

Wildfire and Invasive Initiative

Presented by Ken Mayer

USFWS/ WAFWA



WAFWA Fire and Invasive Initiative Mission

- To develop a report of the current work and set of concise, concrete, prioritized and integrated actions land managers and policy makers can take to effectively preclude the dominance of invasive species and reduce their influence on the fire cycle in sagebrush ecosystems.

Greater sage-grouse Major Conservation Threats



Fire Management
and Restoration

Invasive Weed
Management

Regulatory Framework:
BLM and USFS ROD's;
State Regulations

Consists of 17 Nationally Recognized Experts in...

- Wildfire Ecology and Suppression
- Sage-grouse Ecology and Management
- Range Management and Ecology
- Plant Ecology
- Federal Land Management and Planning

Wildfire/Invasive Initiative Working Group

| Name | ORG | State | Phone # |
|------------------|-------------------|--------------|----------------------------------|
| Tom Christiansen | WYGF | Wyoming | (307) 875-3223 |
| Todd Hopkins | USFWS | GB LCC | (775) 861-6492 |
| Shawn Espinosa | NDOW | Nevada | (775) 6881523 |
| Don Kemner | IDFG | Idaho | (208) 287-2748 |
| Michael Ielmini | USFS-Invasives | DC | (202) 205-1049 |
| Doug Havlina | BLM-Fire | Idaho | (208) 387-5061 |
| Jeremy Maestas | NRCS-SGI | Oregon | (541) 923-4358 |
| Mike Pellant | BLM Land Mgt | Idaho | (208) 373-3823 |
| Dave Pyke | USGS Research | Oregon | (541) 750-0989 |
| Joe Tauge | BLM Planning | Nevada | (775) 861-6556 |
| Pete Anderson | State Forester | Nevada | (775) 684-2501 |
| Jean Chambers | USFS Research | Nevada | (775) 784-5329 |
| Jason Vernon | UDWR USFS-fire | Utah | (435) 283-4441 |
| Laurie Kurth | OSU-ARS | DC Oregon | (202) 205-1511 (541) 573-8939 |
| Chad Boyd | | | |

Products To Date

- ① 1. Preliminary “Gap Analysis” *Wildfire and Invasive Species in the West: Challenges that Hinder Current and Future Management and Protection of the Sagebrush-steppe Ecosystem: A Gap Report (Mayer et. al., 2013)*
- ② 2. A Conceptual Landscape Approach to Assessing the Wildfire/Invasive Threat *Using Resistance and Resilience Concepts to Reduce Impacts of Invasive Annual Grasses and Altered Fire Regimes on the Sagebrush Ecosystem and Greater Sage-grouse: A Strategic Approach (Chambers et. al., 2014).*
- ③ 3. SOIL MOISTURE AND TEMPERATURE MAPS OF THE WEST
- ④ FIELD PILOT PROJECT (NOW CALLED FIAT)

Products To Date con't

- Fire and Fuels Management Contributions to Sage-Grouse Conservation: A Status Report
- Invasive Plant Management and Greater Sage-grouse Conservation: A Review and Status Report with Strategic Recommendations for Improvement

Acknowledgements

- The Working Group also gratefully acknowledges the members and affiliates of:
- Western Weed Coordinating Committee,
- North American Invasive Species Network,
- North American Exotic Pest Plant Council,
- Missouri River Watershed Coalition,
- North American Invasive Species Management
- Federal Interagency Committee for the Management of Noxious and Exotic Weeds,
- National Invasive Species Council,
- Center for Invasive Species and Ecosystem Health,
- Tamarisk Coalition,
- Non-government members of the national Invasive Species Advisory

Acknowledgements Con't

The Working Group also extends its gratitude to:

--AFWA Invasive Species Committee, Chairman William Hyatt and
AFWA staff member Priya Nanjappa

Invasive plant management professionals:

- Mr. Steve Ryder, Colorado State Weed Coordinator;
- Mr. Tim Butler, State Weed Coordinator, Oregon;
- Mr. Slade Franklin, Wyoming State Weed Coordinator;
- Mr. Dean Kelch, State Weed Coordinator, California;
- Mr. Eric Lane, Director of Conservation Services, CO DoA;
- Mr. Jim Olivarez, Missoula County, Montana;
- Mr. Carl Crabtree, Idaho County, Idaho;
- Dr. George Beck, Weed Scientist, Colorado State University;
- Mr. Matt Voile, State Weed Coordinator, Idaho;
- Mr. Rich Riding, State Weed Coordinator, Utah;

Invasive Plant Management and Greater Sage-grouse: A Review and Status Report with Strategic Recommendations for Improvement



Why Invasive Plants Matter?

