

# The Building Blocks for Oregon's Wildlife

Integrating the Oregon Native Seed  
Strategy and the State Wildlife Action Plan

# Oregon's Remarkable Botanical Wealth

- Ranking in the top five among all US states in vascular plant diversity.
- Home to approximately 3,500 native vascular plant species.
- The foundation of nine distinct ecoregions, each harboring unique plant communities.
- These plants provide essential ecosystem services: wildlife habitat, food security, carbon sequestration, and culturally significant materials for indigenous peoples.

**Top 5**  
**3,500 Species**



# The Big Three Conservation Issues

The State Wildlife Action Plan (SWAP) identifies three interconnected threats destabilizing Oregon's ecosystems:



## 1. Altered Fire Regimes:

A legacy of fire suppression leading to uncharacteristically severe wildfires.



## 2. Invasive Species:

Non-native organisms like cheatgrass and medusahead causing profound environmental harm.



## 3. Climate Change:

Increased aridity, drought frequency, and changing habitat viability.

# The Vision: State Wildlife Action Plan (SWAP)

The SWAP is Oregon's blueprint for conservation. It tells us where to go and what we want to save.

## Core Goals:

1. Maintain healthy fish and wildlife populations by maintaining and restoring functioning habitats.
2. Prevent declines of at-risk species.
3. Reverse declines where possible.



# The Mechanism: Oregon Native Seed Strategy (ONSS)

The ONSS provides the tactical tools and biological fuel required to execute the SWAP.

**Core Vision:** Return Oregon lands to diverse, functional, and resilient ecosystems by using the right *right seed in the right place at the right time.*





# The 5 Core Goals

- 1. Ensure Seed Availability:** Provide ecologically appropriate native seed for restoration, rehabilitation, and mitigation.
- 2. Facilitate Research:** Address scientific gaps in native seed production, seedling establishment, and species interactions.
- 3. Develop Resources:** Build tools and inventory systems that enable land managers and growers to make timely, informed decisions.
- 4. Conservation Seed Banking:** Prioritize and implement long-term storage programs to enhance the recovery of sensitive species.
- 5. Secure Funding & Communications:** Develop business plans for stable funding and coordinate broad education and outreach across networks.

# Executive Order 25-26 mandates a resilient future for Oregon.

The EO sets ambitious, necessary targets for the state's natural and working lands:



Conserve, connect, or restore 10% of Oregon's lands and waters in 10 years.



Enhance climate resilience across working lands.



Protect communities from catastrophic wildfire.



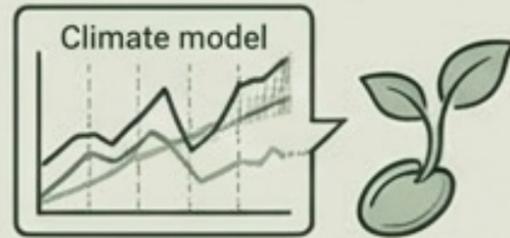
Ensure durable conservation outcomes with multiple co-benefits.



# Operationalizing the EO definition of climate resilience.

The Strategy directly executes the four pillars of resilience required by the Executive Order:

## Anticipate



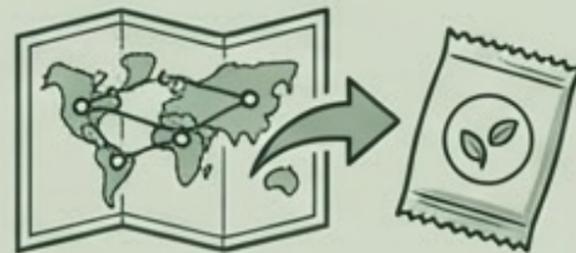
Seed forecasting systems predict restoration needs based on wildfire projections and climate models (Objective 1.1).

## Prepare



Strategic expansion of seed collection, production, and storage capacity ensures availability before disasters occur (Goal 1).

