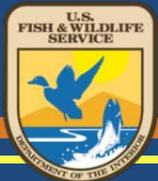


Greater Sage-Grouse Update for States

July 20, 2015

Goals for Today

- **Process for 2015**
- **Additional Analysis**
 - Conifer Encroachment
 - Infrastructure
 - Renewable Energy
 - Grazing
- **Fire and Invasives Cycle**
 - Presentation
 - Discussion



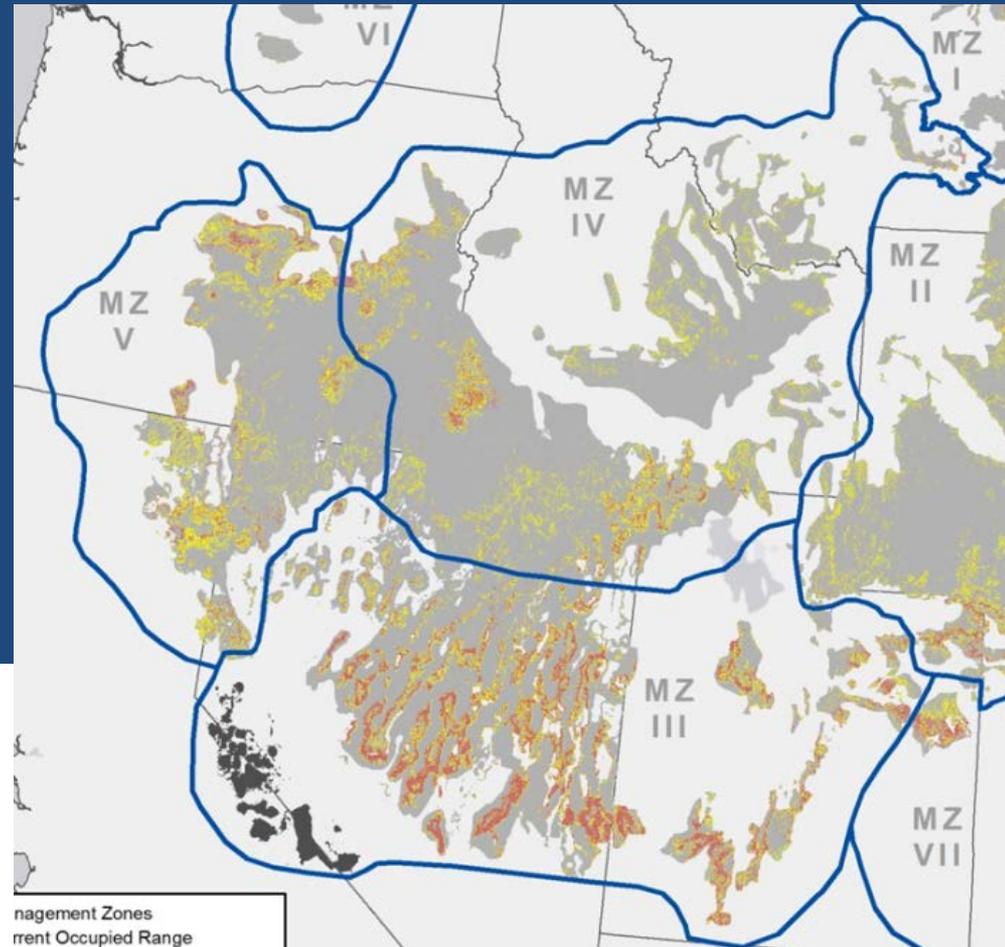
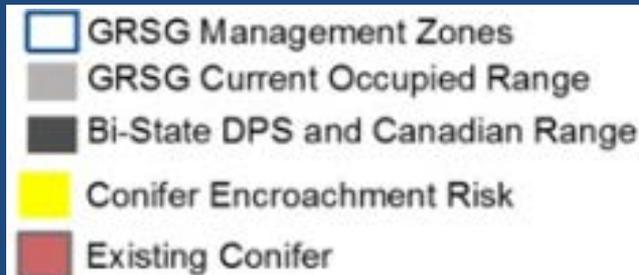
Process Update

