

Oregon All Counties

Conservation Agreements with Assurances (CCAA) Steering Committee

The Oregon Model to Protect Sage-Grouse, All Counties

VISION

Oregon's private rangelands sustain abundant populations of sage-grouse, where threats of wildfire, exotic annual grasses, conifer/juniper encroachment, injurious grazing practices, and open space fragmentation have been reduced in a manner that supports and promotes local economic and social needs.

PARTNERSHIP MEMBERS

Steering Committee and Core Partners:

- Harney Soil and Water Conservation District
- Lakeview Soil and Water Conservation District
- Malheur County Soil and Water Conservation District
- Oregon Association of Conservation Districts
- US Fish and Wildlife Service
- Natural Resources Conservation Service
- Bureau of Land Management

External Partners:

- County governments of Harney, Lake, and Malheur counties
- Cooperative Weed Management Areas
- US Department of Agriculture Research Service
- Oregon State University Extension
- Oregon Department of Fish and Wildlife

ECOLOGICAL PRIORITY

Sagebrush/Sage-Steppe Habitat

FOCAL SPECIES

Greater sage-grouse



GEOGRAPHIC SCOPE

The Steering Committee is focusing its efforts on privately-owned Preliminary Priority Habitats (PPH) for sage-grouse occurring within Harney, Lake, and Malheur counties (approximately 500,000 acres). The scope of work of the six-year OWEB Focused Investment Partnership program is to implement strategies and actions on 40% of these privately owned PPHs (approximately 200,000 acres).