## Respond



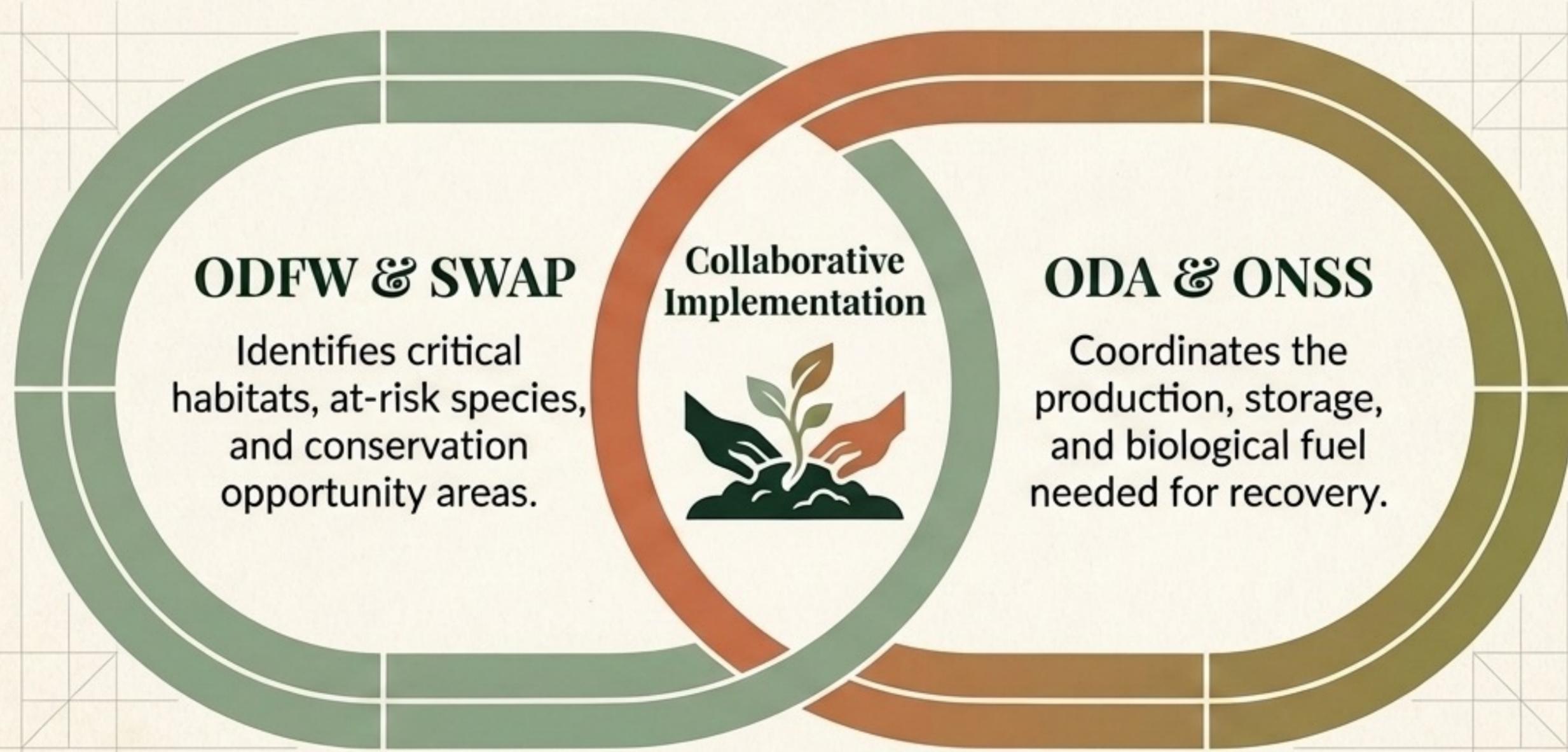
Emergency seed reserves and regional coordination networks allow for rapid deployment post-disturbance (Actions 1.1.3, 1.4.3).

## Recover



Dedicated research on climate-adapted seed sources supports long-term ecosystem recovery (Action 2.3.2).

