Welcome to
SageCon
Summit 2022

Managing new realities on the range:

Using a novel approach to coordinate planning and management on large landscapes

SageCon Partnership Summit Workshop
November 3, 2022
Burns, Oregon

HIGH DESERT Partnership

USDA ARS

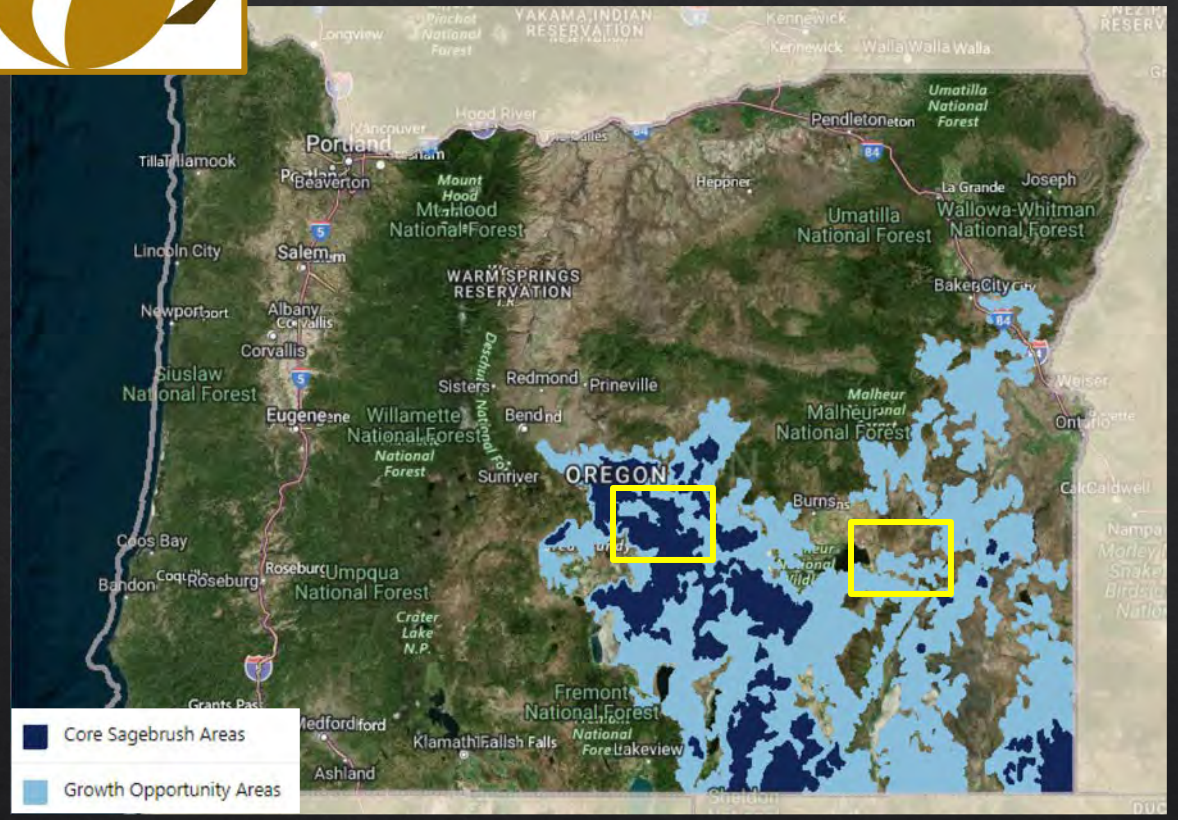
U.S. FISH & WILDLIFE SERVICE
DEPARTMENT OF THE INTERIOR

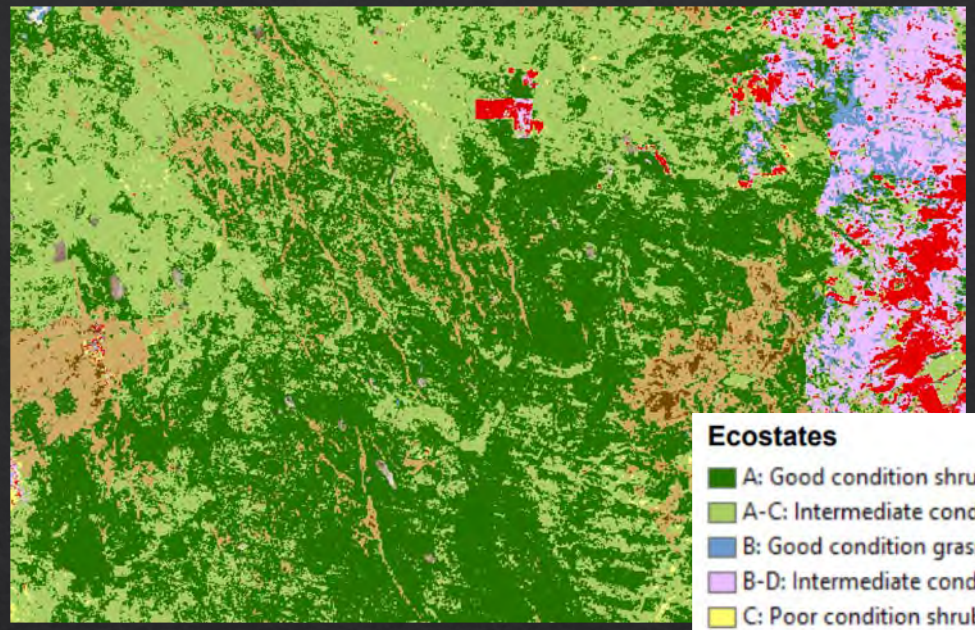