- **Species Report**
 - Will remain as a draft
 - Timing of outside studies/models precluded finalizing
- **Determination**
 - Will be a stand alone document
 - To be published in the Federal Register
- **Due Date: September 30, 2015**



Conifer Encroachment

- >11.5 million ac (6% of the occupied range)
- Pervasive in MZs III, IV, and V
- Locally present rangewide



Summary: Conifer Encroachment

In 2010:

- Identified as a concern across the range, but particularly in the Great Basin

Since 2010:

- Conifer encroachment has continued
- ~6% of occupied range

Conservation Efforts

- Fire and Invasives Assessment Tool
- Sage Grouse Initiative (SGI)
- > 400,000 ac removed by SGI

CED recorded 556 completed projects (>200,000 acres)



Infrastructure

Direct Disturbance

- Habitat loss and fragmentation
- Potential to create movement barriers and or functional habitat loss
- Direct mortality related to collision

Indirect Area of Influence

- Increase in predator densities, supplemented by increased human activity
- Increased risk of incursion of invasives species due to unsuccessful reclamation, or increased introduction from impacted areas – potential to increase fire risk.



Summary: Infrastructure

In 2010:

- Identified as a substantial contributor to habitat fragmentation

Since 2010:

- Development has continued

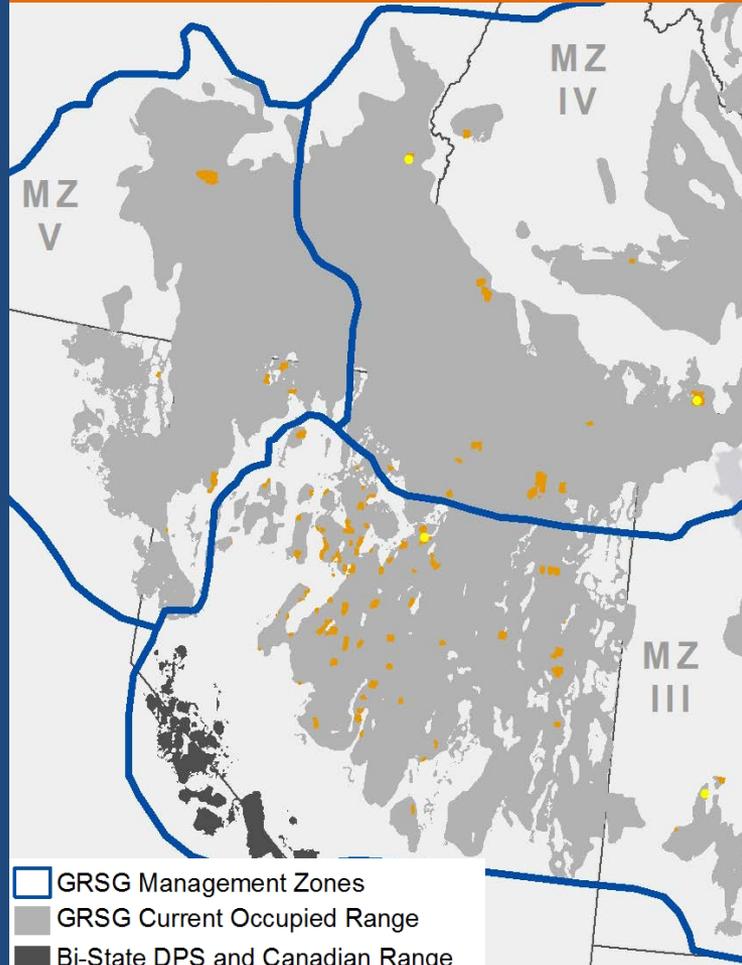
Conservation and Regulatory Mechanisms

- Federal Plans, when finalized, will encourage construction outside of priority areas
- Some State plans (WY, ID, UT) address siting
- Local plans encourage utilities to bury power lines where technically and economically feasible



