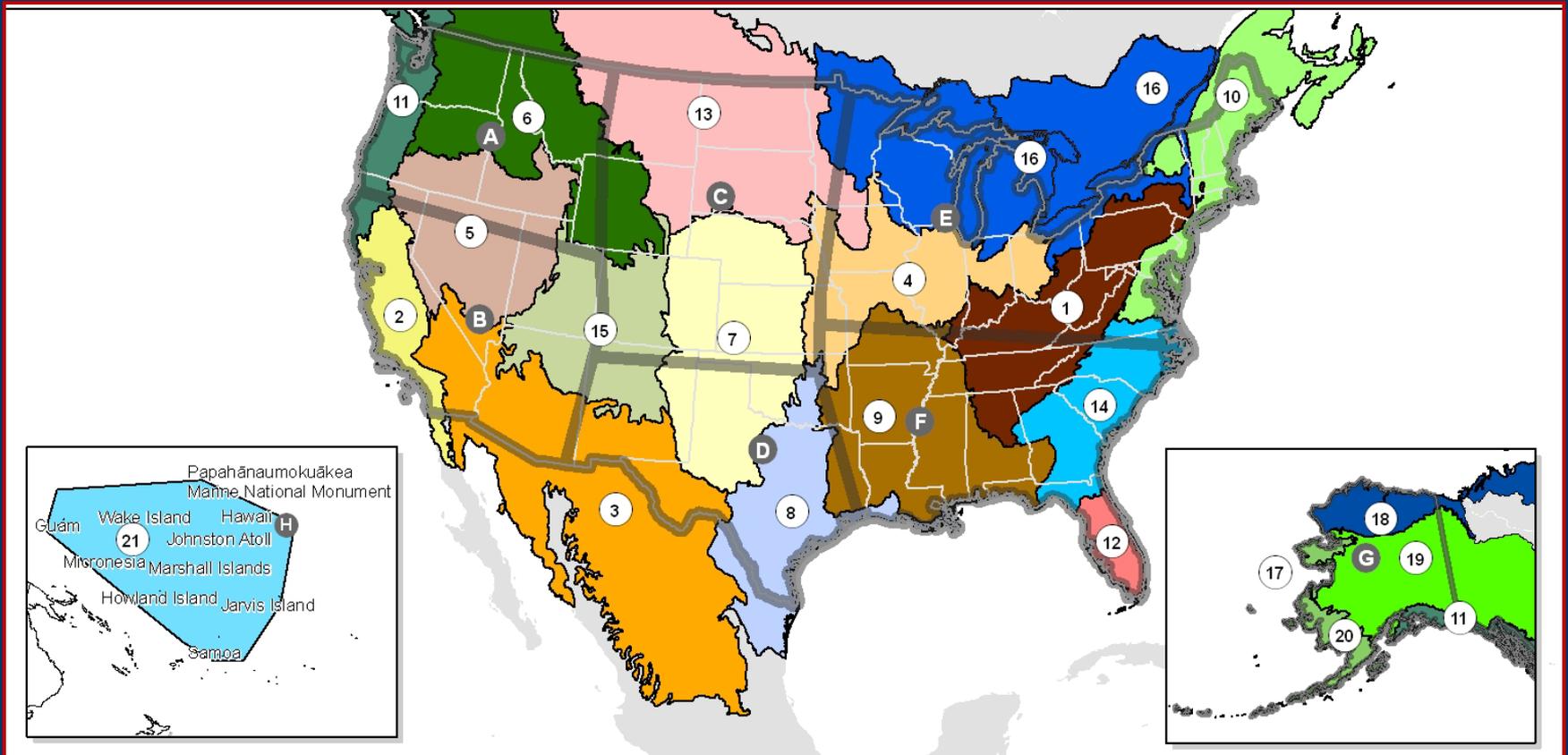
- They were established in [Secretarial Order No. 3289](#) on Sept. 14, 2009 by Interior Secretary Ken Salazar to better integrate science and management to address climate change and other landscape-scale issues (<http://doi.gov/whatwedo/climate/strategy/>).
- LCC's are self-directed science and management partnerships between the Interior Department bureaus, other federal agencies, states, tribes, NGOs, universities, and stakeholders within a geographically defined area.

