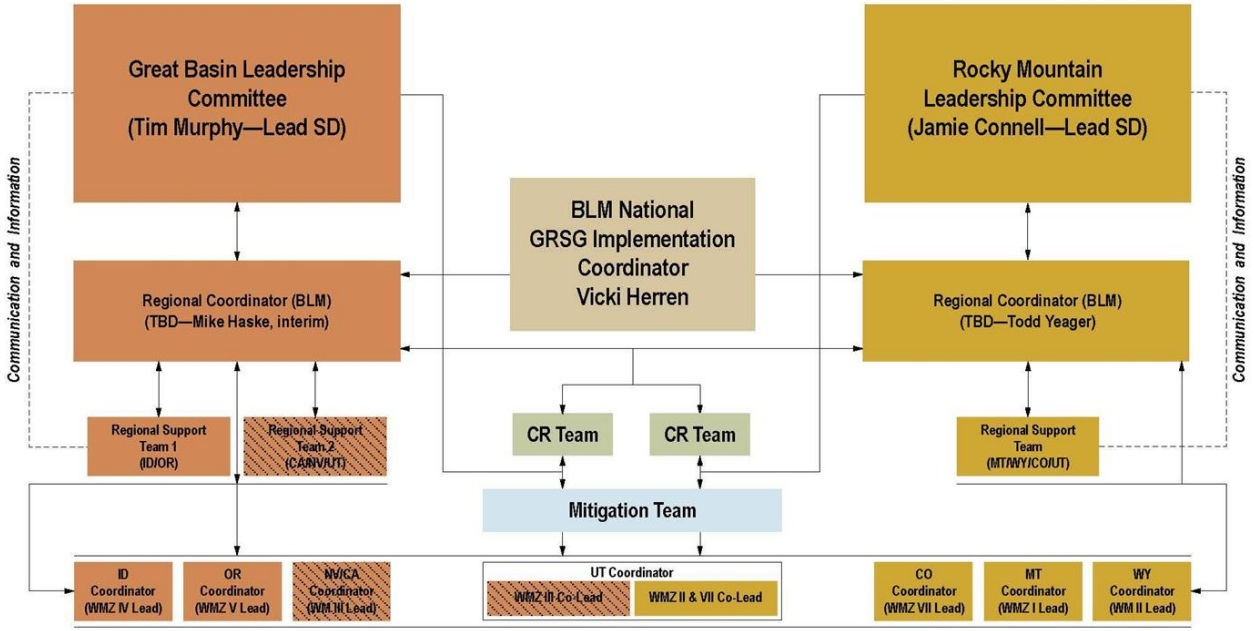
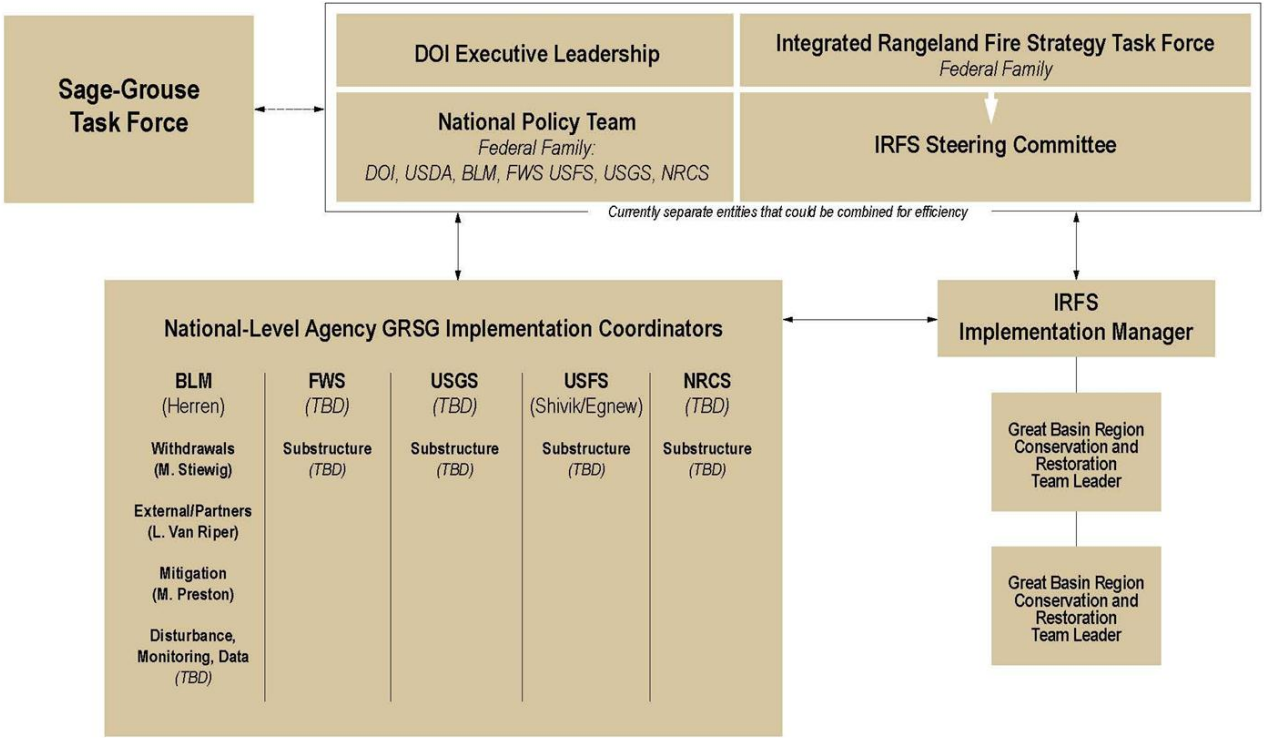
Regional, Sub-Regional and State Level: GRSG Implementation Coordination (BLM Organizational Structure)



DRAFT 11-30-15

[Current Situation] National Level: GRSG and IRFS Implementation Coordination Structure



DRAFT 11-30-15

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Steppe Forward Series

Working Together: Managing Data and Collaborating on Mitigation

December 9, 2015

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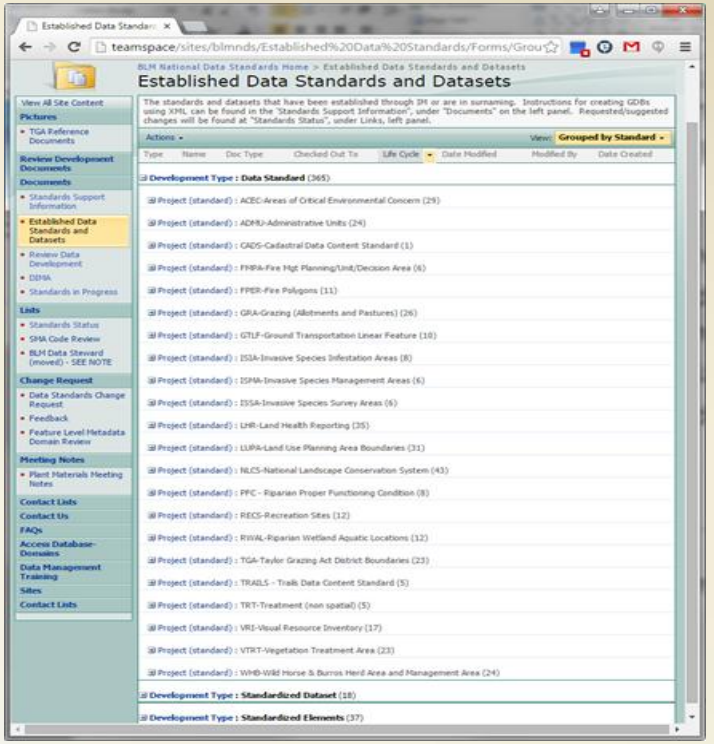
Data and Data Management

A whole lot of information!

Data Standards and Standardized Datasets: What's the difference?

Data Standards:

- Identify business requirements
- Develop a logical data model and implementation method
- Create a standardized schema
- Generate data under the Standard



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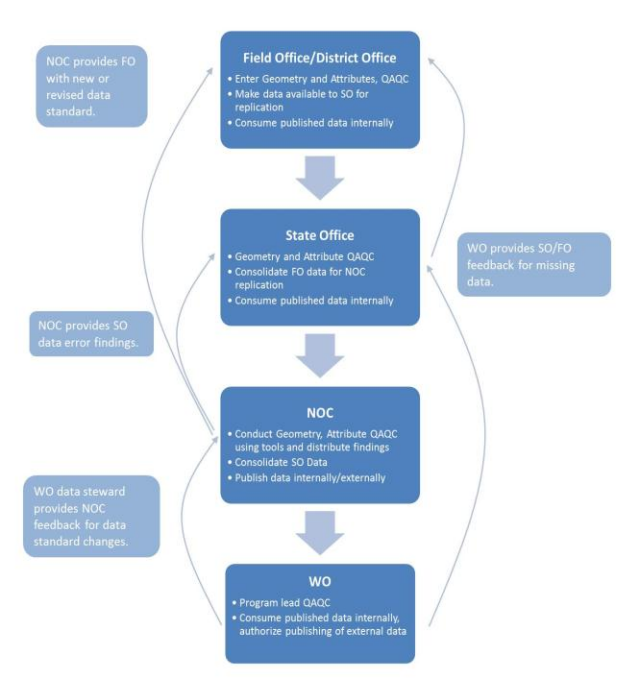
Data Standards and Standardized Datasets: What's the difference?