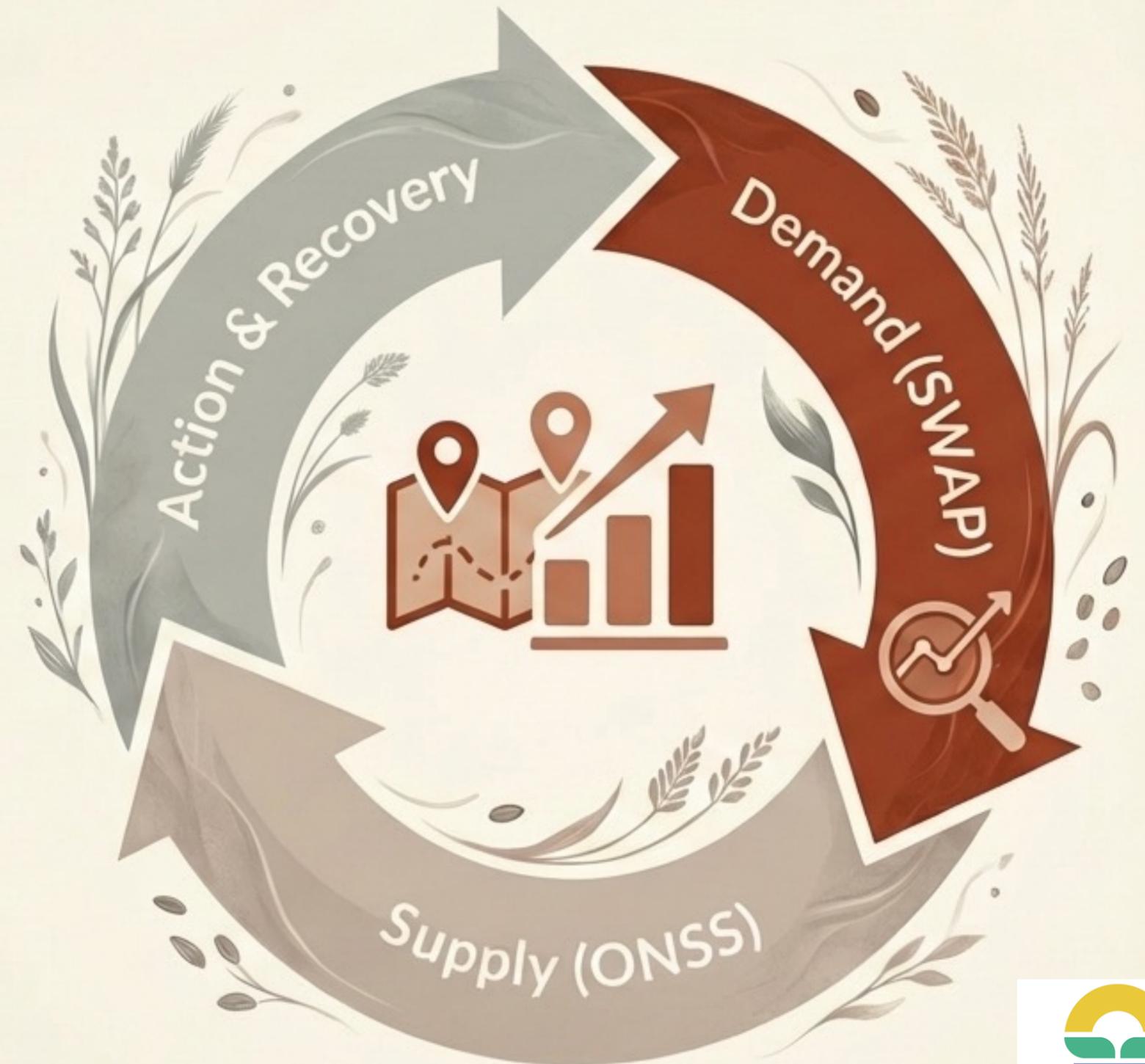
# The Partnership Engine



**ODFW is not a passive beneficiary of the Seed Strategy, they are an active cooperator and logistical partner working alongside ODA to ensure seeds reach the soil**

# Step 1: Demand & Prioritization

- **SWAP Identifies:**  
Priority habitats, Key Conservation Issues, Conservation Opportunity Areas, and high-risk post-fire zones.
- **ONSS Responds (Objective 1.1):**  
This data directly informs ONSS seed forecasting and quantification. Regional networks use SWAP data to guide species prioritization and predict seed needs.