21 LCCs function as an integrated national network



- | | | | |
|---|-----------------------------------|-------------------------------------|----------------------------------|
| 1. Appalachian | 7. Great Plains | 13. Plains and Prairie Potholes | 19. Northwestern Interior Forest |
| 2. California | 8. Gulf Coast Prairie | 14. South Atlantic | 20. Western Alaska |
| 3. Desert | 9. Gulf Coastal Plains and Ozarks | 15. Southern Rockies | 21. Pacific Islands |
| 4. Eastern Tallgrass Prairie and Big Rivers | 10. North Atlantic | 16. Upper Midwest and Great Lakes | Unclassified |
| 5. Great Basin | 11. North Pacific | 17. Aleutian and Bering Sea Islands | |
| 6. Great Northern | 12. Peninsular Florida | 18. Arctic | |

USGS Climate Science Centers



Climate Science Centers are USGS led partnership-based entities that provide fundamental science to assist LCCs and others in adapting to or mitigating the impacts of climate change and associated stressors.

LCCs Add Value

- Forum for coordination among partners
- Science-based decision support tools
- Biological and geospatial data sharing
- Shared regional assessments
- Help identify science needs



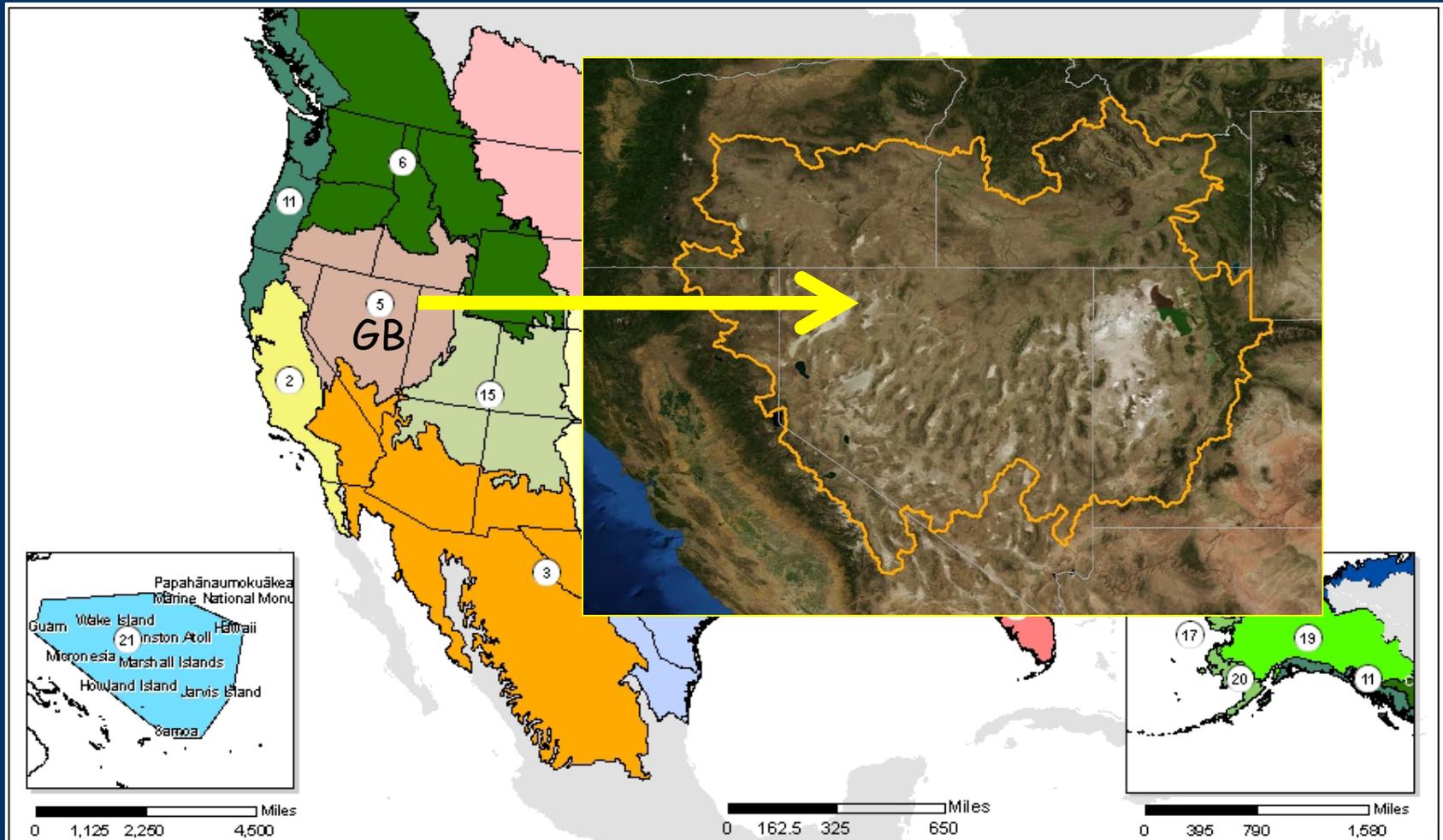
Landscape Conservation Cooperatives

Do Not:

- Implement or fund on-the-ground projects.
- Replace existing organizations, groups, or partnerships.
- Regulate or prescribe activities.

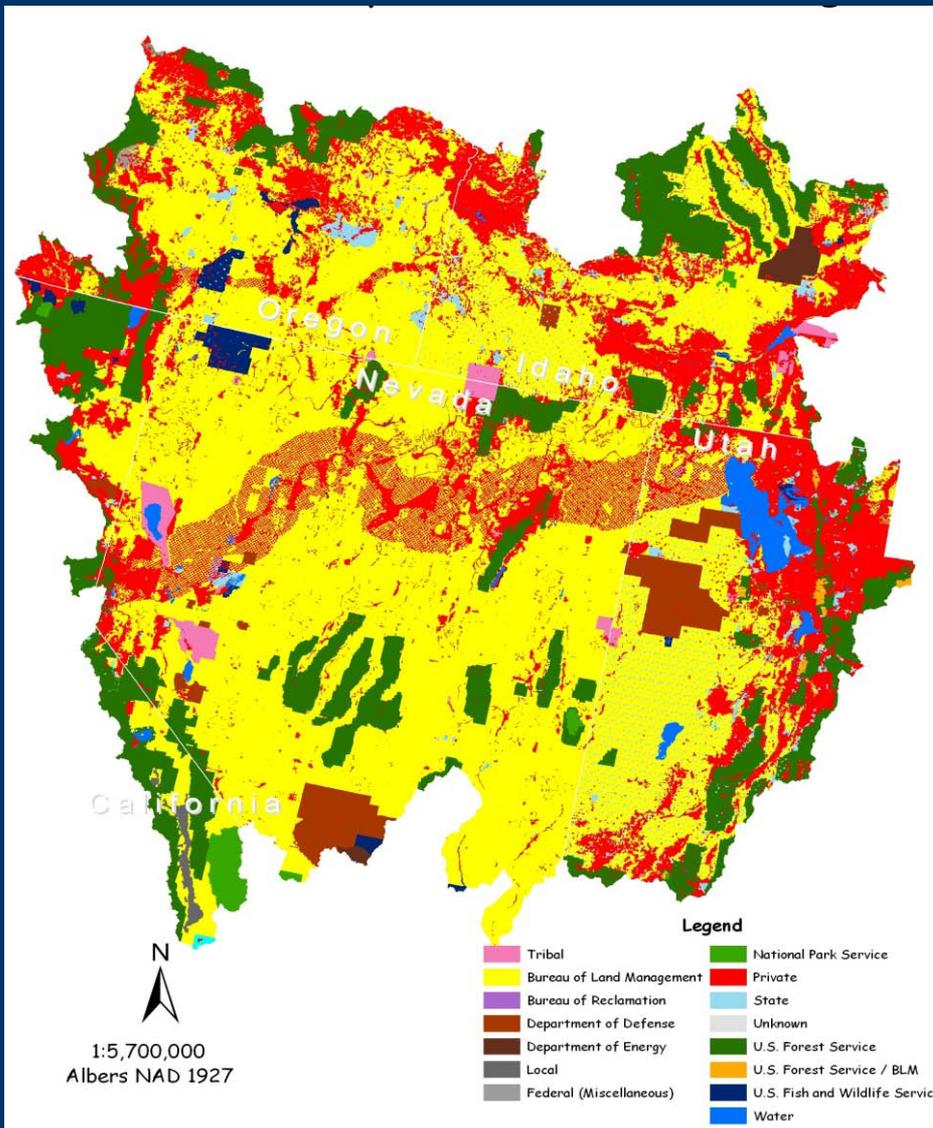


Great Basin LCC



- | | | | |
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Great Basin Land Ownership