Oregon State University

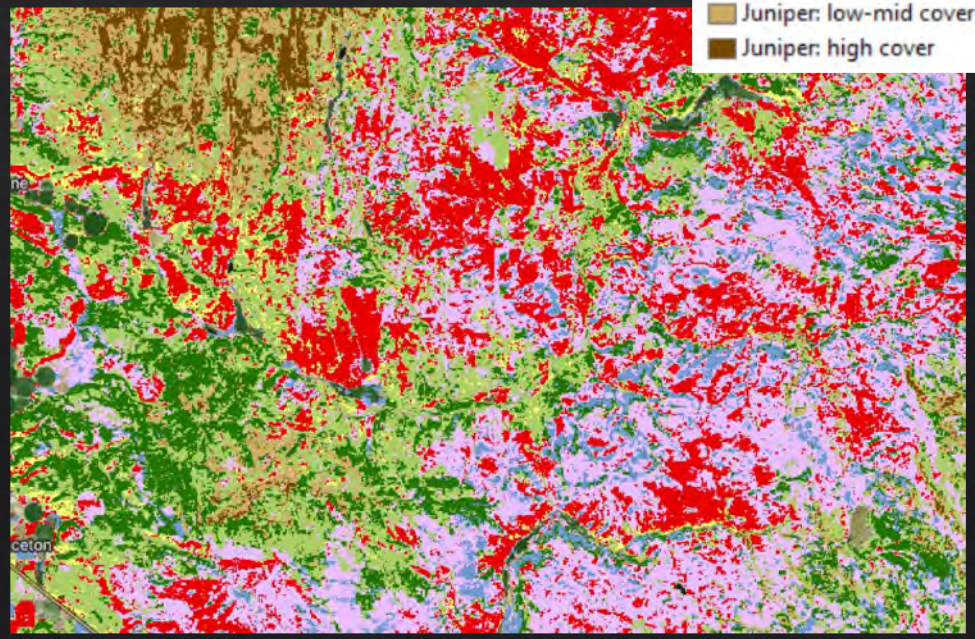
HARNEY COUNTY Wildfire COLLABORATIVE

INSTITUTE FOR NATURAL RESOURCES

Introduction







Ecostates

- A: Good condition shrubland
- A-C: Intermediate condition shrubland
- B: Good condition grassland
- B-D: Intermediate condition grassland
- C: Poor condition shrubland
- D: Poor condition grassland
- Juniper: low-mid cover
- Juniper: high cover