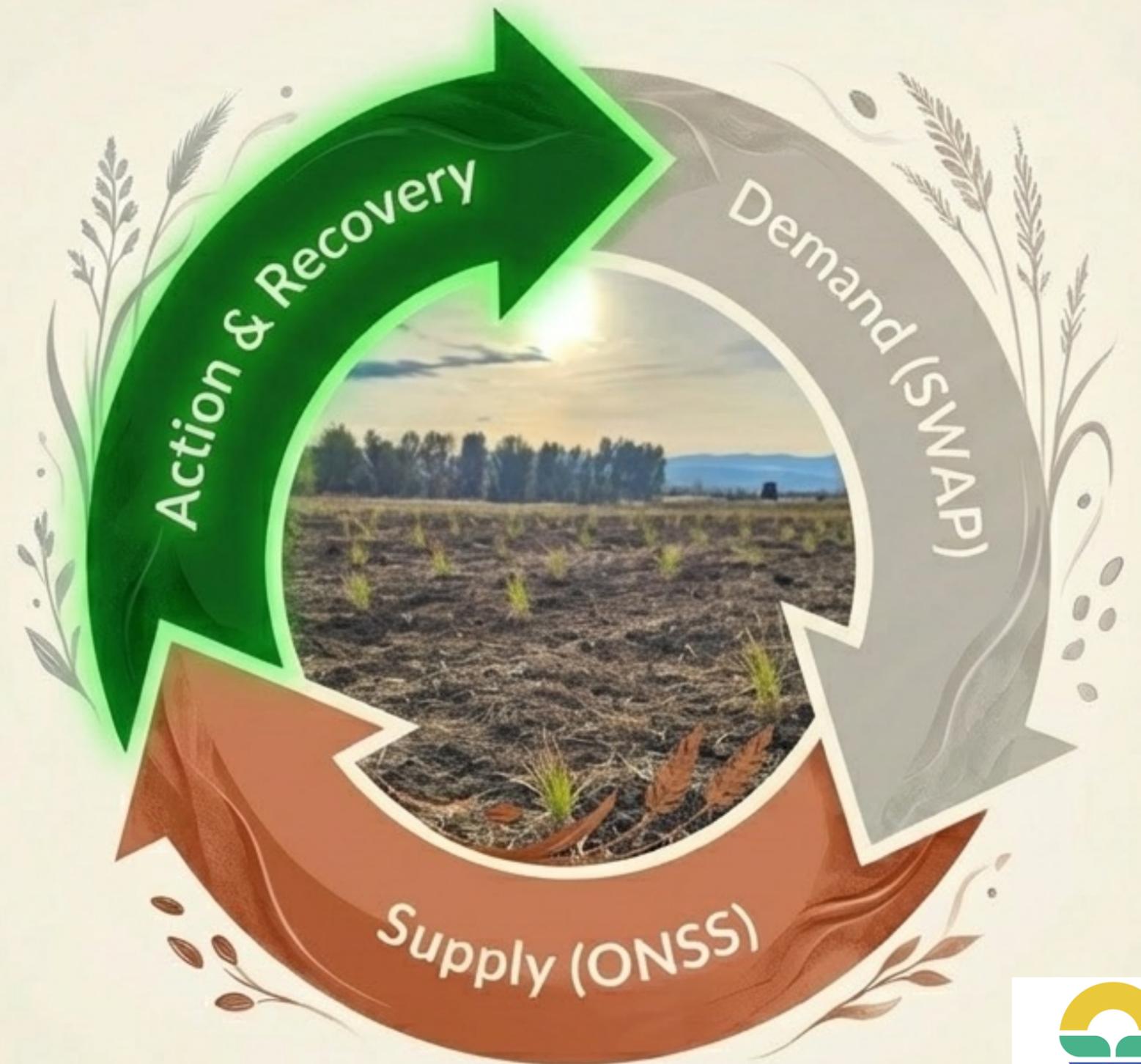
# Step 2: Supply & Production

- **ONSS Coordinates:** Wildland seed collection, massive-scale seed production, cleaning, and storage capacity.
- **ONSS Researches (Goal 2):** Conducts research to improve seed production and characterize genetic variation.
- **Result:** A robust, ecologically appropriate seed supply tailored to the demands forecasted by the SWAP.



# Step 3: Action, Recovery & Assessment

- **Action:** Ecologically appropriate seeds are deployed to target landscapes.
- **Recovery:** Habitats recover functionality, resisting invasive species and altered fire regimes.
- **Feedback:** SWAP goals are met, baselines improve, and new ecological data feeds back into the system to refine the next cycle of demand.



# Synergy 1: Aligning Overarching Goals

## SWAP Goal 1:

Maintain and  
restore  
functioning  
habitats.



## ONSS Goal 1:

Ensure ecologically  
appropriate native  
seed is available for  
restoration,  
rehabilitation, and  
mitigation.

**The Synergy:** Habitats are simply communities of plants. Restoring functioning habitats is biologically impossible without an abundant, reliable supply of ecologically appropriate native seeds.

# Synergy 2: Breaking the Vicious Cycle

We cannot manage Altered Fire Regimes or out-compete Invasive Species through policy alone.