72% Federal Management

	Acres	Percentage
Tribal	1,382,365	0.95%
Bureau of Land Management ■	78,499,886	53.93%
Bureau of Reclamation	38,321	0.03%
Department of Defense	3,570,405	2.45%
Department of Energy	670,169	0.46%
Local	358,390	0.25%
Federal (Miscellaneous)	132,831	0.09%
National Park Service	919,144	0.63%
Private ■	32,385,413	22.25%
State	3,716,394	2.55%
Unknown	7,296	0.01%
U.S. Forest Service	20,343,170	13.98%
U.S. Forest Service / BLM	191,902	0.13%
U.S. Fish and Wildlife Service	1,319,074	0.91%
Water	2,011,978	1.38%
Total	145,546,736	100.00%

Issues in the Great Basin



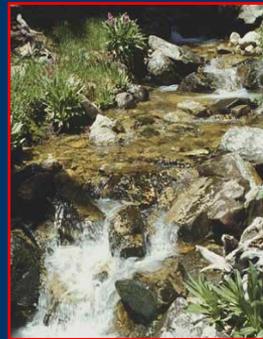
Wildfires & Invasives



Development



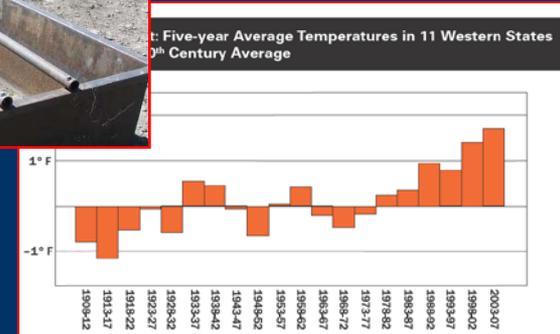
Loss of Habitat



Water

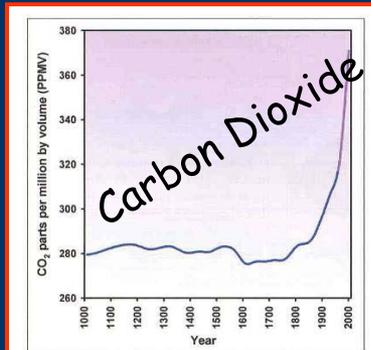
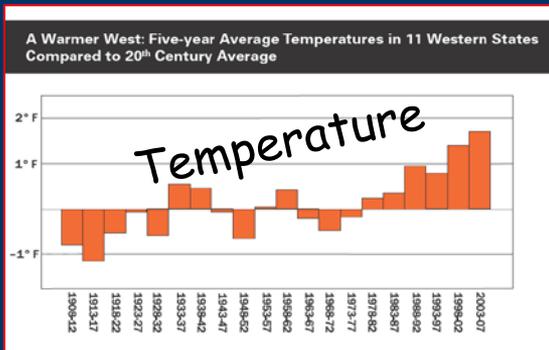


Climate Change



Landscape Scale & Connectivity of Issues

Climate Change



Contributing to increase in extent and productivity of cheatgrass



Cheatgrass → Wildfires
"Mega-Fire Era"

Science News Share Blog C

Windborne Desert Dust Falls on High Peaks, Dampens Colorado River Runoff

ScienceDaily (Sep. 21, 2010) — On spring winds, something wicked this way comes—at least for the mountains of the Colorado River Basin and their ecosystems, and for people who depend on snowmelt from these mountains as a regional source of water.

“More than 80 percent of sunlight falling on fresh snow is reflected back to space,” says scientist Tom Painter of the Jet Propulsion Laboratory in Pasadena, Calif., and the University of California at Los Angeles. “But sprinkle some dark particles on the snow and that number drops dramatically.”