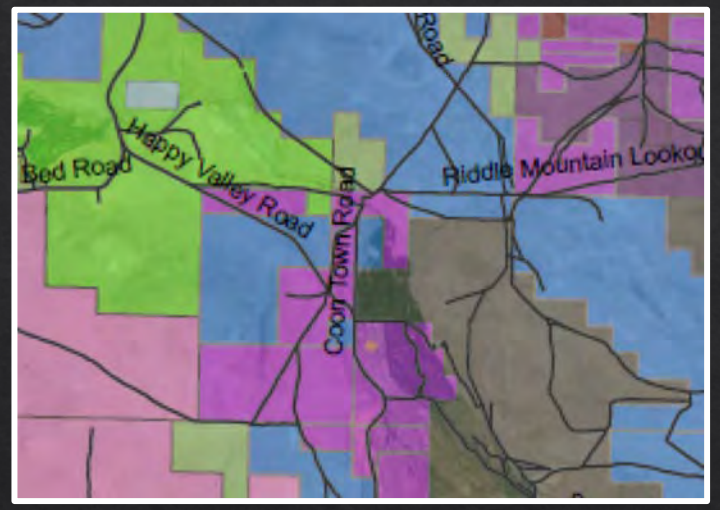
- **Connect** partners
- **Share** information, ideas & resources
- **Inspire** action

Ecological challenges:
Why is managing for rangeland resilience hard?

- Managing invasive annual grasses is challenging
- "Usual" tactics ineffective
- From event-based to process-based
- Not just ecological!

Social & Administrative challenges

- Barriers to collective actions
  - mixed ownership context
  - different values, resources, capacities
- Need to be defensible
- Knowledge gaps
- Resources



?

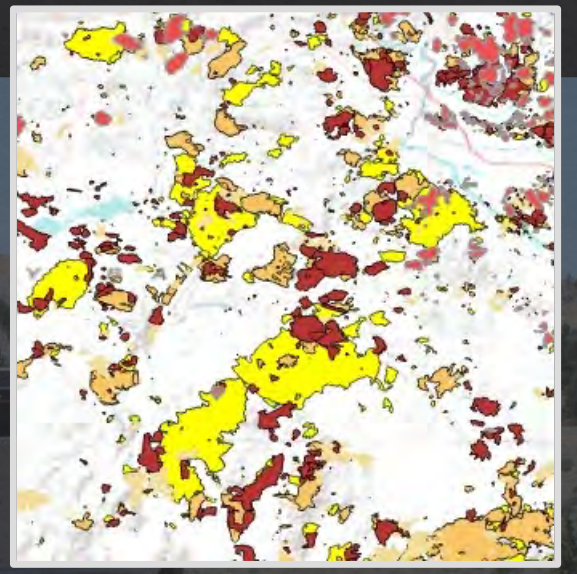
Strategy is key:
We can't work everywhere

- Be strategic in:
  - Where we work
  - Scale we work at
  - What we do
  - Who we work with

HARNEY COUNTY
Wildfire
COLLABORATIVE

A Collaborative is Born

- 2012 wildfire season
- Objectives
- Successes



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Antecedents for Success

- Common crisis
- Common vision/existing networks
- Mutual benefit
- Leadership

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Why the Stinkingwaters?

- First a pilot
- Social, administrative & ecological rationale
- Enabling conditions

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Get to know the Stinkingwaters

This is a very large area!