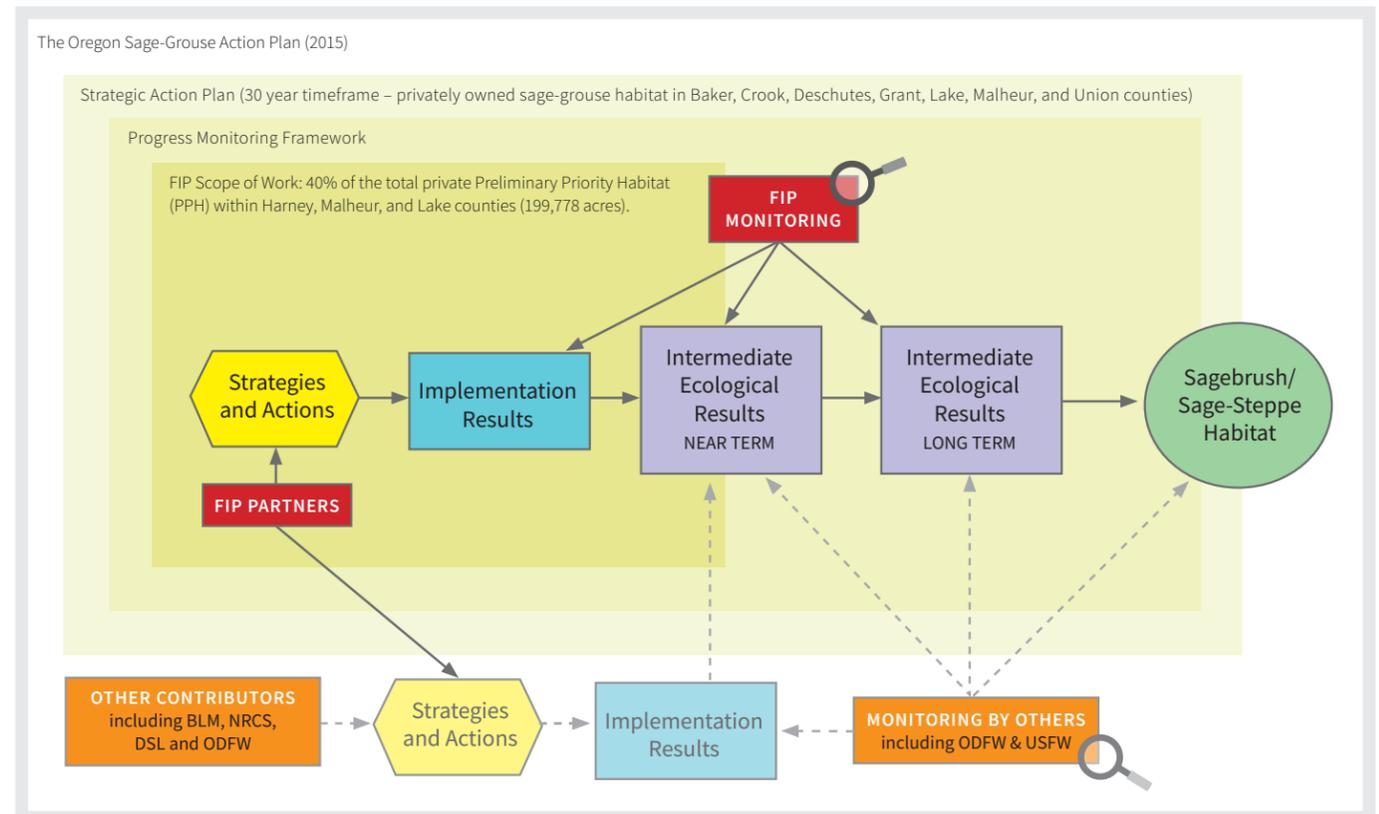
Operational Context

Greater sage-grouse conservation efforts are taking place across a 165-million-acre expanse of sage-grouse habitat that includes areas within eleven western states. The Oregon context for the Steering Committee's initiative is defined in the Oregon Sage-Grouse Action Plan – covering approximately 18 million acres of habitat.

The partnership's Strategic Action Plan is focused on privately-owned sage-grouse PPH in seven Oregon Counties and defines strategies and objectives that cover a 30-year timeframe (2015-2045). Complementary actions on public lands are being led by federal and state agencies including the Bureau of Land Management, Oregon Department of State Lands, and Oregon Department of Fish and Wildlife, with complementary funding on private lands provided by the Natural Resources Conservation Service.

Together, the Steering Committee and partner agencies will contribute to the ecological outcomes shown in the results chain.

Figure 1: Operational context of the OWEB-funded Focused Investment Partnership Initiative



Theory of Change.

SITUATION

Sage-grouse habitat across Oregon is threatened by historic and ongoing changes to native plant communities and the impact of increasingly catastrophic wildfires. Native shrubs and grasses have largely been replaced by invasive annual grasses and historical fire suppression has encouraged expansion of juniper. The invasive grasses provide inadequate cover for sage-grouse nesting, and are highly flammable, promoting more frequent and more severe wildfire. Both the abundance of invasive grasses and the increased incidence and severity of wildfire prevent the re-establishment and persistence of native plant species.

APPROACH

The results chain (Figure 2) articulates the partnership's theory of change by displaying the relationships between strategies, implementation results, and the intermediate ecological results partners predict will occur in response to strategy implementation that will ultimately lead to restoration of the FIPs ecological priorities.

Numbered results identified in Figure 2 are those the partnership has highlighted as part of a monitoring approach. They will allow the partnership to measure progress in both the near (e.g. 6-year FIP timeframe) and long term, and to identify where key uncertainties might exist with regards to confidence of predicted outcomes or relationships between results.

Each numbered implementation result is associated with the corresponding objective in the Strategic Action Plan (Tables 1 and 2). For intermediate ecological results, objectives are included if identified; however, for many ecological results, the degree (and timeframe) to which they will be achieved is not yet well understood. Given this complexity, continued assessment and planning will be required to support development of specific, measurable objectives for the desired ecological outcomes.

The narrative below summarizes the resulting theory of change. Implementation results and ecological results prioritized for monitoring during the six-year FIP timeline are indexed to correspond to the results chain (Figure 2) and measuring progress tables (Tables 1 and 2).

STRATEGIES

The Initiative's theory of change is that the strategies and actions described in the Strategic Action Plan will reduce or eliminate factors limiting sage-grouse and their habitats within privately owned PPHs of Harney, Malheur, and Lake Counties. This work represents an important contribution to the larger regional-scale efforts to recover and conserve sage-grouse.

The strategies focus primarily on reducing the spatial extent of undesirable plant communities dominated by juniper and exotic annual grasses. It is predicted that a reduction in the extent of undesirable plant species will promote an increase in the extent and connectivity of the desired plant communities necessary to support all life stages of sage-grouse. It is also predicted that the strategies will reduce the frequency and severity of wildfires and allow the establishment and long-term stability of desired plant communities.