The darker dust absorbs sunlight, reducing the amount of reflected light and in turn warming the now “dirty

Cheatgrass Die-off in the Great Basin

Winnemucca, Nevada Area

Dead Live





Integrated Cheatgrass Die-off Project

Great Basin Restoration Initiative

Background

Cheatgrass (*Bromus tectorum*) invasion and expansion in sagebrush ecosystems of the Great Basin has been well documented. Less understood are the various biotic/abiotic stressors (climate, pathogens, insects, etc.) that influence or control established cheatgrass stands. Historically, periods of multi-year drought could result in relatively large die-offs of cheatgrass. However, in recent years, cheatgrass die-off has been documented during periods of reduced (or no) drought and in patterns that

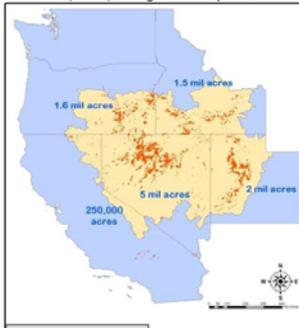


Figure 2 Distribution of areas dominated by cheatgrass (Bradley and Mustard 2005)



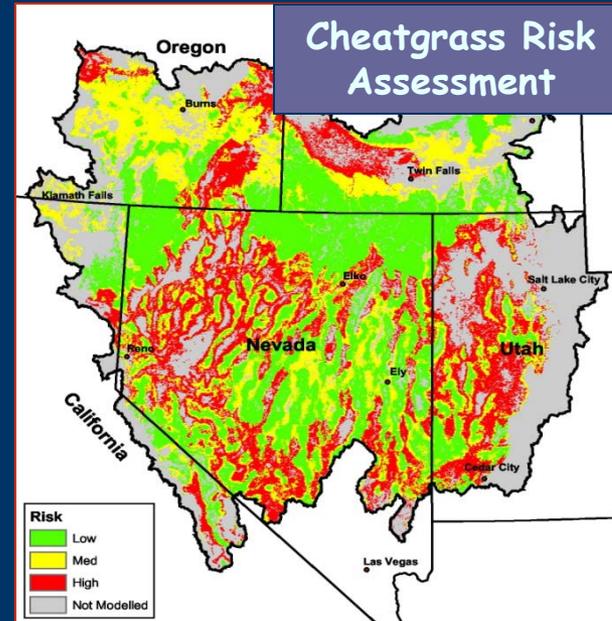
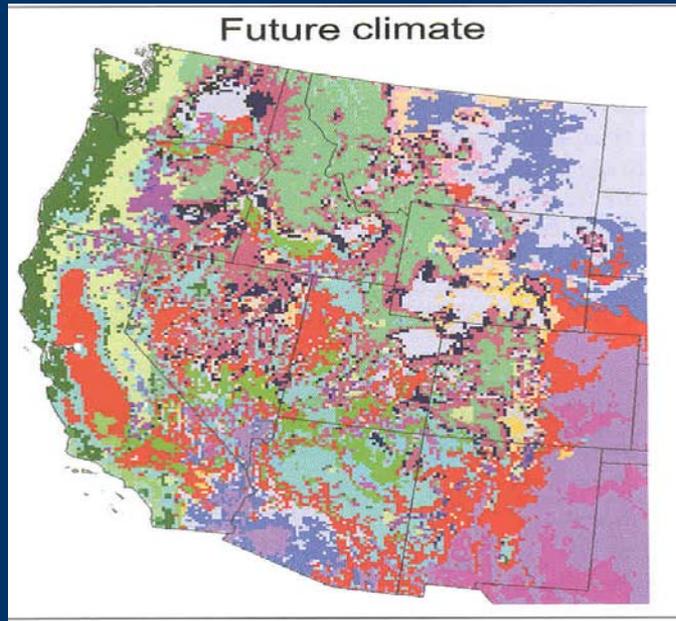
Figure 1 Mature cheatgrass (reddish purple tones) and cheatgrass die-off areas in yellow-browns to gray in the Winnemucca area in northern Nevada.

are not easily explained by weather in Northern Nevada (Figure 1). An initial estimate of the affected area in the general vicinity of Winnemucca, NV is ~500,000 acres. However, actual extent of the phenomenon could be considerably larger as die-offs are occurring in smaller areas across portions of the Northern Great Basin. Given the current extent of rangelands largely dominated by cheatgrass (Bradley and Mustard 2005) (Figure 2), the potential for additional die-off areas may be significant. Possible explanations of the observed die-offs include pathogens (viral, fungal, etc), soil chemistry changes, insects (army cutworm), and climate change.

Issues & Opportunities in Cheatgrass Die-Off Areas

There are potential management opportunities associated with areas where cheatgrass mortality

Downscaled climate change and invasive species models for regional and local applications...