Standardized Datasets:

- Collect and examine existing data – these data are already meeting business requirements
- Identify commonalities across datasets
- Develop uniform definitions for common elements
- Develop a schema to capture data consistently

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Data Standards and Standardized Datasets: Why does it matter?

Data created by the planning process is *neither!*

- Plan related data may have been derived from data developed under a data standard or from standardized datasets
- They do not “inherit” the source data designation
- For cumulative effects analyses – allocation and habitat categories were delineated but no standards were created
- Because of this, ***each planning area/State is the official source for all plan related data***

One More Topic: The "M" Word

Dublin Core for non geospatial data - simple

FGDC - CSDGM for geospatial data - not so simple

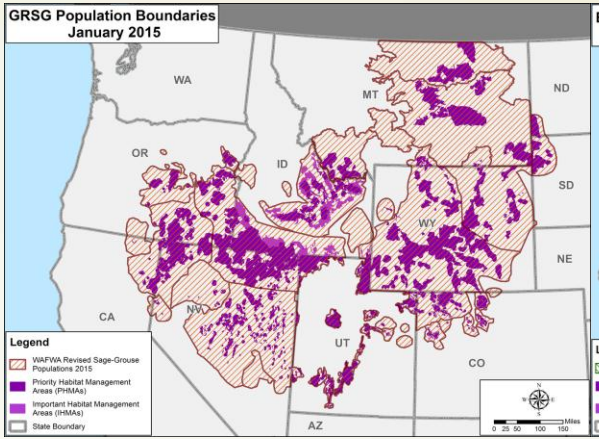
- Facilities data discovery
- Documents the integrity of data
- Assists in determining suitability for use
- Documents data limitations & uncertainty

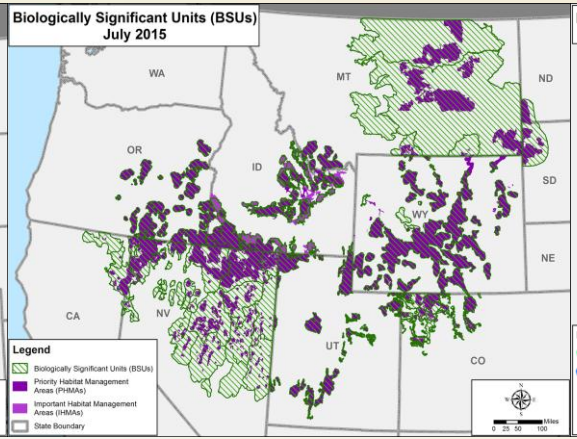
More information at the National Data Standards Site:
http://teamspace/sites/blmnds/default.aspx

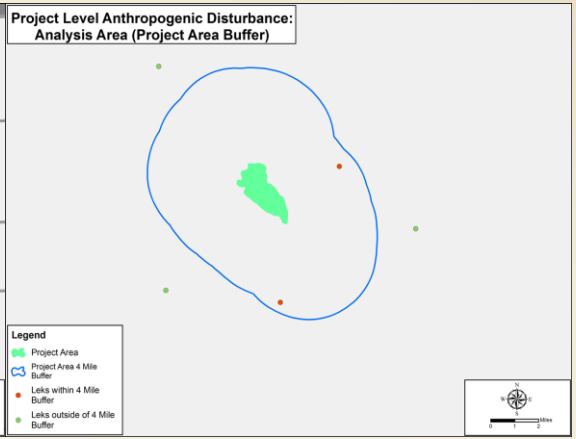
Data: What and Where

Scale Dependence

Broad → **Mid** → **Fine/Site**







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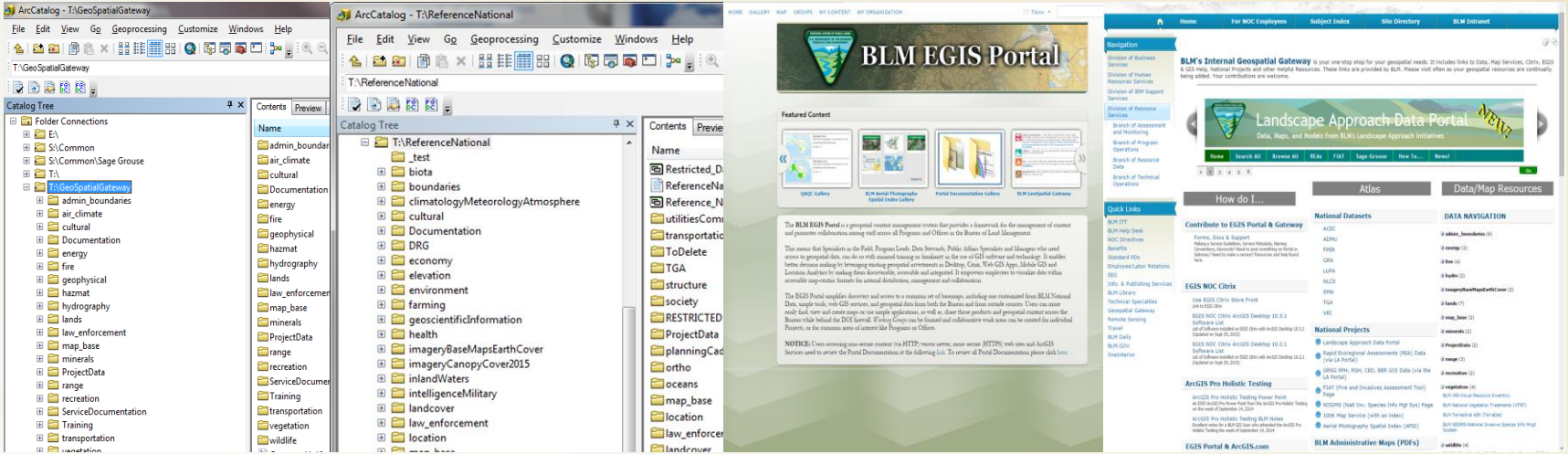
What and Where - Broad/Mid-Scales

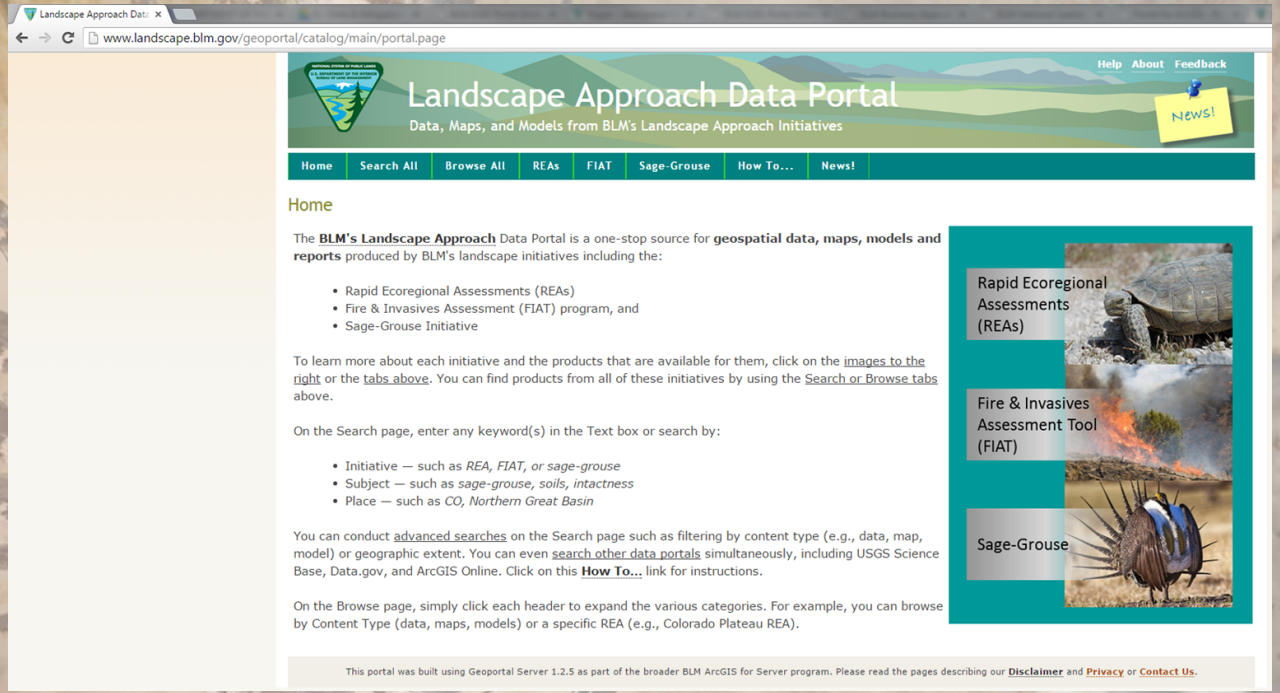
Internal: EGIS (\\blm\dfs\loc\EGIS), EGIS Portal & Geospatial Gateway