- ⦿ Invasive annual grasses fuel the wildfire threat and cause degradation of sagebrush communities, resulting in habitat loss and negative effects on GRSB populations, as well as other sagebrush-dependent wildlife species.
- ⦿ The invasion and spread of invasive plants across the western landscape have resulted in significant ecosystem transformations.
- ⦿ Invasive species transform ecosystems by altering their basic species composition and function.

What are the Most Important Invasives ?

- While cheatgrass (*Bromus tectorum*) and medusahead (*Taeniatherum caput-medusae*) are considered the most problematic of the exotic annual grasses, an array of other invasive plant species also exists in sagebrush (*Artemisia* spp.) ecosystems across the west.



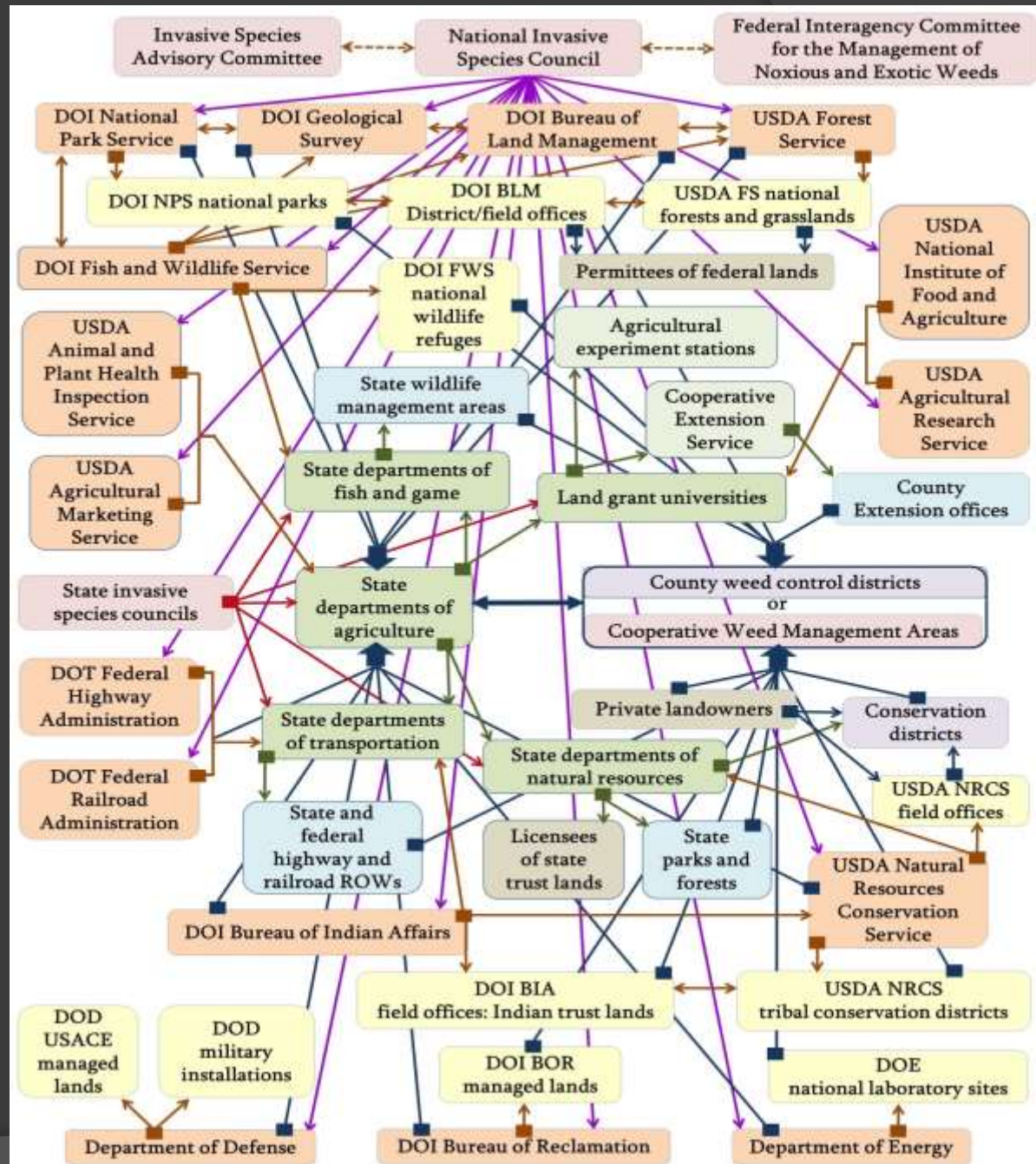
Goal of Report:

- Provide a high-level review of information related to the effects and management of invasive plants across an 11-state area that currently, or will potentially, provide habitat for the GRSG and other sagebrush obligate species.