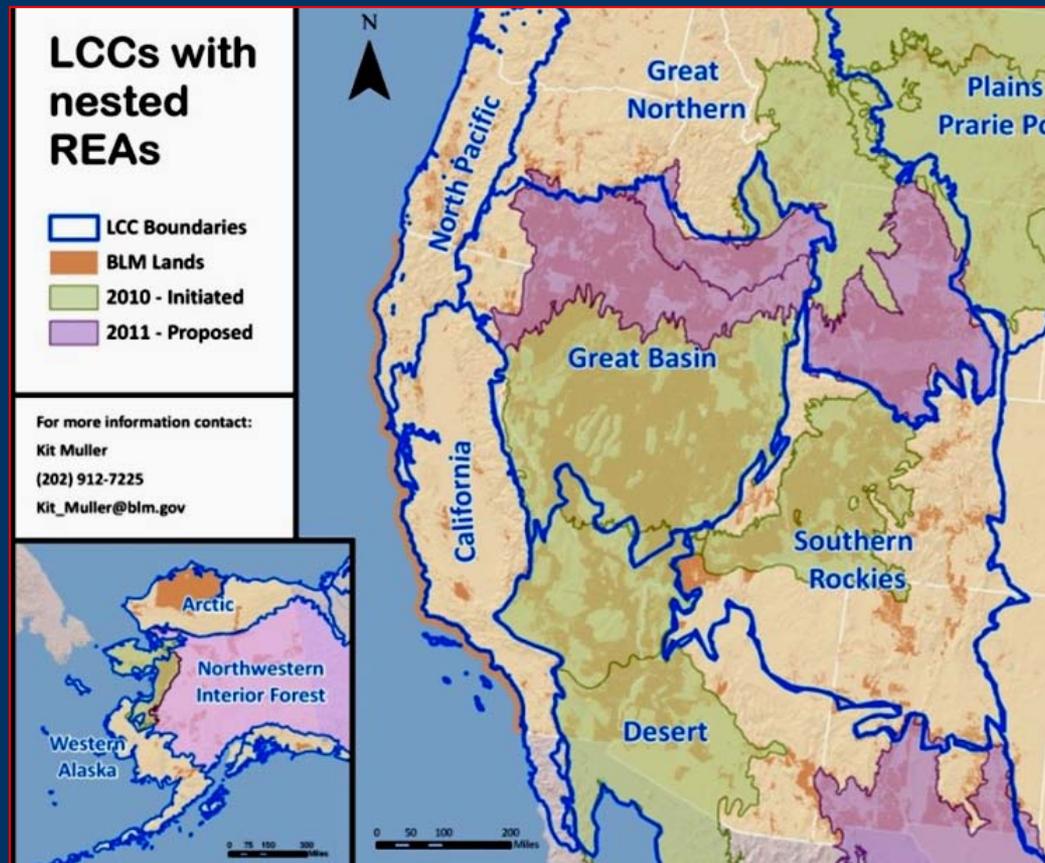


...that predict vegetation, wildlife, and water responses.



BLM Rapid Ecoregional Assessments (REAs) & Great Basin LCC

LCCs are partnership organizations that need landscape-scale information to be fully effective.



REAs provide landscape-scale information intended for conservation applications through partnerships.