OPERATIONAL STRATEGIES

1 Complete Candidate Conservation Agreement with Assurances (CCAAs) for private lands

This strategy involves the development of CCAAs for privately owned sage-grouse habitat through recruiting landowner participation and developing Site Specific Plans for those interested in participating. CCAAs are agreements between private landowners and the US Fish and Wildlife Service in which landowners agree to take actions on their lands to reduce or eliminate threats to sage-grouse in exchange for assurances from USFWS that they will face no further regulatory requirements should the species become listed under the Endangered Species Act (ESA) at a future time.

Theory of Change.

The opportunity to avoid future regulatory requirements associated with the possible ESA listing of sage-grouse will encourage private landowners with PPH sage-grouse habitat on their lands to enroll in CCAAs¹ in sufficient numbers to achieve the Steering Committee's objectives. Once landowners enroll in CCAAs the partners will complete Site Specific Plans² and provide guidance to apply for and receive technical and financial assistance to carry out appropriate conservation actions³ on their land.

2 Provide the opportunity for private landowners to enroll in conservation easements

Conservation easements are voluntary legal agreements between a landowner and a specifically qualified conservation organization that place long-term restrictions on the use of property in order to protect certain natural values. Conservation easements are uncommon and not well accepted within the geographic scope of the Steering Committee so the Steering Committee will provide the opportunity for one or two interested landowners to participate in a conservation easement as a way to generate community dialogue about the role this strategy could play in the future.

Theory of Change.

Focused and strategic outreach with private landowners about the potential benefits of conservation easements will improve the understanding of how easements work and the benefits they can provide landowners and sage-grouse and their habitat. This more complete understanding will increase interest and encourage implementation of initial measurements.

Partners anticipate successful implementation with early adopters will promote additional participation and expand opportunities for Partners to provide support for applying and receiving technical assistance to carry out appropriate conservation actions³.

CONSERVATION STRATEGIES

3 Apply conservation measures to address the threat of wildfire

This strategy involves taking actions to reduce the threat of high frequency severe wildfires⁶.

Theory of Change.

A reduction in the frequency of severe wildfires will promote:

- establishment of connected plant communities composed of desired species¹², and
- structure and function¹⁴ across sufficient spatial extent.

Both outcomes will support all life stages of sage-grouse at a population scale.

4 Treatment of exotic annual grasses in sage-grouse habitat

Methods for treating exotic annual grasses may include application of herbicides, mechanical removal, prescribed fire, biological treatment, or targeted grazing. Treated areas are then seeded with desired species using areal, drill, or broadcast methods.

Theory of Change.

Actions to treat exotic annual grasses will lead to:

- removal of these species from sage-grouse habitat⁴,
- implementation of managed grazing systems⁷, and
- support of conservation measures addressing severe wildfire threats⁶.

These treatments will reduce the overall extent of exotic annual grasslands and the frequency and severity of wildfires in sage-grouse habitats. Reducing the extent of exotic annual grasses promotes the expansion of desired plant cover¹⁰, contributing to increased extent and connectivity of desired plant communities.

5 Remove juniper in sage-grouse habitat

Actions associated with this strategy may include prescribed fire, application of herbicides, or mechanical removal with various treatments of material including slash pile burning, broadcast burning, lop and scatter, or mastication.

Theory of Change.

Removal of juniper on CCAA enrolled properties will reduce the extent and density of juniper across CCAA enrolled properties. A reduction in woodland type plant communities¹¹ will increase desired plant cover¹⁰, thereby improving the extent of connected communities of desired plant species¹⁴.

In addition, a reduction in confers will reduce avian predator perches and reduce predation of sage-grouse.

6 Implement actions to address all other threats

This strategy focuses on actions to reduce threats and limiting factors not otherwise addressed. *These include:*

- implementation of managed grazing systems,
- installation of wildlife escape ramps in livestock watering troughs,
- marking fences in high risk collision areas, and
- additional conservation measures to address the threat of fire.

Theory of Change.

Implementation of managed grazing systems⁷ will:

- reduce the extent of exotic annual grasses,
- promote an increase in the extent of desired plant cover¹⁰, and
- diminish the frequency and severity of wildfire.

These results will expand connected plant communities containing desired species¹⁴.