Renewable Energy

GEO THERMAL

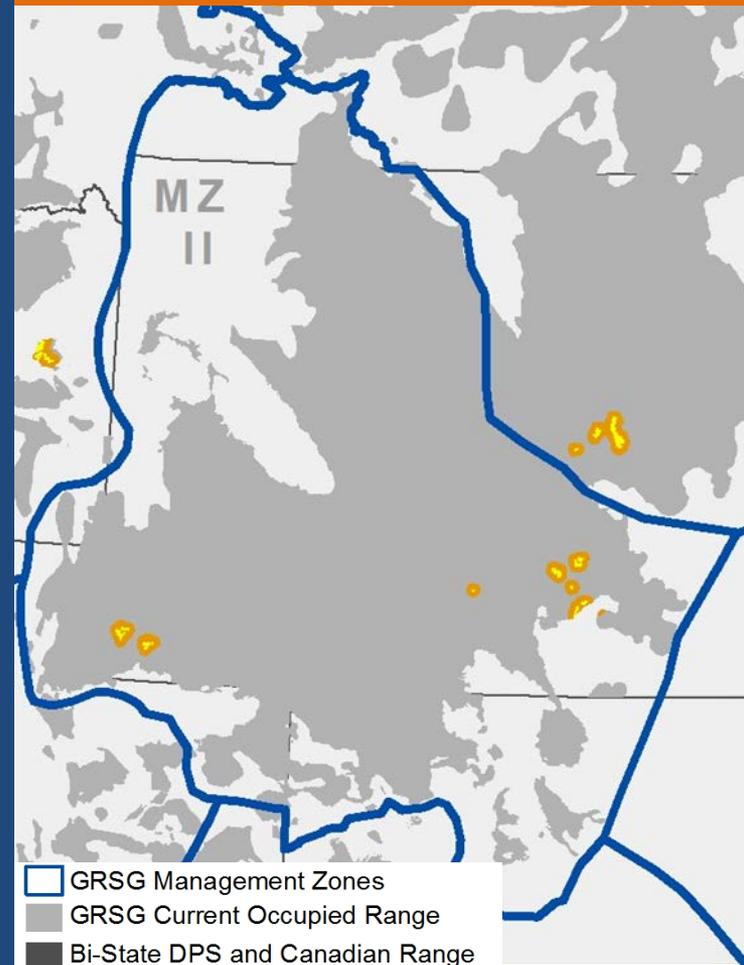


- GRS G Management Zones
- GRS G Current Occupied Range
- Bi-State DPS and Canadian Range

Geothermal

- Direct Disturbance
- Approved Geothermal Leases BLM

WIND



- GRS G Management Zones
- GRS G Current Occupied Range
- Bi-State DPS and Canadian Range

Wind Turbines

- Direct Disturbance
- Indirect Areas of Influence



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Summary: Renewable Energy

In 2010:

- Concluded that renewable energy was likely to increase into the future

Since 2010

- Renewable energy development increasing
(primarily in MZs I and II, III)

Conservation:

- Federal Plans, when finalized, will regulate development inside the PAC/IPAs (PHMAs)
- Some state plans (e.g. ID, UT, WY) include regulatory mechanisms

BLM Wind- Right of Way Restrictions



Improper Grazing

- Improper grazing can alter the habitat composition and reduce habitat value for sage-grouse
- Can cause habitat fragmentation in areas where improper grazing occurs
- Provide pathways for invasive species



Summary: Improper Grazing

In 2010:

- Improper grazing may impact at local scales
- Potential for population level impacts