Boise-May 11, 2010



Great Basin Landscape Conservation Cooperative Informational Meetings

100+ participants
from seven states



Salt Lake City-May 12, 2010



Reno-May 13, 2010

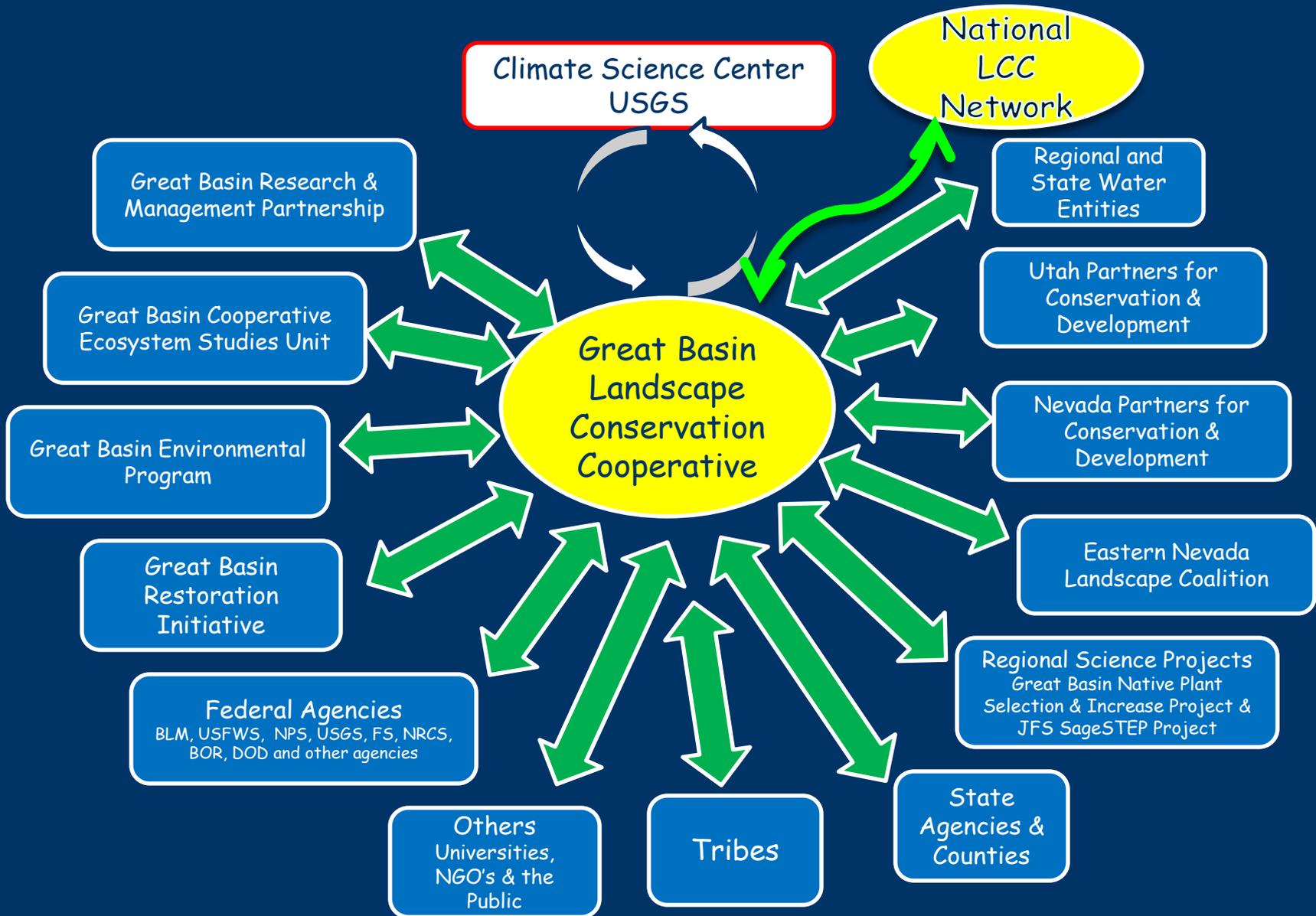
Recommended
formation of an
Organizing
Committee

Great Basin Landscape Conservation Cooperative "Basin- wide" Meeting and Webinar in October- November 2010