Examples: EVT, BpS, Broad/Mid-Scale Disturbance



What and Where - Broad/Mid-Scales

Public: Landscape Approach Geoportal



What and Where - Fine & Site Scales

Existing Plan Data - Internal and External

- Coordinated through your State Office
- Will vary based on how each State manages data
- May leverage EGIS, ePlanning, map viewers, web apps and even partner web sites
- Examples include allocation decisions & habitat management areas
- Seasonal habitat areas, working closely with state partners as they are developed

What and Where - Fine & Site Scales

“New” Data - Disturbance

Two approaches to capturing disturbance

1. **DDCT (WY) - Established procedures and data management**

1. **SDARTT - New, still in testing & development**

What and Where - Fine & Site Scales

Project Submittal Example

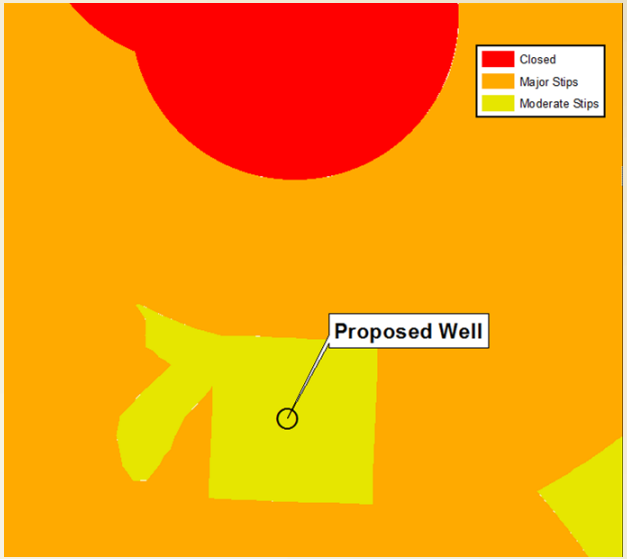
First Question: Does the plan allow for this project?

Data:

- Allocation data
- Project location

Source:

- Plan/State data repository
- Proponent



What and Where - Fine & Site Scales

Project Submittal Example

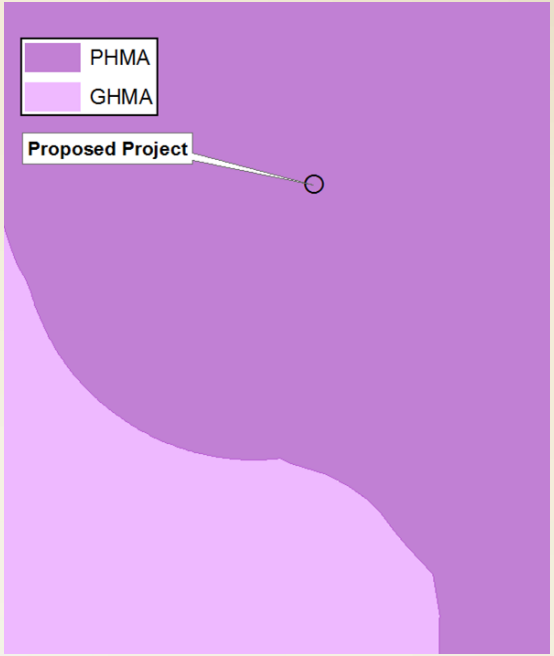
Second Question: Is the project in GRSG habitat?

Data:

- Habitat data
- Project location

Source:

- Plan/State data repository
- Proponent



What and Where - Fine & Site Scales

Project Submittal Example

Third Question: What is the existing disturbance estimate on PHMA within the BSU?

Data:

- Mid-scale disturbance estimate
- Plan thresholds

Source:

- EGIS
- Plan documents

BSU Acres	Acres of HMA in BSU		Acres of Disturbance on PHMA / IHMA in BSU	Percent of PHMA / IHMA Disturbed In BSU
	PHMA in BSU	IHMA in BSU		
47,605	13,033	0	148	1.14%
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
148,367	101,260	0	1,985	1.96%
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2,588,286	1,437,375	0	19,830	1.38%
364,616	220,215	0	3,888	1.77%
726,862	0	726,862	5,414	0.74%
963,230	963,230	0	4,555	0.47%
1,016,488	0	1,016,488	5,898	0.58%
1,733,249	1,733,249	0	10,754	0.62%
1,053,553	0	1,053,553	6,147	0.58%
780,507	780,507	0	4,425	0.57%
499,262	0	499,262	1,977	0.40%
1,724,688	1,724,688	0	3,489	0.20%

USFWS Listing Decision Threat	Sagebrush Availability	Habitat Degradation	Energy and Mining Density
Agriculture	X		
Urbanization	X		
Wildfire	X		
Conifer encroachment	X		
Treatments	X		
Invasive Species	X		
Energy (oil and gas wells and development facilities)		X	X
Energy (coal mines)		X	X
Energy (wind towers)		X	X
Energy (solar fields)		X	X
Energy (geothermal)		X	X
Mining (active locatable, leasable, and saleable developments)		X	X
Infrastructure (roads)		X	
Infrastructure (railroads)		X	
Infrastructure (power lines)		X	
Infrastructure (communication towers)		X	
Infrastructure (other vertical structures)		X	
Other developed rights-of-way		X	

What and Where - Fine & Site Scales

Project Submittal Example

Fourth Question: What is the *project analysis* area?

Data:

- Habitat Management Areas
- Project footprint
- Lek Locations

Source:

- Plan/State data repository
- Proponent
- State Fish & Game Agencies

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The Steppe Forward Series

What and Where - Fine & Site Scales

Project Submittal Example

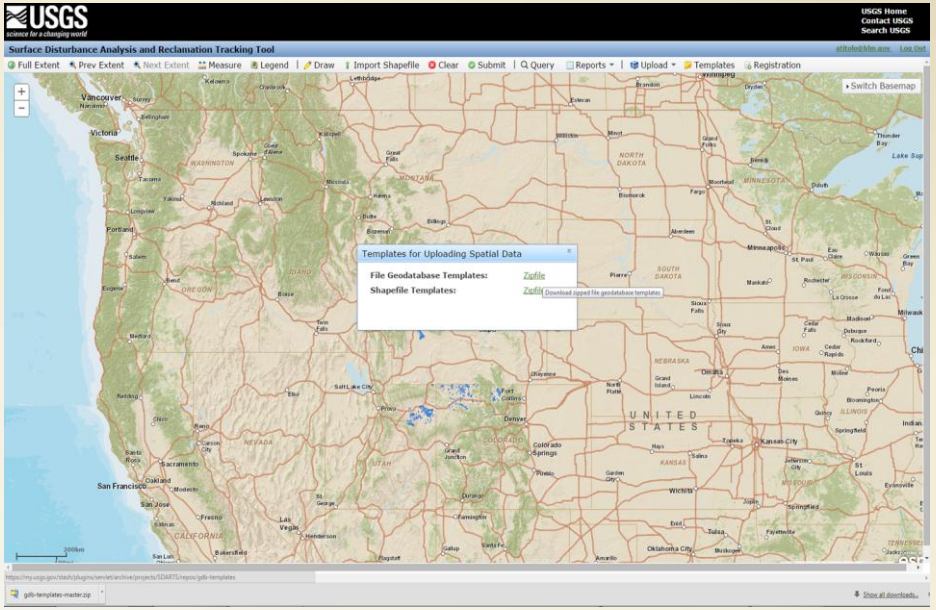
Fifth Question: What is the *existing disturbance* within the *project analysis* area?

Data:

- Project footprint
- Existing disturbance

Source:

- User generated using SDARTT templates



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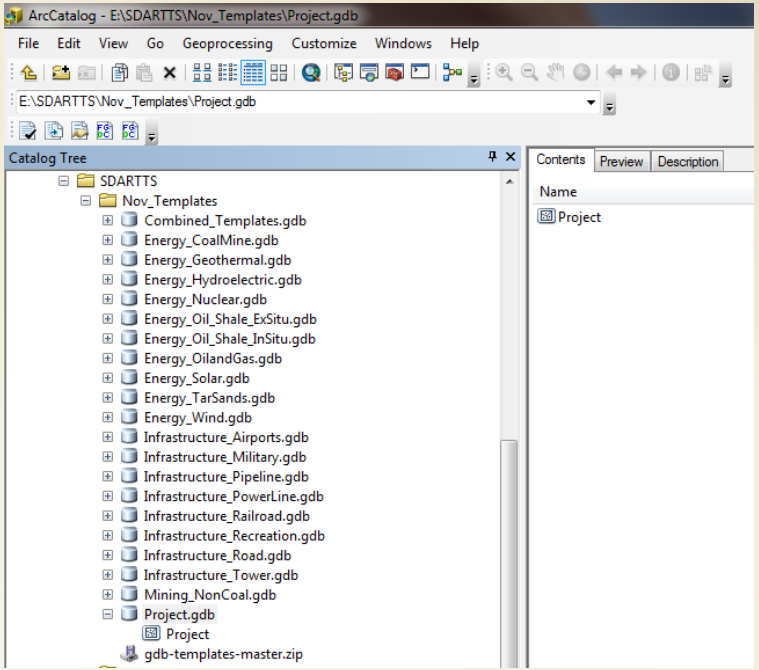
The Steppe Forward Series

What and Where - Fine & Site Scales

Project Submittal Example

Fifth Question: What is the *existing disturbance* within the *project analysis* area?