A shared understanding of the need for  
**ACTION**



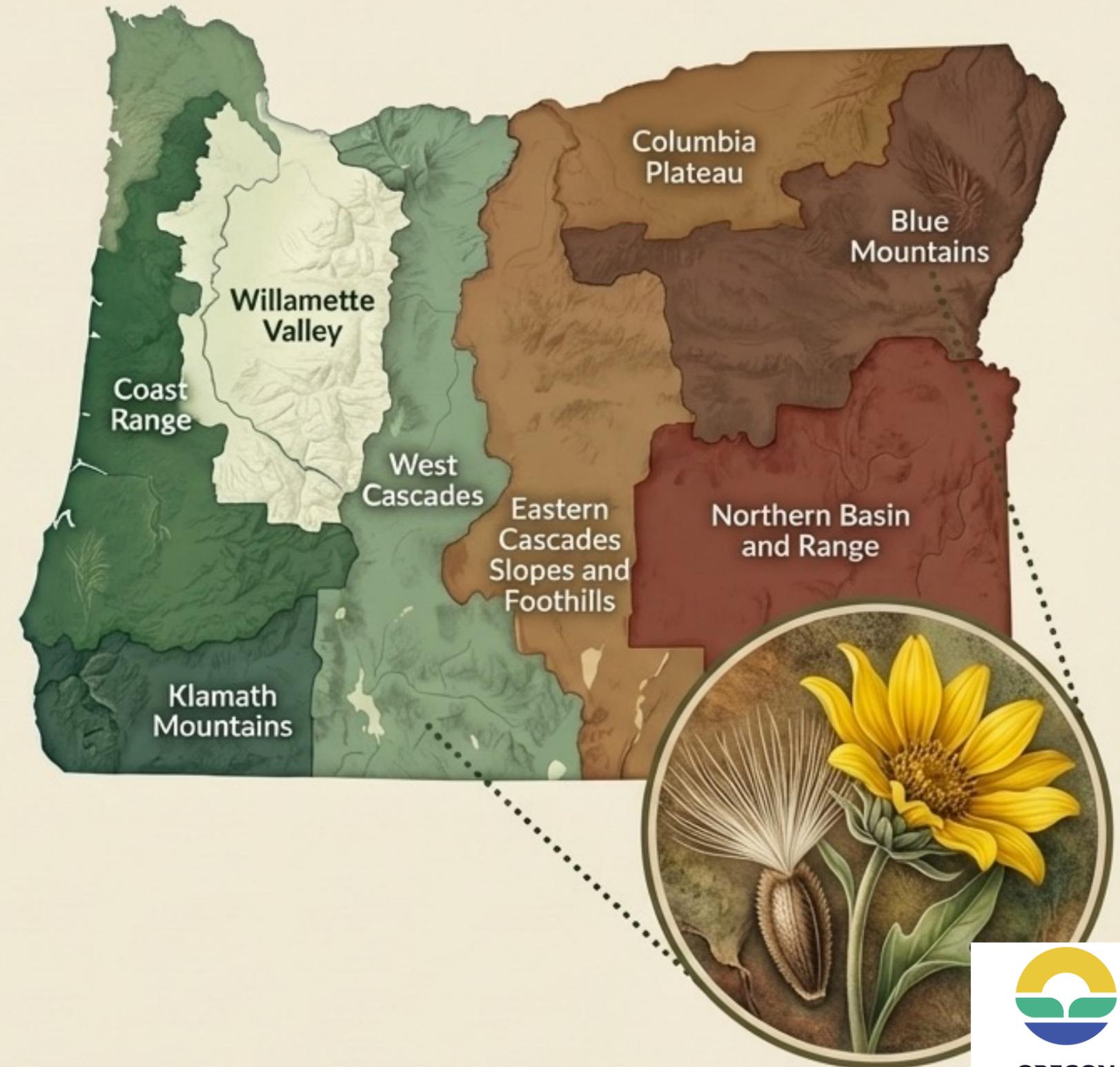
# Synergy 3: Climate Adaptation through Genetics

- **The SWAP Threat:**  
Changing temperatures and drought dramatically shrink available habitat and threaten local species with extirpation.
- **The ONSS Solution:**  
Conserving genetic diversity within native plant species provides the resilience needed for climate adaptation.
- **Collecting and preserving genetic materials** from habitat fragments thriving despite climate impacts provides the foundation for future conservation introductions.

# Synergy 4: Scaling via Ecoregions

Both frameworks rely on Oregon's Level III Ecoregions to scale their efforts accurately.

- **SWAP Approach:** Evaluates vulnerability and plans conservation at a landscape-scale across broad ecoregions.
- **ONSS Approach:** Utilizes Level III Ecoregions and empirical seed zones to guide seed transfer decisions, ensuring that plant materials are adapted to survive their unique local abiotic and biotic conditions.



# Synergy 5: Restoring Key Habitats

- **Target:** Sagebrush Steppe Ecosystems (SWAP Key Habitat).
- **Threat:** Habitats formerly dominated by sagebrush are now overrun by invasive annuals, failing to meet the needs of native wildlife.
- **Action:** Coordinated ONSS production of native sagebrush, grasses, and forbs to reseed degraded landscapes, directly supporting Species of Greatest Conservation Need (SGCN) like the Greater Sage-Grouse.