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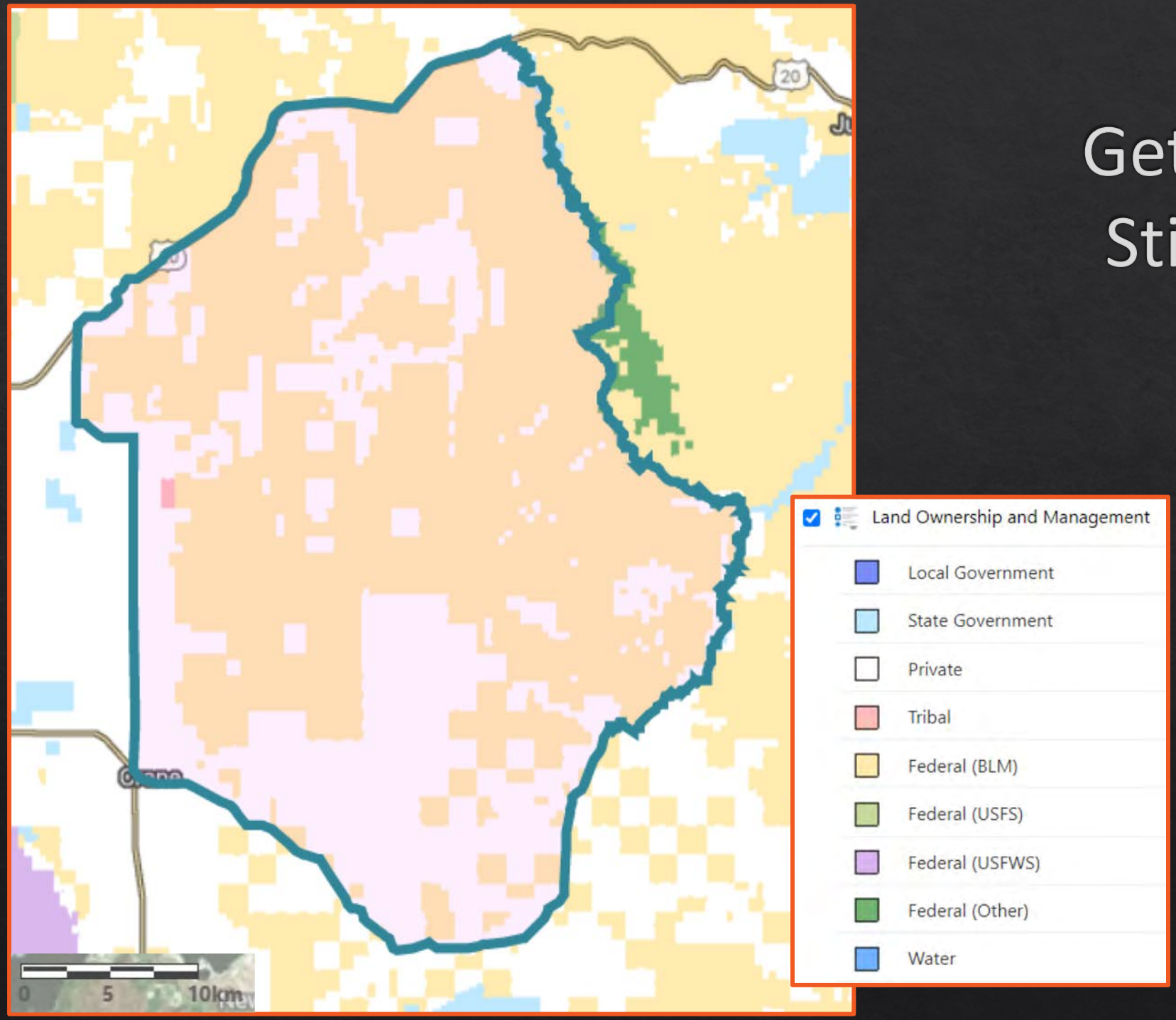
Get to know the Stinkingwaters

Ownership is complex



Land Ownership and Management

- Local Government
- State Government
- Private
- Tribal
- Federal (BLM)
- Federal (USFS)
- Federal (USFWS)
- Federal (Other)
- Water