- Project analysis area
- 12 general disturbance categories
- 7 additional site scale disturbances



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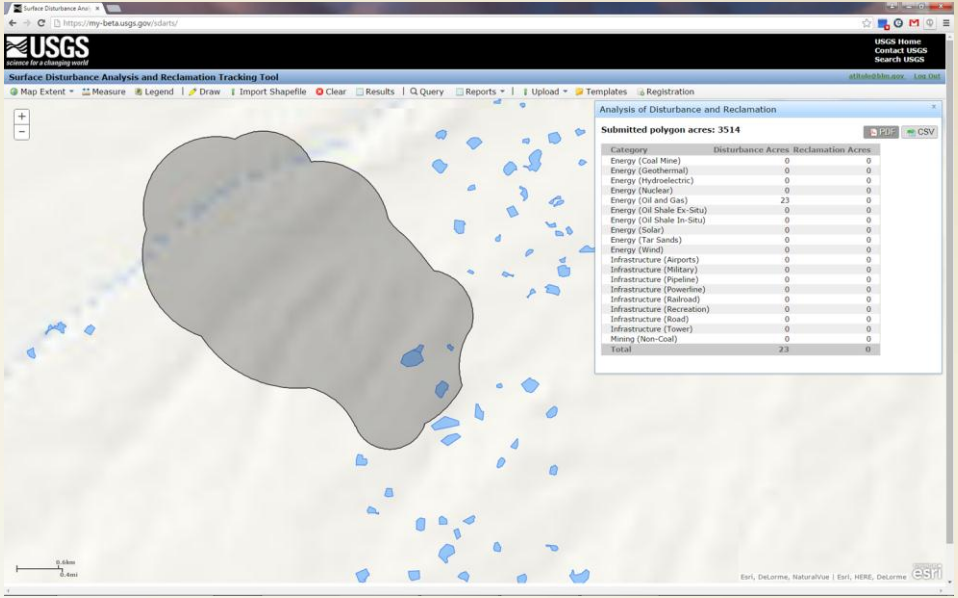
The Steppe Forward Series

What and Where - Fine & Site Scales

Project Submittal Example

Fifth Question: What is the *existing disturbance* within the *project analysis* area?

- 3514 acres in the analysis area
- 23 acres of existing disturbance
- 0.65% of analysis area already disturbed



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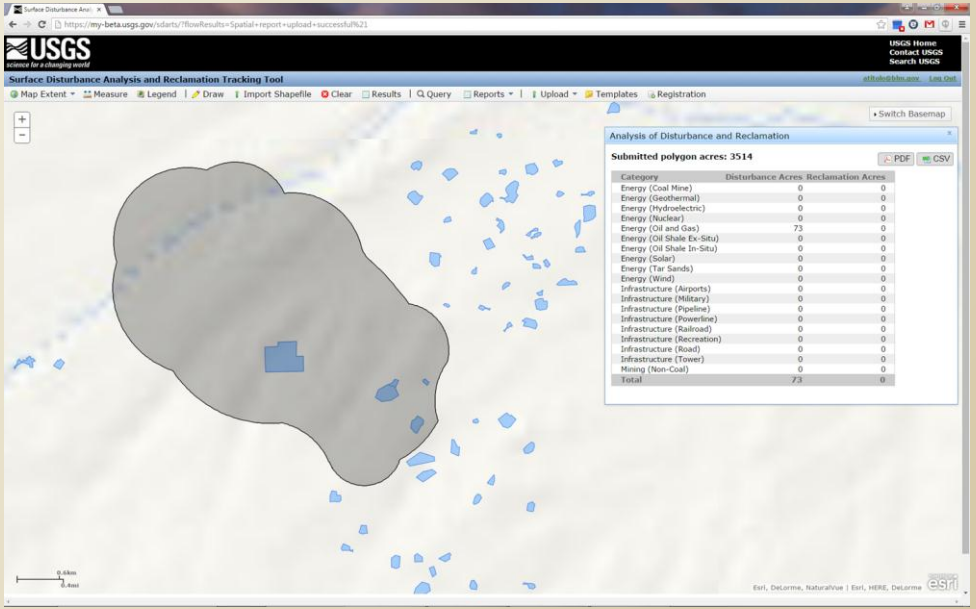
The Steppe Forward Series

What and Where - Fine & Site Scales

Project Submittal Example

Sixth Question: What *will the disturbance be* within the *project analysis* area?

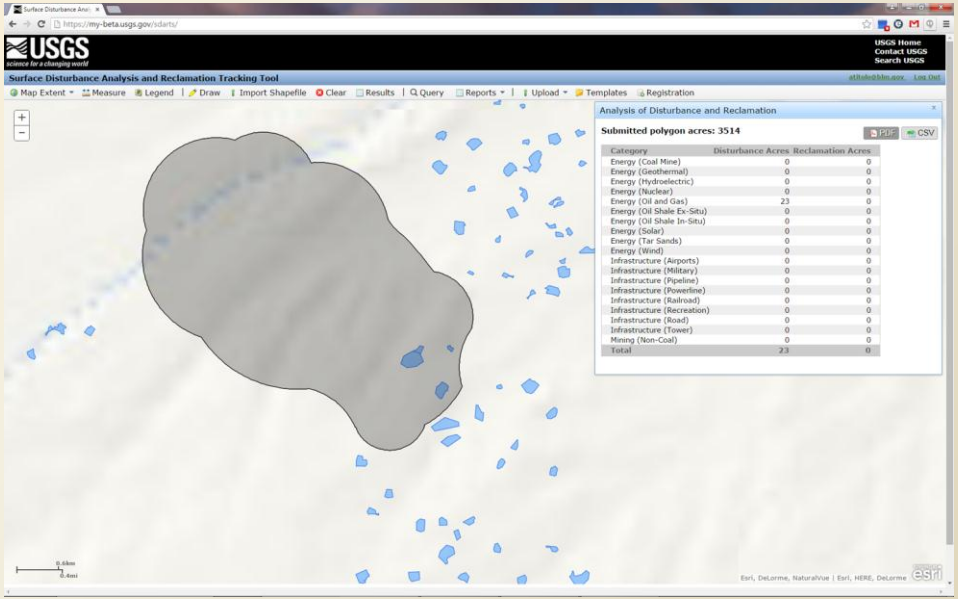
- Disturbance would increase from 23 to 73 acres
- 2.08% of analysis area *will be* disturbed



What and Where - Fine & Site Scales

Project Submittal Example

Sixth Question: What is the density of energy and mining facilities within the *project analysis* area?



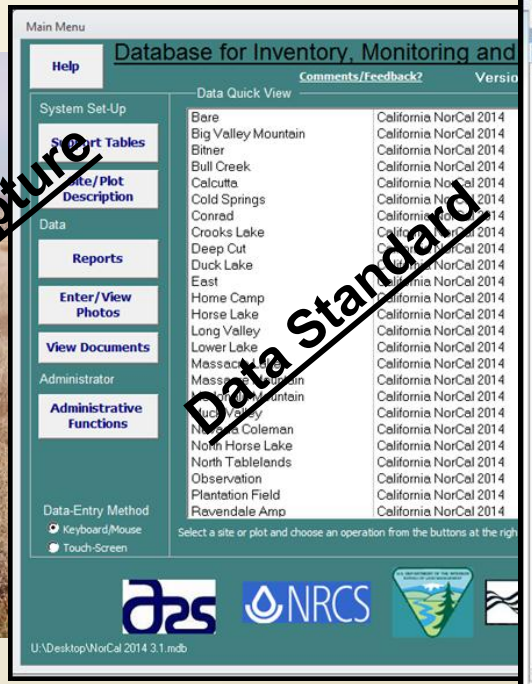
USFWS Listing Decision Threat	Sagebrush Availability	Habitat Degradation	Energy and Mining Density
Agriculture	X		
Urbanization	X		
Wildfire	X		
Conifer encroachment	X		
Treatments	X		
Invasive Species	X		
Energy (oil and gas wells and development facilities)		X	X
Energy (coal mines)		X	X
Energy (wind towers)		X	X
Energy (solar fields)		X	X
Energy (geothermal)		X	X
Mining (active locatable, leasable, and saleable developments)		X	X
Infrastructure (roads)		X	
Infrastructure (railroads)		X	
Infrastructure (power lines)		X	
Infrastructure (communication towers)		X	
Infrastructure (other vertical structures)		X	
Other developed rights-of-way		X	