# Synergy 6: Protecting Conservation Opportunity Areas

- **ONSS Goal 4:** Develop a Conservation Seed Banking Program to prioritize and enhance the recovery of sensitive plant species.
- **SWAP Integration:** By preventing the extirpation of rare native flora, we preserve the foundational architecture of SWAP's Conservation Opportunity Areas (COAs). Protecting rare plants ensures the survival of the rare fauna that depend on them.



# Pillar 1: Advocacy, Alignment, and Knowledge Sharing

## **Agency Leadership: Elevating the Mission**

Agency leadership actively elevates the importance of native seed infrastructure.

## **Inter-Agency Strategy: The Oregon Native Seed Collective**

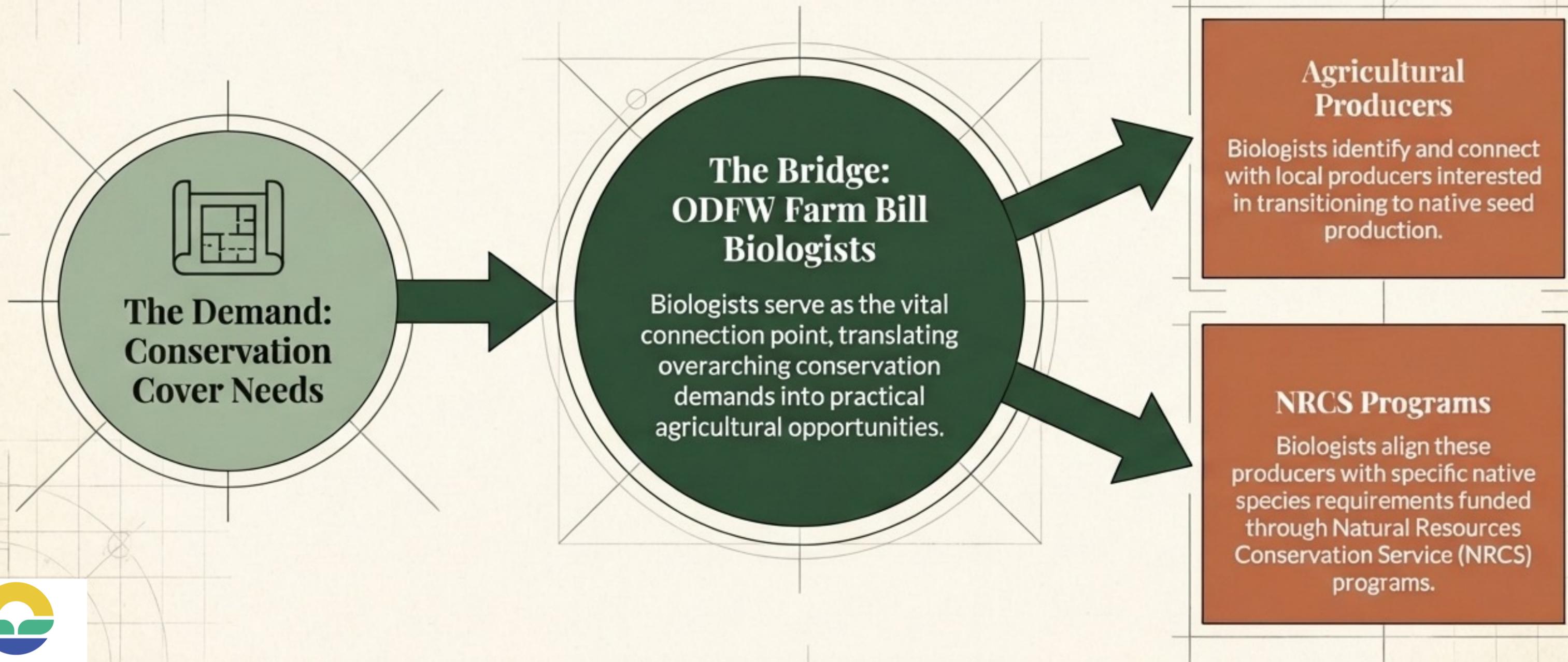
ODFW serves as a participating member of the ONSC, directly sharing ideas, connections, and grant development resources to advance the ONSS blueprint.

## **External Networks: Public Amplification**

Agencies jointly share SWAP and ONSS objectives with external staff and partners, including co-presenting at major conferences.



# Pillar 2: Activating the Landscape via Farm Bill Biologists



# Pillar 3: Leveraging ODFW Public Lands for Production



## Wildland Collection Sites

Source local genetics with specialized partners.



## Greenhouses & Plug Production

Scale seed volumes via ODA coordination.