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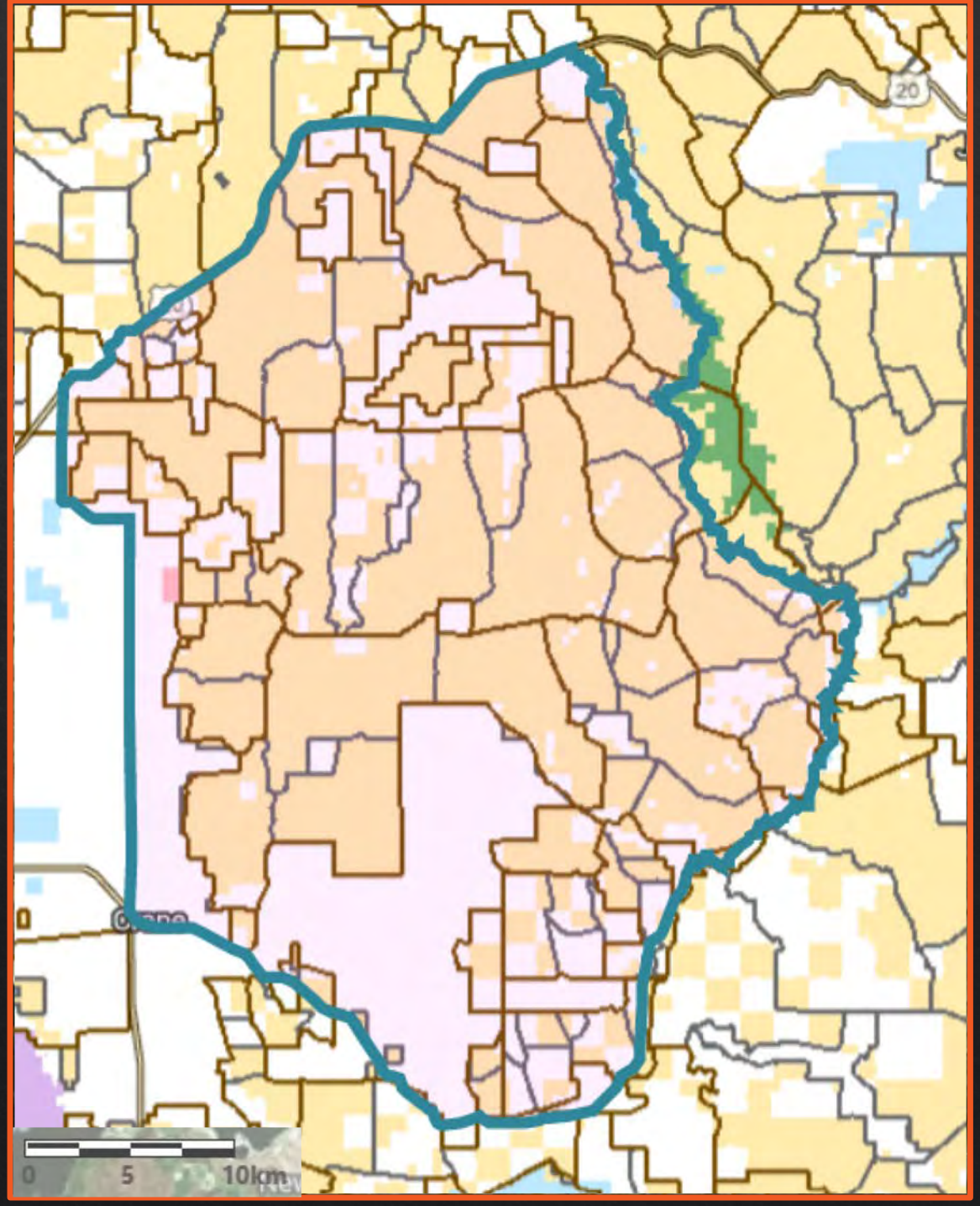

Get to know the Stinkingwaters

Even within BLM management is complex

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Get to know the Stinkingwaters

Fortunately, RFPAs cover this area

Rangeland Fire Protection Associations (RFPAs)