Since 2010

- Improper grazing remains a concern

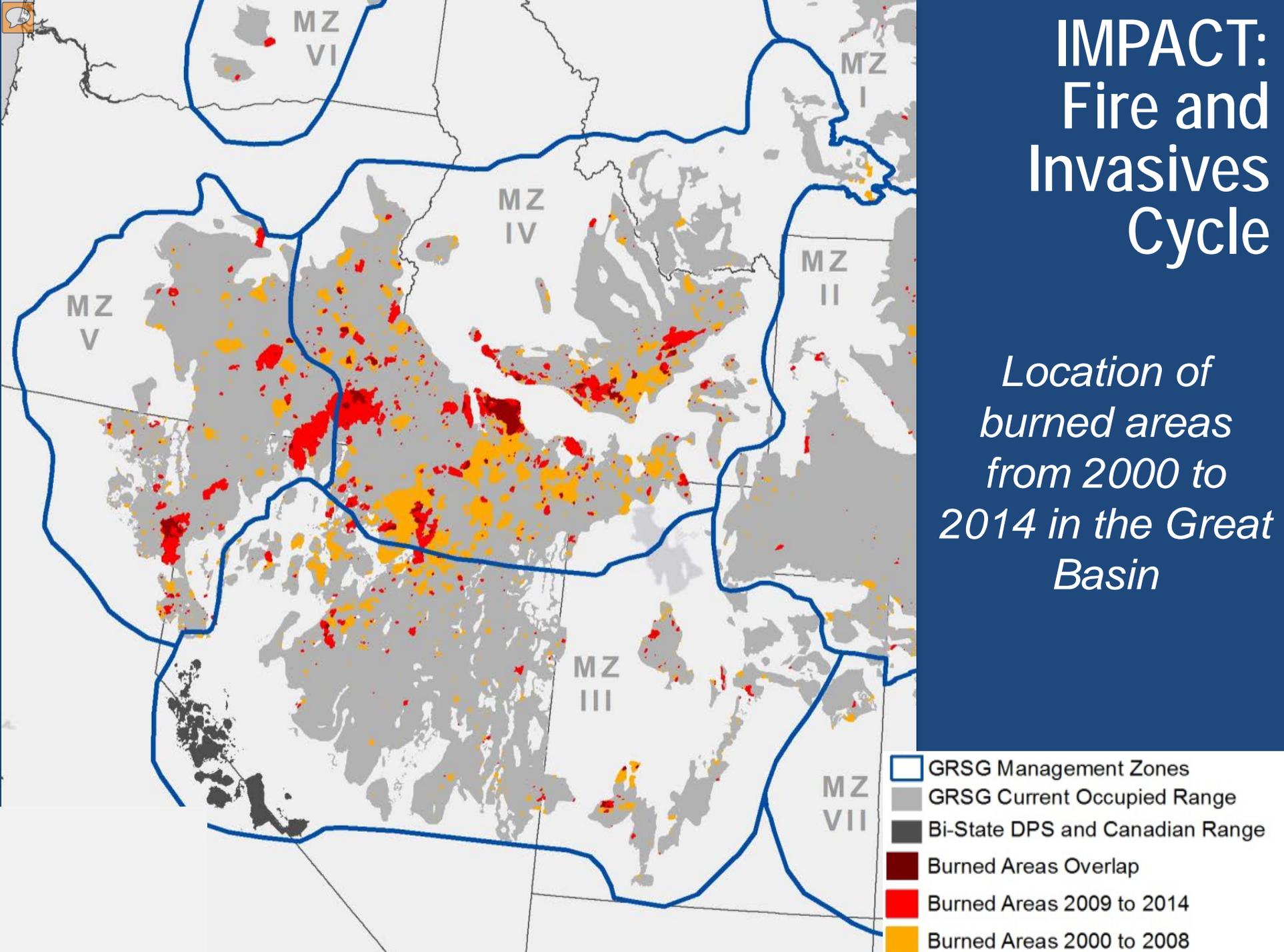
Conservation:

- Federal Management Plans
 - Some state plans (e.g. WY, ID) address grazing
- SGI, CCAAs/CCAs