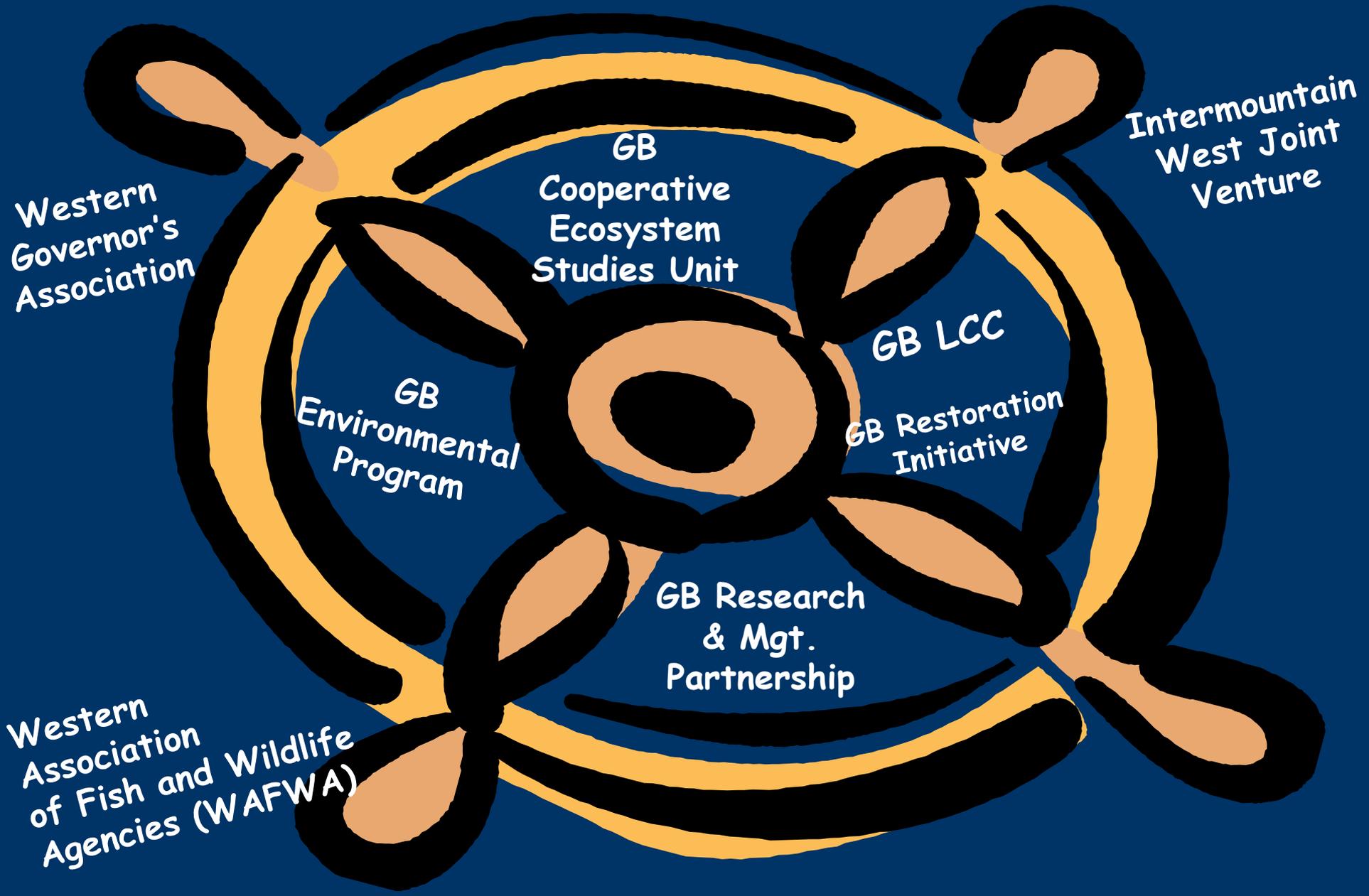


Received input on
Charter, Governance and
Mission Statement from
150 individuals

Great Basin LCC--Organizational Concept



Great Basin (GB) Initiatives



Next Steps

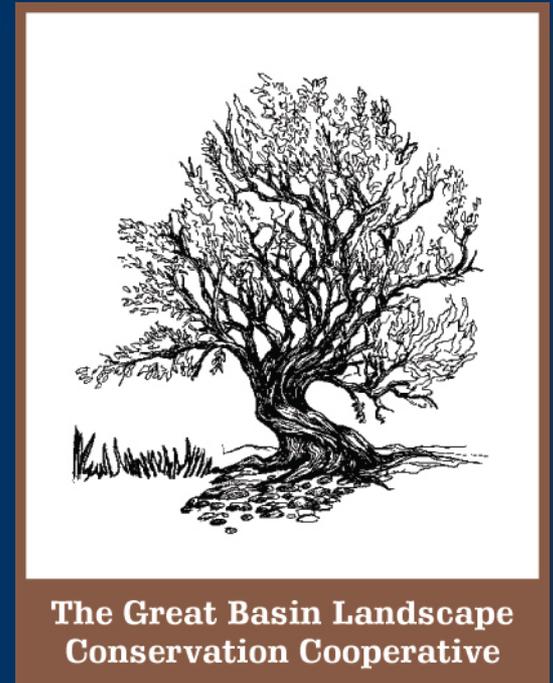
- Continue outreach to potential partners.
- Finalize charter and establish an interim Executive Council (early 2011).
- Fill GB LCC staff positions...LCC Coordinator, science advisor, and USGS scientist (landscape ecologist).



Contact Us

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http://www.blm.gov/wo/st/en/prog/more/Great_Basin_LCC.html

"We are confronted by insurmountable opportunities"

Pogo