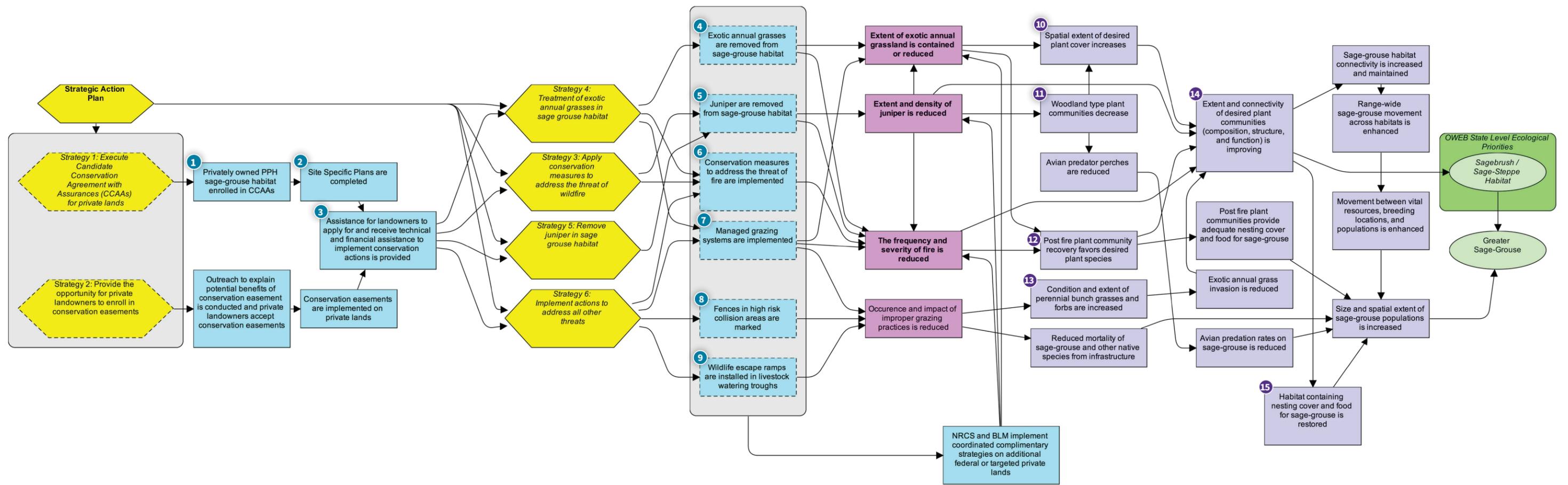
Installation of wildlife escape ramps⁹ and marking fences in high-risk collision areas⁸ will reduce direct mortality of sage-grouse using these areas.

Superscript numbers ¹⁻¹⁵ can be cross referenced on the Results Chain diagram and the Implementation Progress/Ecological Progress tables on the following pages.

Results Chain

Figure 2: Results chain for Oregon All Counties CCAA (Sage-Grouse)

Progression of the Results Chain.



Measuring Progress

Monitoring and communication of the Initiative's progress occurs at the local scale (within the scope of the Initiative) and will contribute to reporting at the state or regional scale. At the Initiative scale the implementing members of the Steering Committee will measure and communicate progress towards achieving implementation objectives and effectiveness or ecological outcomes objectives outlined in Table 1 and specified in Site Specific Plans for each treated property.

Data will be processed, summarized, and reported at the initiative level as well, with partners, landowner, OWEB and other funders engaged in communicating progress.

Data collected from the Initiative will be reported to a state-level database for integration into a regional monitoring and reporting framework, thereby contributing to analysis and reporting at the landscape and population scale (status and trend monitoring).

OUTPUTS

Implementation Progress

Table 1. Implementation results objectives and metrics. The result numbers correspond to results shown in the results chain (Figure 2) and theories of change.

