The SageCon Invasives Initiative



Overview of the geographic strategy to address invasive annual grasses in Oregon for policymakers and the public

The Problem

Invasive annual grasses in Oregon rangelands negatively affect wildlife, rangeland health, and ranching communities across public and private lands, and have fueled large wildfires that are destructive to both wildlife habitat and property. The scale of the problem is vast, and in order to successfully protect and restore rangeland ecosystems the response must cross large, multi-jurisdictional landscapes. Many agency programs already exist to address the invasive grass threat in Oregon rangelands, but our collective efforts are often applied at small scales and tend to be reactive, expensive, and have high failure rates due to the arid climate and unpredictable conditions. The SageCon Invasives Initiative takes a strategic approach to invasive annual grasses in Oregon through a collaborative, multi-stakeholder group coordinated by the SageCon Partnership. This document provides an **overview** of the geographic strategy to identify areas for coordinated investments in reducing the annual grass threat, intended for **communication with policymakers and the public**.

The Geographic Strategy

A key component of the Invasives Initiative is a shared geographic strategy for proactive, landscape-scale management of invasive annual grasses across jurisdictional boundaries in southeastern Oregon. The strategy is informed by remotely sensed maps that provide landscape context and integrate multiple types and sources of information across broad spatial scales. This geographic strategy follows similar efforts across the sagebrush biome, including the Western Governors' Association <u>Toolkit for Invasive Annual Grass Management in the West</u> and the Idaho <u>Cheatgrass Challenge</u>. These collaborative strategies provide a unified conceptual model of "Defend the Core, Grow the Core, Mitigate Impacts", consisting of three components:

- 1. **Defend the Core**: Prevent annual grass encroachment and promote a healthy perennial ecosystem in intact **core** areas where the problem is currently minimal.
- 2. **Grow the Core**: Work adjacent to core into the **transition zone**, containing intermediate levels of annual grass invasion, to strategically increase the amount of core across the landscape.
- 3. **Mitigate Impacts**: In addition to the proactive approaches of defending and growing the core, management in the highly invaded **degraded areas** may be required to mitigate the most severe impacts of invasive species and wildfire on life and property.







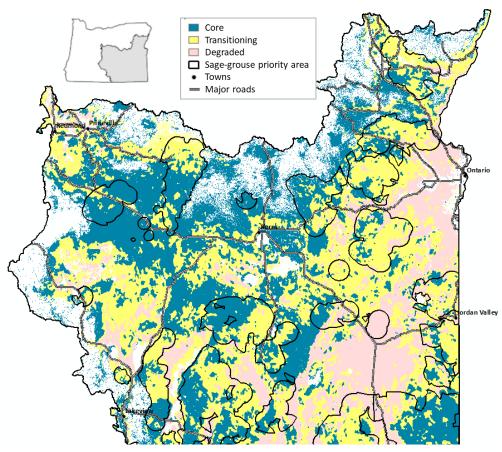
Diverse rangeland plant communities (left) can become invaded by annual grasses (center), which are at risk of conversion to annual grass monocultures after wildfire (right). This conversion displaces native plant species and increases the risk of repeated wildfire due to the continuous, dry fuels provided by the invasive grasses. Photos: US Fish & Wildlife Service.

The Geographic Strategy Maps

The geographic strategy maps follow the principles of "Defend the Core, Grow the Core, Mitigate Impacts", but differs from other mapping efforts across the West by incorporating both biotic (herbaceous composition) and abiotic (resilience and resistance) components. **Herbaceous composition** is characterized by both

annual (undesirable) and perennial (desirable) herbaceous cover, and emphasizes the key role of perennial grasses in stabilizing sites and lowering restoration costs. Resilience and resistance maps identify soils and climatic conditions that influence recovery potential after disturbance, informing the level restoration intervention that may be needed. Combining information on biotic and abiotic condition allows managers and policymakers to identify areas with the greatest management need and restoration potential.

The geographic strategy consists of multiple components for use at different scales:



The Generalized Strategy map identifies core, transitioning, and degraded areas in southeastern Oregon. Spatial patterns have been simplified for use at broad spatial scales.

- 1. The **Generalized Strategy Map** (above) is a simple communication tool to be used at broad scales. Identifying large blocks of core (blue) to maintain and grow across the landscape is a key first step toward the strategy of defending and growing the core.
- 2. The Management Strategy Map provides finer-scale and more detailed information to help guide collaborative teams working at local scales toward landscape-scale outcomes. This map helps identify management objectives, particularly within the transition zone where targeted opportunities exist to grow the core while mitigating risk. Visit the SageCon Invasives Initiative webpage to access a Management Guide with more information on how to use the Management Strategy Map, download spatial data, and find technical documentation.

This geographic strategy was created collaboratively by SageCon partners in Oregon and is designed to be used in concert with other planning efforts, such as the Natural Resources Conservation Service Sage Grouse Initiative and the Bureau of Land Management Integrated Program of Work. The geographic strategy can be used for state-wide planning (i.e., coordinating funding toward shared geographic priority areas) as well as supporting locally led groups such as Local Implementation Teams and agency District staff in coordinating investments and identifying opportunities to work across boundaries.