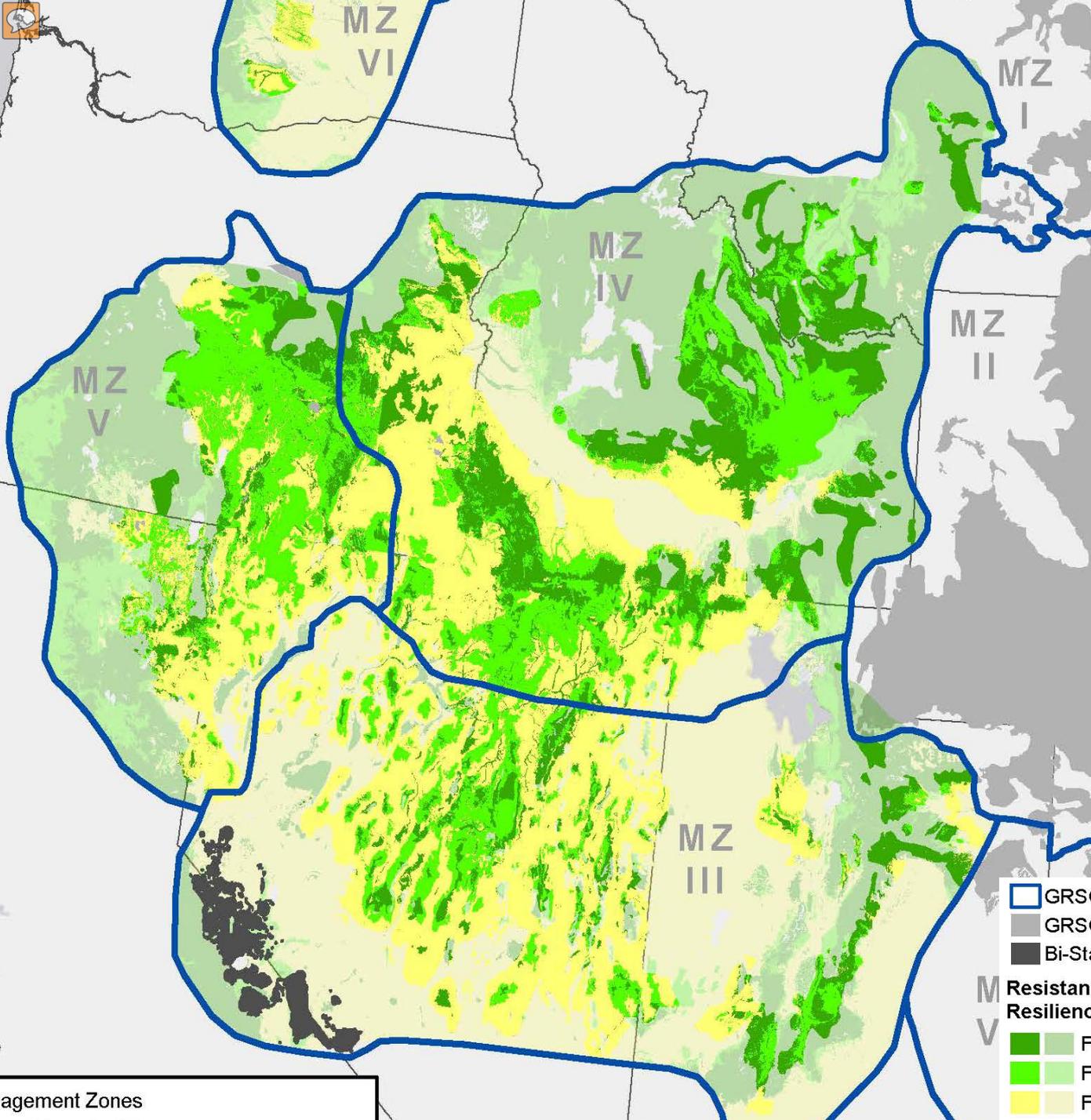
IMPACT: Fire and Invasives Cycle

*Location of
burned areas
from 2000 to
2014 in the Great
Basin*



IMPACT: Fire and Invasives Cycle

*FIAT Classes
(resilience and
resistance) in the
Great Basin*



Management Zones

Fire and Invasives - RISK AMELIORATION

What's working?



- Outlook of fire suppression and risk amelioration?
- Risk amelioration provided by
 - State Plans?
 - Federal Plans?
 - Secretarial Order?
- How can we be most successful?



Questions



For more information on the greater sage-grouse, please visit our national sage-grouse website.

<https://www.fws.gov/greatersagegrouse/>