## Foundation Lots

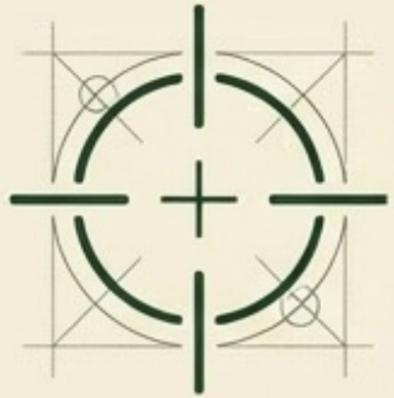
Establish initial increases using contractors.



## Production Fields

Achieve industrial-scale output through joint agency field operations.

# Pillar 4: Species-Specific Targeting

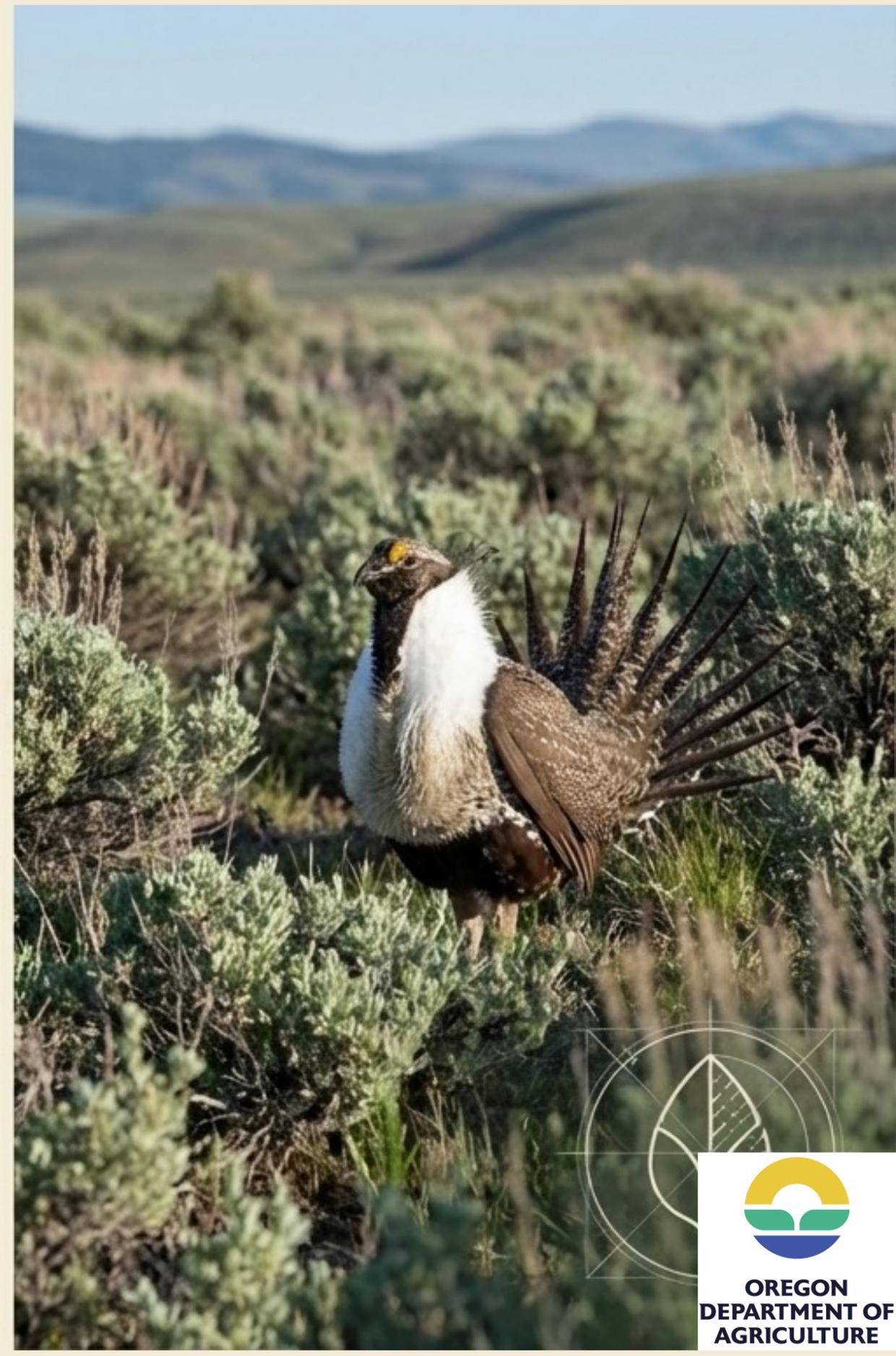


**True restoration requires that the plant community composition is aligned with the needs of the biota that inhabit the landscape.**