Organization of the Report:

- ⦿ Background with an general overview
- ⦿ Current infrastructure and organization of invasive species management programs at the federal, state, local and private lands level—including partnerships.
- ⦿ Highlights of invasive species management program activities currently underway and how well are they working—including major challenges and barriers.
- ⦿ Recommendations for improvements

Invasive plant management network structure



Challenges and Barriers

◎ Information Management and Science Challenges

- Barrier: Lack of emphasis on surveys, inventories, and monitoring activities
- Barrier: Failure to re-establish desired perennial vegetation
- Barrier: Inadequate collection, retrieval, and sharing of invasive plant data
- Barrier: Lack of certainty for actions under a changing climate

Challenges and Barriers

- ◎ **Leadership, Coordination, and Communication Challenges**
 - **Barrier**: Insufficient governmental leadership and emphasis for invasive species management at nearly all levels
 - **Barrier**: Very limited coordination and collaboration with non-traditional stakeholders
 - **Barrier**: Lack of effective communication and engagement with the public.
 - **Barrier**: Low level of public awareness and support for invasive species management

Challenges and Barriers

◎ Policy and Regulatory Challenges

- Barrier: Lack of effective legal and regulatory framework for invasive species management
- Barrier: Insufficient evaluation, compliance monitoring, and enforcement

Challenges and Barriers

◎ Operational Capacity and Program Management Challenges

- Barrier: Highly variable management prioritization of high risk invasive plants; Programs do not emphasize sagebrush restoration when targeting invasive plants across the range of the GRSG
- Barrier: Lack of internal structure and capacity for weed management programs at all levels
- Barrier: Lack of federal funding at the field level, which transfers risk to state and local governments
- Barrier: Inconsistent and fragmented prevention operations
- Barrier: Lack of an effective early detection and rapid response (EDRR) system across the landscape
- Barrier: Inadequate restoration strategies, implementation, and approaches

Recommendations

◉ INFORMATION MANAGEMENT AND SCIENCE RECOMMENDATIONS

Recommendation 1. The ISAC should establish a standing committee dedicated to promoting research and adaptive management to determine how we can a) prevent spread of existing weed infestations, and b) consistently re-establish desired perennial plants in invaded sites.

Recommendations

○ LEADERSHIP, COORDINATION, AND COMMUNICATION RECOMMENDATIONS

Recommendation 1. Convene a summit of federal Departments (i.e., DOI, USDA, DOC, etc.) and agencies, state government agencies, and key non-government organizations to review existing invasive species mandates (e.g., 1999 Presidential Executive Order 13112), overarching policies, and agency budgets.

Recommendation 2. Re-engage NISC at the Department level to establish a high-level multi-federal agency working group and charge them with drafting a National Invasive Species Strategy in the U.S.

Recommendations

◎ POLICY AND REGULATORY RECOMMENDATIONS

Recommendation 1. Establish a subcommittee within ISAC to review the current legislative and regulatory framework (federal and state) on invasive species, including coordination with AFWA.

Recommendation 2. Establish a working group to review federal, state, and provincial rules, procedure's, work contract and permit clauses, and Best Management Practices (BMPs) designed to prevent the spread of invasive plants.

Recommendations

◉ PROGRAM MANAGEMENT AND OPERATIONAL CAPACITY RECOMMENDATIONS

Recommendation 1. Conduct a comprehensive evaluation, including potential restructuring, of the funding and personnel model for invasive species management programs at all levels across federal, state, and county agencies and governments.

Recommendation 2. Develop funding mechanisms at state and federal levels to significantly increase program capacity to accelerate invasive plant prevention and control activities at all levels, with the goal of achieving a measurable net reduction of priority invasive plant populations each year

Recommendations

◉ PROGRAM MANAGEMENT AND OPERATIONAL CAPACITY RECOMMENDATIONS con't

Recommendation 3. A new approach needs to be developed and funded to provide for early detection, rapid management response (EDRR) and restoration of areas to prevent invasive plant species from becoming established or spreading.

Recommendation 4. Develop a nationally consistent public awareness and education program for the prevention and management of invasive species, similar to the successful national fire prevention program campaign, coordinated across public and private sectors.

Recommendations

◉ PROGRAM MANAGEMENT AND OPERATIONAL CAPACITY RECOMMENDATIONS con't

Recommendation 5. As stated in the WAFWA Gap Report, coordination between the public and private landowners to manage invasive plants across landscapes is essential and managed through County Weed Management Areas. These CWMA's need to be supported.

Recommendation 6. Wherever feasible, maximize niche occupation with desired native species to allow for long-term recovery of sagebrush and other native species.

Questions?