Q&A

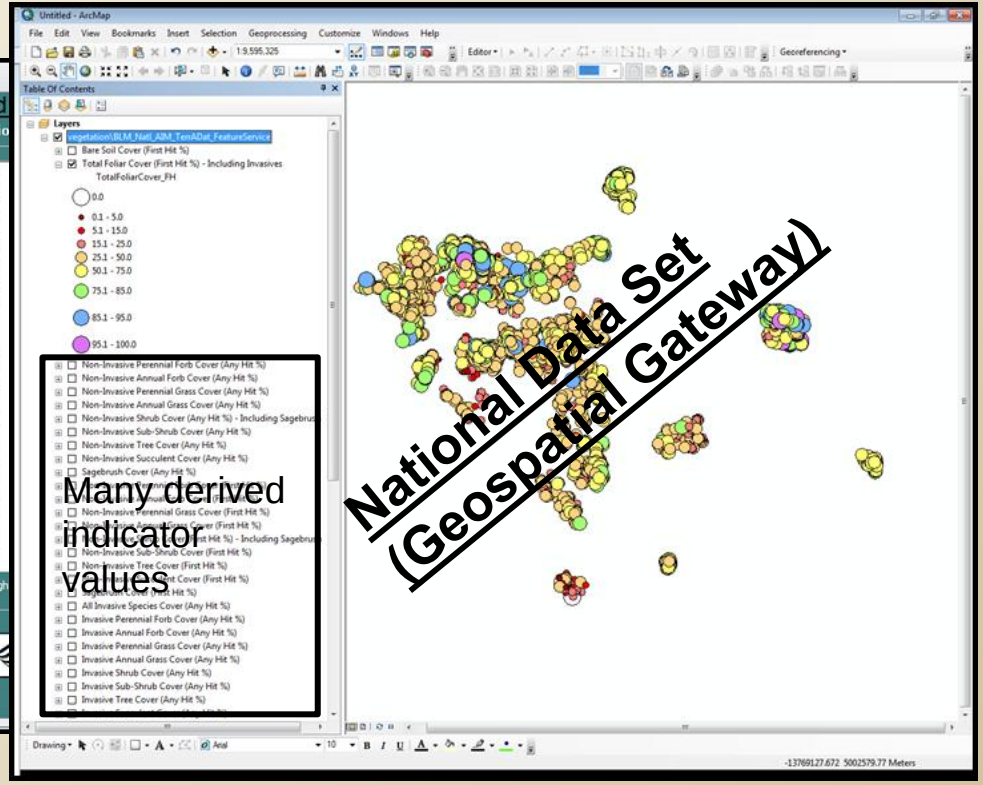
Transition to Gordon

Site Scale: Data Collection/ Storage

Electronic Data Capture

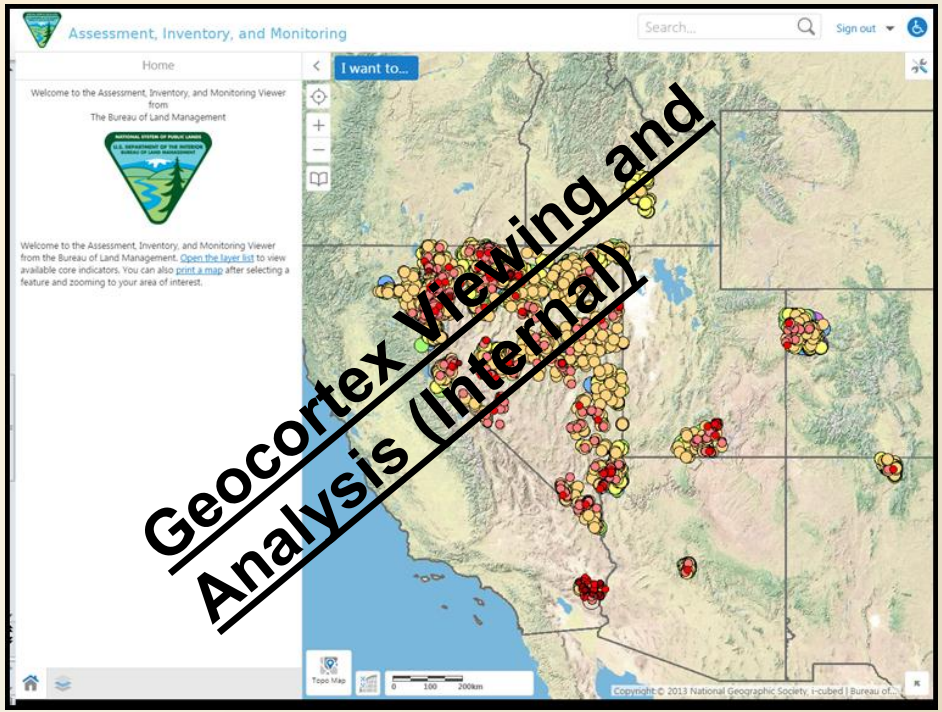


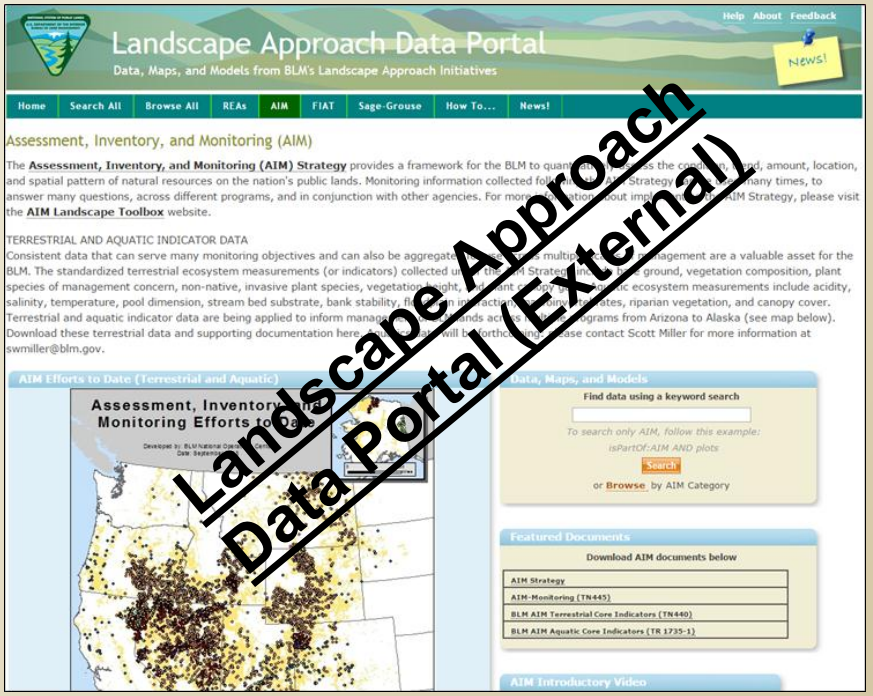
Data Standard



National Data Set (Geospatial Gateway)