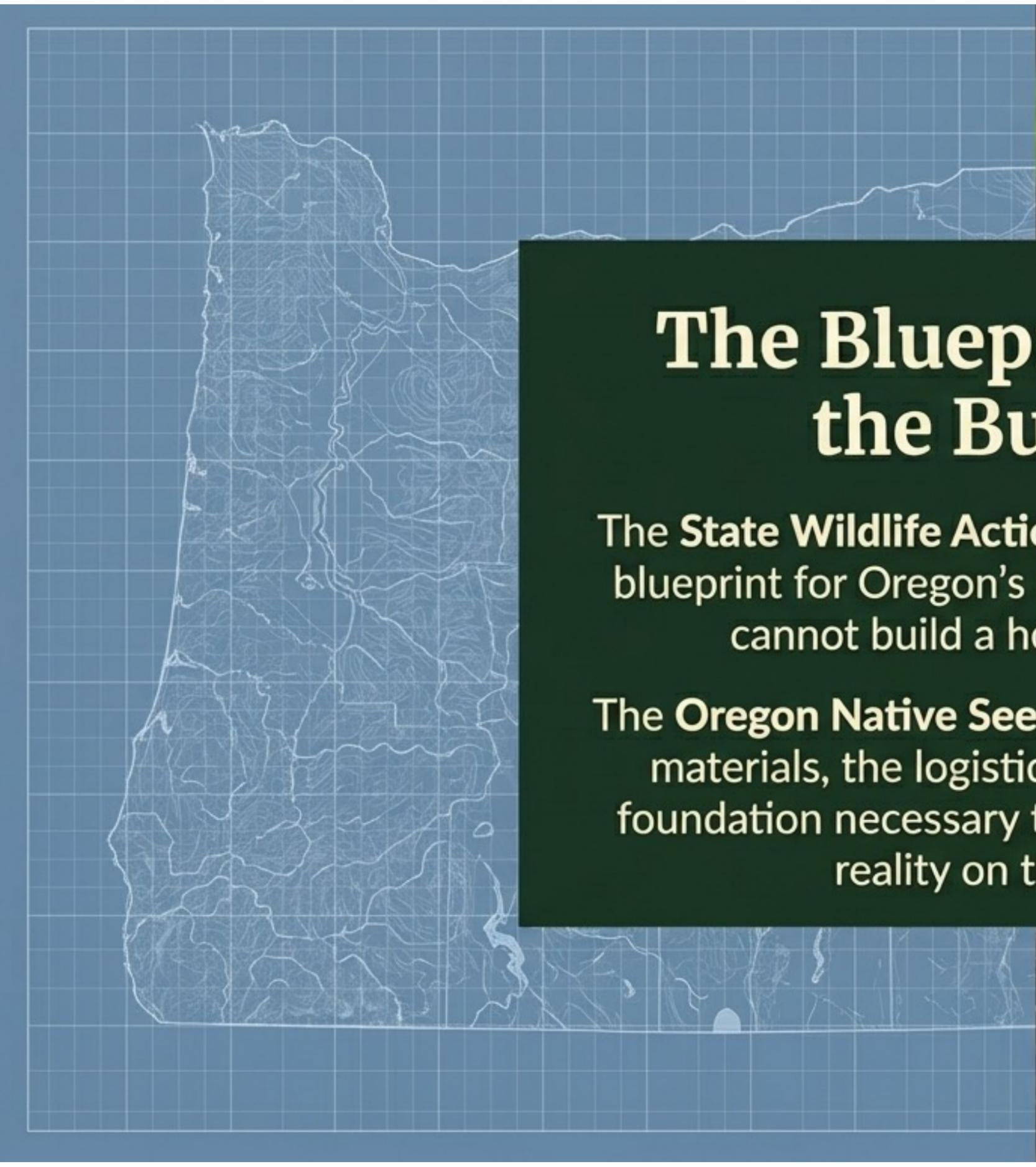
ODFW Wildlife Diversity staff analyze the State Wildlife Action Plan (SWAP) to isolate specific at-risk species.

Staff identify the habitat requirements to determine prescriptive restoration activities, identify necessary plant materials for those efforts.

This data is fed back into the ONSS network to inform collection and production priorities.



OREGON  
DEPARTMENT OF  
AGRICULTURE



# The Blueprint Needs the Builders

The **State Wildlife Action Plan** is a world-class blueprint for Oregon's future. But a blueprint cannot build a house on its own.

The **Oregon Native Seed Strategy** provides the materials, the logistics, and the biological foundation necessary to turn that vision into reality on the ground.