IMPLEMENTATION RESULTS

OBJECTIVES

METRICS

1	Privately owned PPH sage-grouse habitat enrolled in CCAAs	By September 30, 2017, 40% (608,000 acres) of privately owned PPH sage-grouse habitat will be enrolled in CCAAs.	Percent of privately owned PPH in focal area with approved SSPs by 9/30/17
2	Site Specific Plans are completed	Complete Site Specific Plans for 40% (608,000 acres) of privately owned PPH sage-grouse habitat Complete Site Specific Plans for 40% (199,778 acres) of privately owned PPH sage-grouse habitat in the FIP Focal Area by 9/30/2017. (13% of all privately owned PPH.)	Percent of privately owned PPH in focal area with approved SSPs by 9/30/17
3	Assistance for landowners to apply for and receive technical and financial assistance to implement conservation actions is provided	Assist landowners in applying for and receiving technical and financial assistance as needed to implement conservation measures according to the timeframes specified in the site specific plans. Assist landowners in applying for OWEB FIP funding.	Percent of landowners applying for FIP funding receiving assistance
4	Exotic annual grasses are removed from sage-grouse habitat	30,900 acres of sage-grouse habitat have conservation measures applied to address exotic annual grasses by 6/30/2022. 8,550 acres of sage-grouse habitat in the FIP Focal Area have conservation measures applied to address exotic annual grasses by 6/30/2022	Number of acres with applied conservation measures (or percent of objective)
5	Juniper are removed from sage-grouse habitat	Remove 117,680 acres of juniper from sage-grouse habitat by 6/30/2022. Remove 14,680 acres of juniper from sage-grouse habitat in the FIP Focal Area by 6/30/2022.	Number of acres treated for juniper removal (or percent of objective)
6	Conservation measures to address the threat of fire are implemented	608,000 acres have conservation measures applied to address the threat of wildfire by 2045. 199,778 acres have conservation measures applied to address the threat of wildfire by 6/30/2022.	Number of acres with conservation measures to address wildfire (or percent of objective completed)
7	Managed grazing systems are implemented	Threats to sage-grouse (other than wildfire, exotic annual grasses, and conifer encroachment) will be identified and conservation measures will be implemented on 90% of the enrolled CCAA properties. Manage grazing systems on 199,778 acres of sage-grouse habitat in the FIP Focal Area by 6/30/2022	Number of CCAA enrolled acres with managed grazing systems (or percent of objective completed)
8	Fences in high risk collision areas are marked	Mark 146 miles of fence in high risk collision areas within the FIP Focal Area by 6/30/2022	Miles of fence marked (or percent of objective)
9	Wildlife escape ramps are installed in livestock watering troughs	Install escape ramps in 250 troughs located in the FIP Focal Area by 6/30/2022.	Number of troughs with escape ramps (or percent of objective)

Table 2. Ecological results potential objectives and potential metrics. The result numbers correspond to results shown in the results chain (Figure 1) and theories of change.

Given the complexity of ecosystems, continued assessments and planning will be required to support development of specific, measurable objectives for desired ecological outcomes.

OUTCOMES

Ecological Progress

LIMITING FACTOR REDUCTION OR INTERMEDIATE ECOLOGICAL RESULTS

POTENTIAL OBJECTIVES

POTENTIAL METRICS

10	Spatial extent of desired plant cover increases	To be determined through preliminary post-project monitoring	Perennial bunchgrass basal cover and density - change from baseline toward desired ecological state Niche occupation by bare-ground or desirable annual forbs - change from baseline toward desired ecological state Sagebrush cover and density – change from baseline toward desired ecological state
11	Woodland type plant communities decrease	To be determined through preliminary post-project monitoring	Conifer cover in treated sites
12	Post fire plant community recovery favors desired plant species	To be determined through preliminary post-project monitoring	To be determined through continued assessment and planning.
13	Condition and extent of perennial bunch grasses and forbs are increased	To be determined through preliminary post-project monitoring	To be determined through continued assessment and planning.
14	Extent and connectivity of desired plant communities (composition, structure, and function) is improving	60% of enrolled private lands in Oregon will exhibit a stable to improving trend in ecological condition by 2022	Percent of enrolled acres in FIP Focal Area with a stable to improving trend.
15	Habitat containing nesting cover and food for sage-grouse is restored	117,680 acres of potential habitat identified as being in ecological states that do not currently provide seasonal or year round habitat during baseline inventory will transition to ecological states capable of providing seasonal or year round habitat by 2022.	To be determined through continued assessment and planning.

Status & Trends

ECOLOGICAL PRIORITIES

Sagebrush / Sage-Steppe Habitat
Greater Sage-grouse

Monitoring the status and trends of ecological priority habitats and focal species will include coordination with agencies or conservation organizations operating at the appropriate landscape or population scales. FIP partners will work with these entities to establish a process for integrating their monitoring framework with existing status and trends monitoring programs (if they occur) or to establish an approach for identifying key ecological attributes that should be measured to document and communicate change in the status and trajectory of ecological priority habitats and focal species populations.