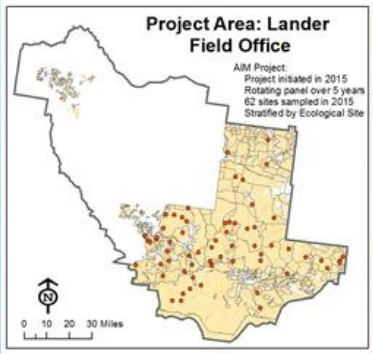
Site Scale: Analysis and Access





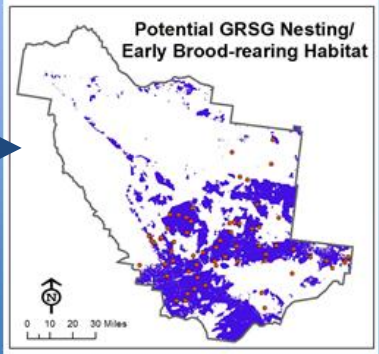
Habitat Objectives Workflow

Select project area & reporting units

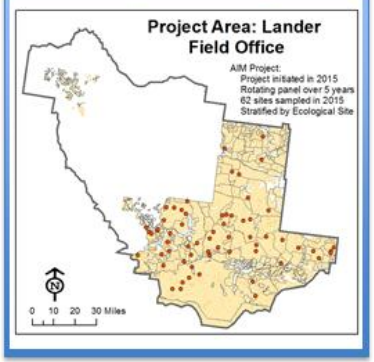


Identify lands that can produce GRSG Habitat

Define or map GRSG seasonal habitats

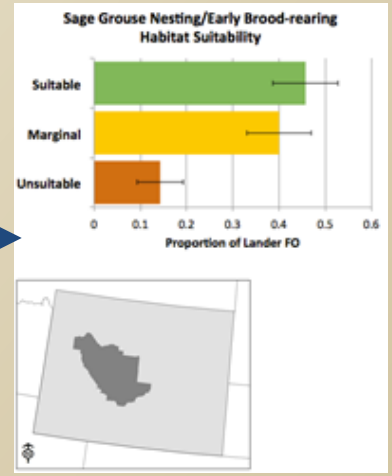


Gather/evaluate sample data & point weights

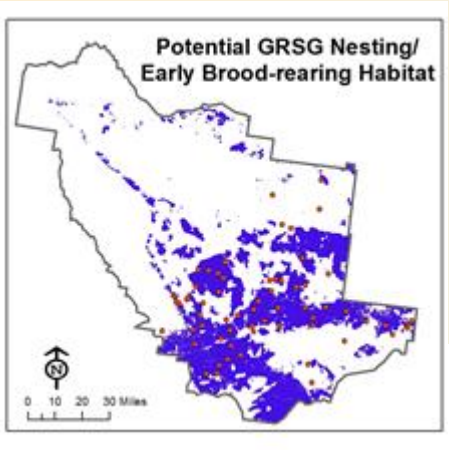


Determine Habitat Suitability

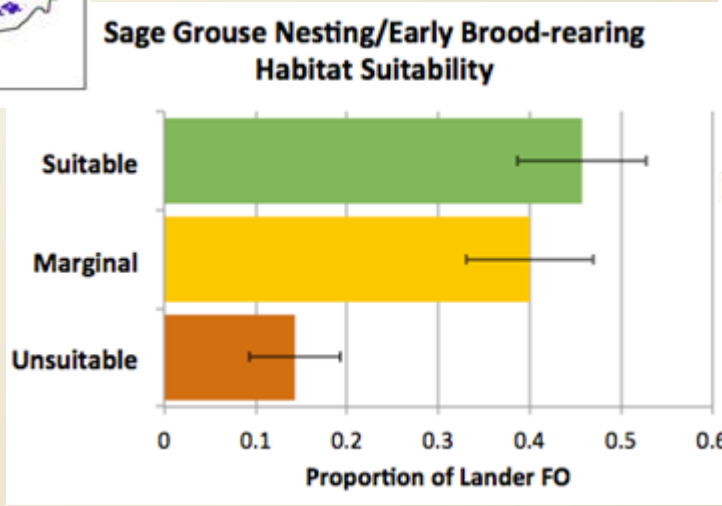
- Define habitat indicator objectives
- Calculate indicator values for sample locations
- Determine suitability for individual indicators
- *Determine overall habitat suitability by sample location*

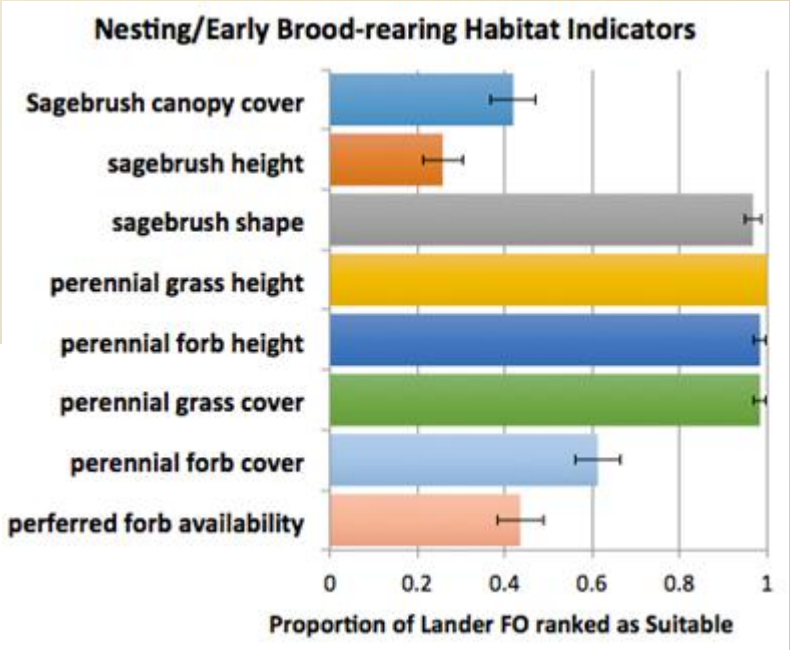


Nesting/ Early Brood Rearing Habitat

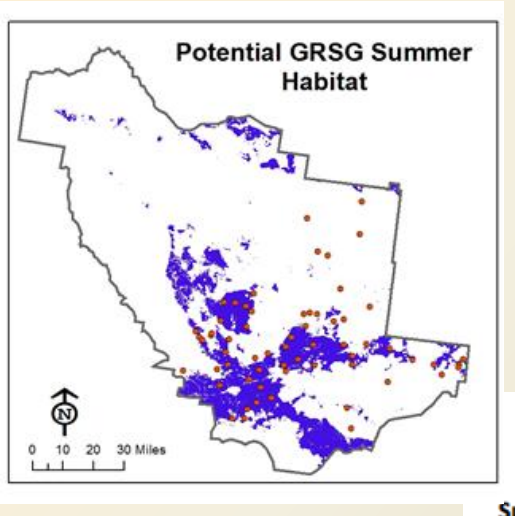


Habitat Indicator Values are LUP <u>Specific!</u>





Summer Habitat



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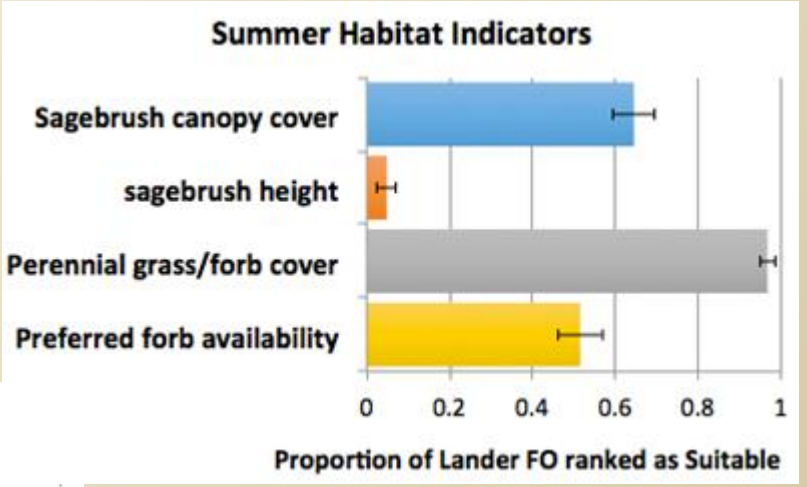
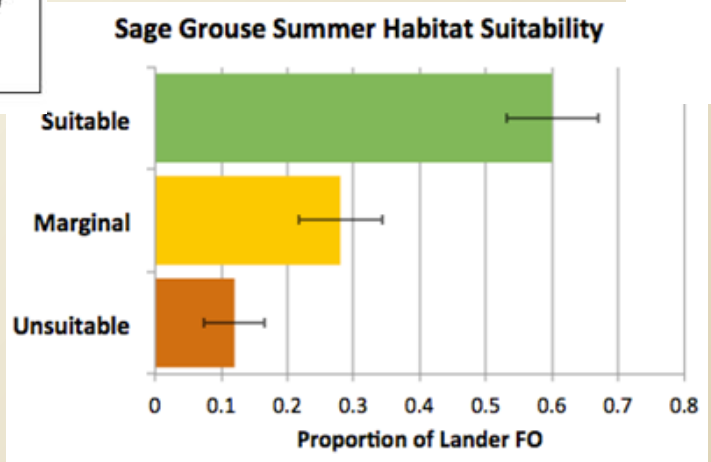
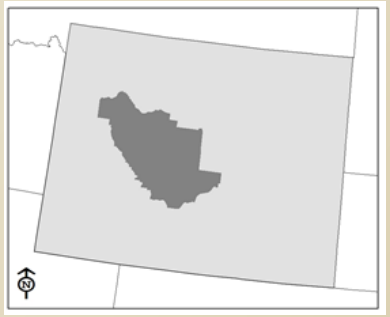


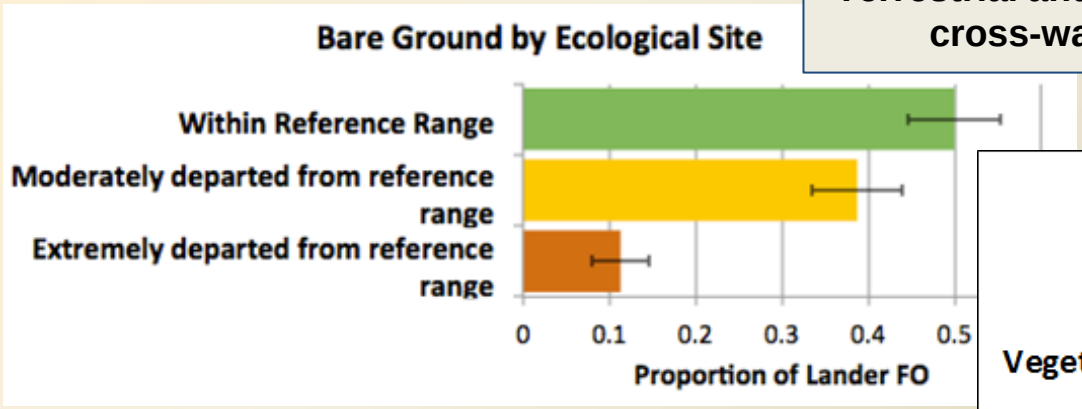


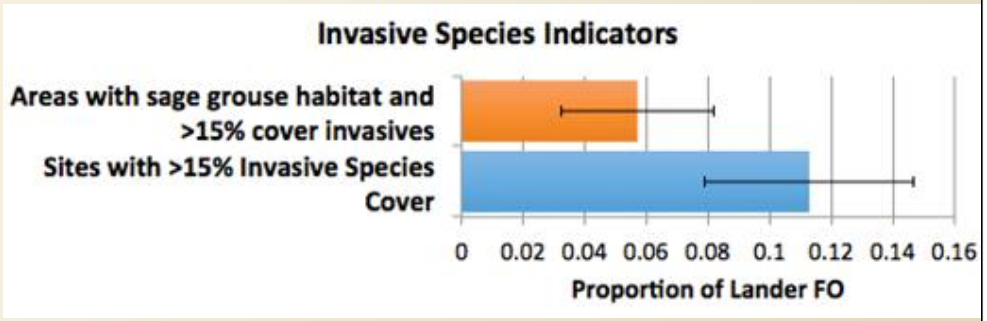
Need to add Riparian Stability Indicator

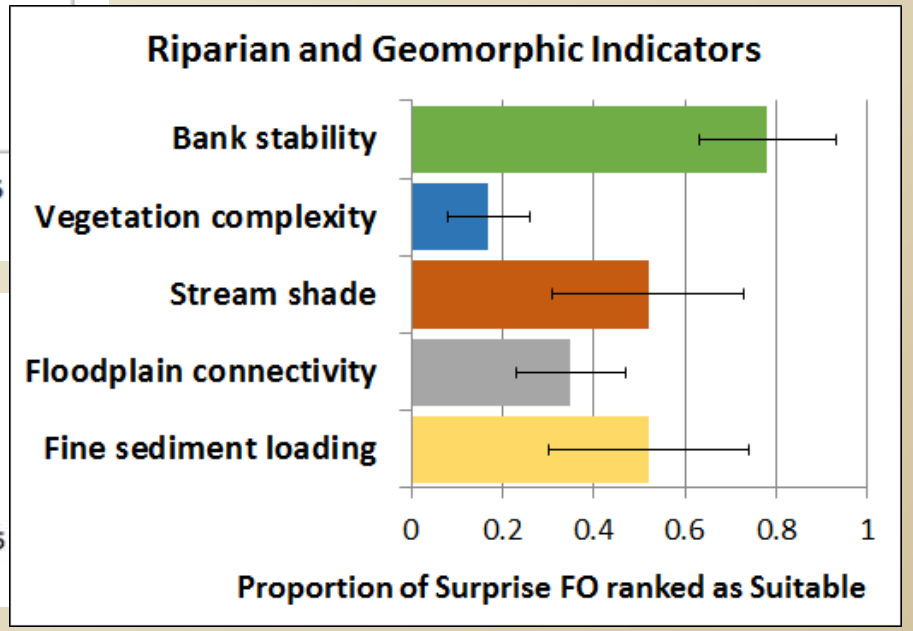
Land Health--Watershed/ LUP



Terrestrial and Aquatic Indicators cross-walked with LHS







Why is Standard Data such a Big Deal?

- 5-year FWS evaluation
- Consistent annual reports

- Transparent authorization decisions
- Consistent data for adaptive management
- Scalable data for analyses
  - Seasonal Habitat, Home Range, Population, and Range-wide
- BLM commitment in ROD

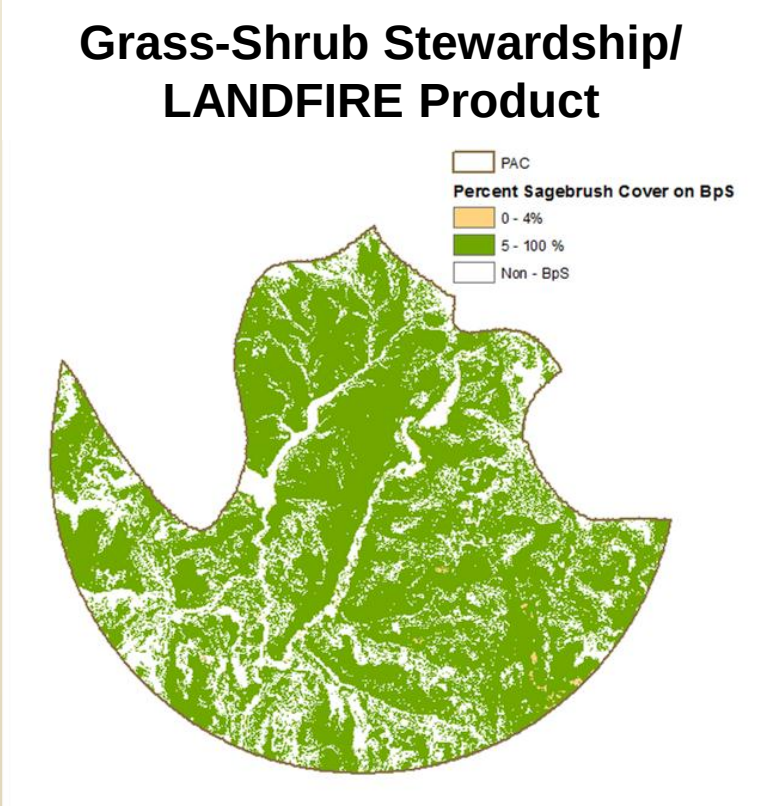
Reporting--Sagebrush Availability

Plan Vegetation Objective: 5% sagebrush cover on a minimum of 70% of PAC area capable of supporting sagebrush (ESD or BpS)

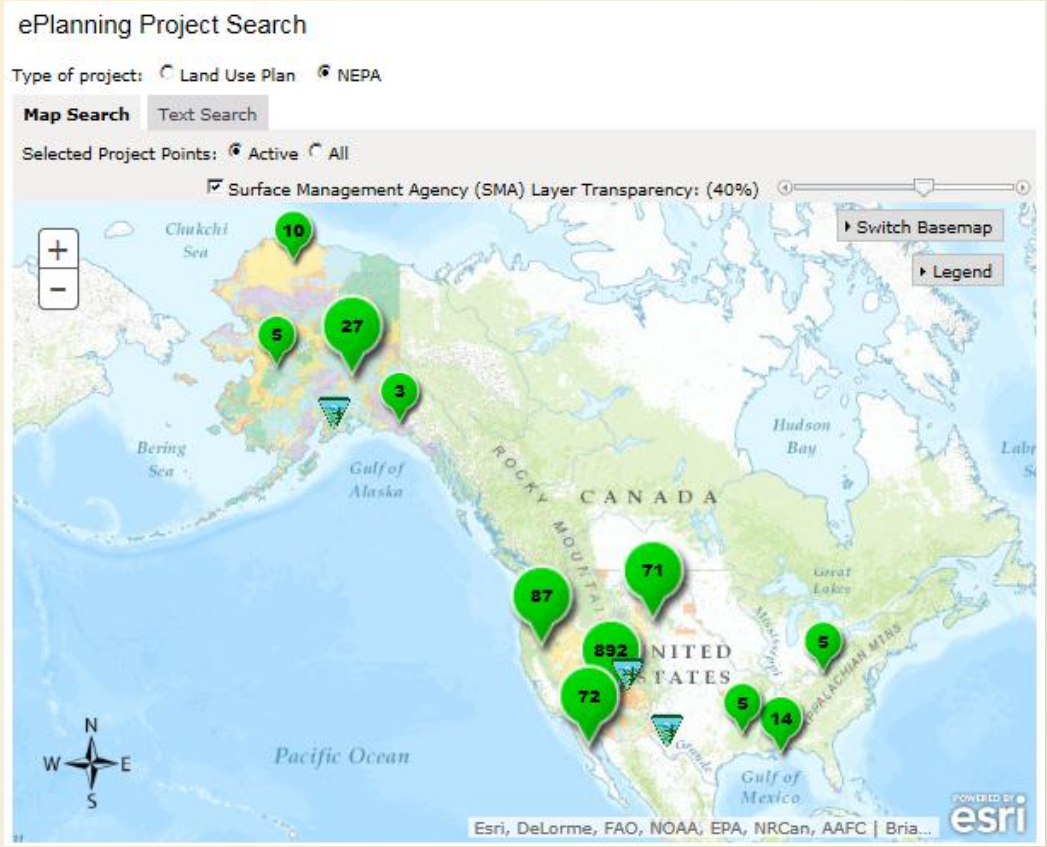
Patch Size and Connectivity (in development)

Analysis:

- 25,700 acres >= 5% cover
- 25,900 acres BpS
- 99% of BpS have >= 5% cover



Reporting--Implementation

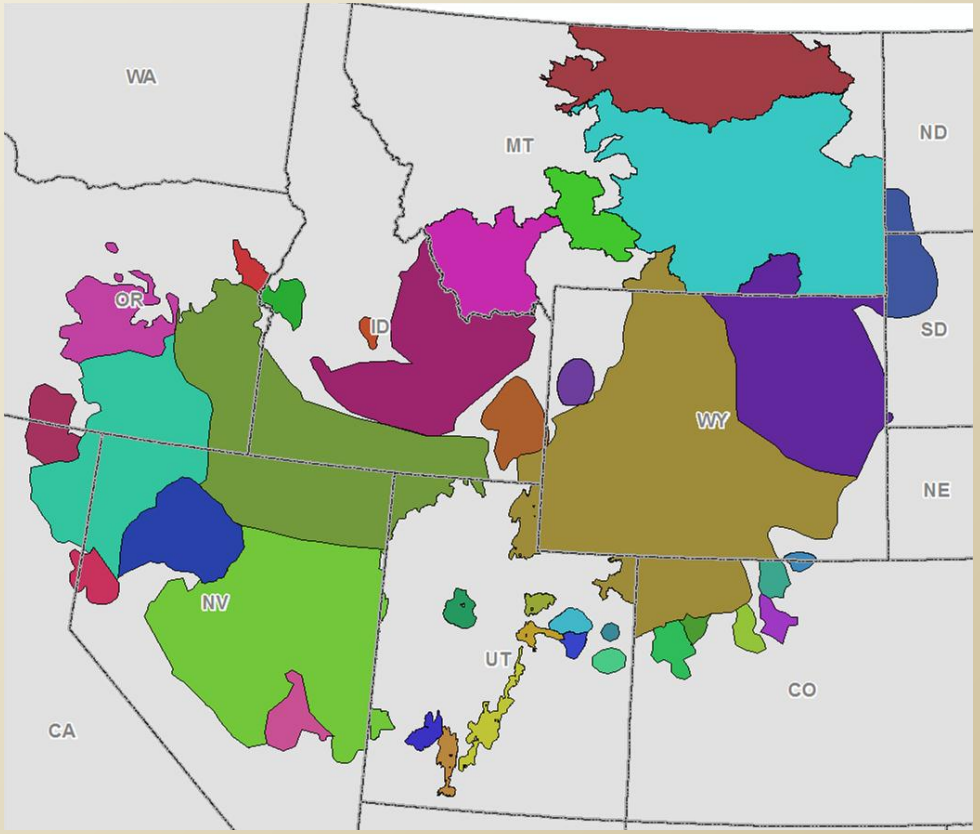


ePlanning Modifications

- GRSG habitat (Y/ N)
- Habitat designation
- Program category
- Sub-Program category
- Sub-Program subject

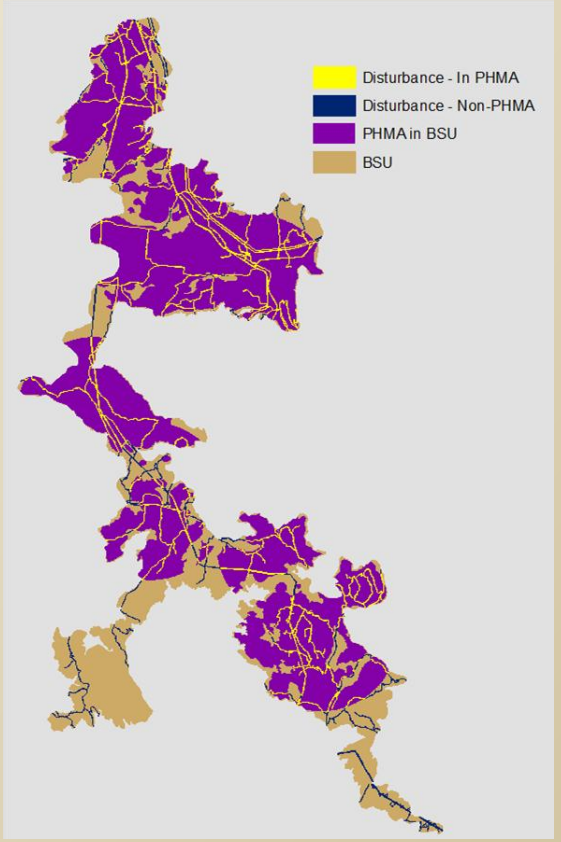
Reporting--Populations

- MOU with WAFWA
- Cooperation with State Fish and Game Agencies
- BLM data



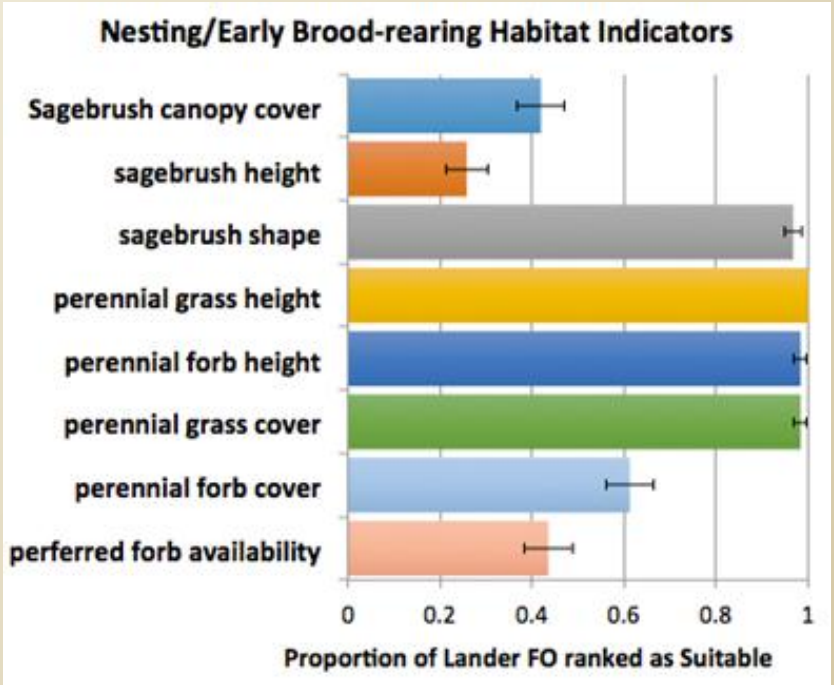
Reporting--Disturbance

- Disturbance estimate in priority habitat within BSU (national layers, all-lands)
- Disturbance permitted in BSU by BLM (SDARTT operator as-built)
- Density of energy and mining facilities in project area



Reporting--Effectiveness (Decisions)

- Trend of terrestrial and aquatic resources
- Trend of GRSG habitat indicators
- Areas meeting HAF suitability criterion
- Number of allotments meeting standards



Reporting--Effectiveness (Projects)

- Conservation Efforts Datbase (CED)
- Vegetation Treatment Solution (VTS)
  - NISIMS, NFPORS, FRIS, RIPS, ES&R, LTDL, Fuels
- Treatment monitoring

Q&A

Transition to Matt

Greater Sage Grouse Mitigation

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What is Mitigation?

- The BLM authorizes impacts to resources.
- We lessen/eliminate those impacts via avoidance, minimization, and compensation.

Why Do We Need to Mitigate?

NEPA

FLPMA

Mineral Leasing Act

Other Laws

It's policy

<u>It's in the plans!</u>

When to Mitigate for GSG Impacts?

- Authorizing a land use?
- Going to cause habitat loss/degradation?
  - Mitigate!

BLM

The Steppe Forward Series

How Much Mitigation for GSG?

- Net conservation gain to the species
- Account for uncertainty

How to Mitigate for GSG?

- Avoid impacts
  - –RMP decisions
  - –Micro-siting
- Minimize impacts
  - –Best management practices
- Compensate for impacts
  - –*Much of rest of presentation*

Principles of Compensation

- Landscape approach/partners
- Advanced/Timely
- Durable
- Additional
- Monitoring, Adapt. Mgmt
- Reporting

Calculating Debits and Credits

- Debits (residual impacts)
- Credits (compensation)
- Consistency
- Tools (exist/developing)

Banks, Exchanges, Funds

- Private investment
- Lots of innovation and questions
- Seeking consistency
- Partner with FWS/State

Regional Mitigation Strategies

- One per Mgmt. Zone; within one year of ROD
- Identify, analyze, and communicate mitigation needs and opportunities
- In advance of impacts
- *Developed with partners*
- Recommendations inform future NEPA

Q&A

Transition to Cathy