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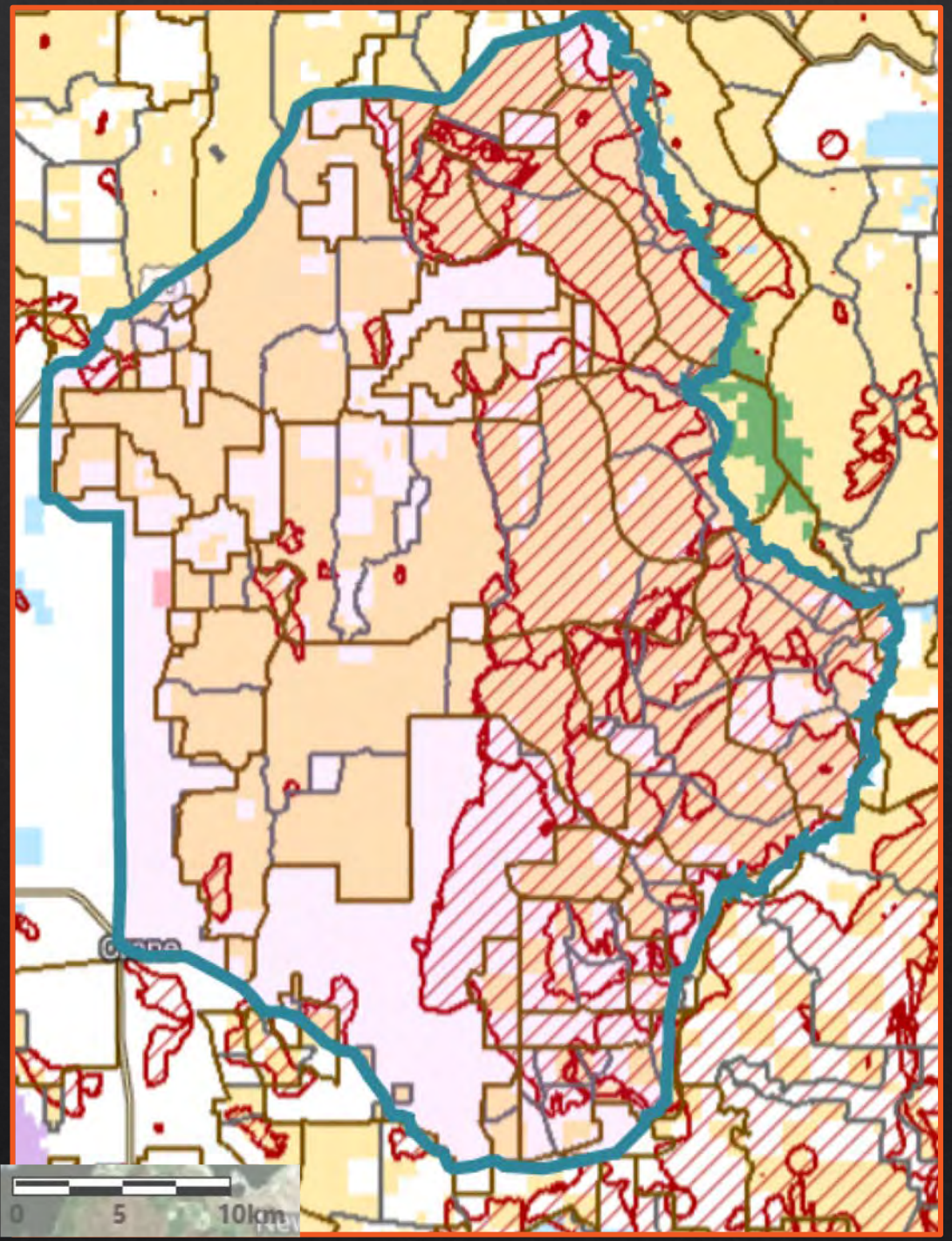

Get to know the Stinkingwaters

We have a history of large fires, across various management areas

Fire Perimeters (through 2020)

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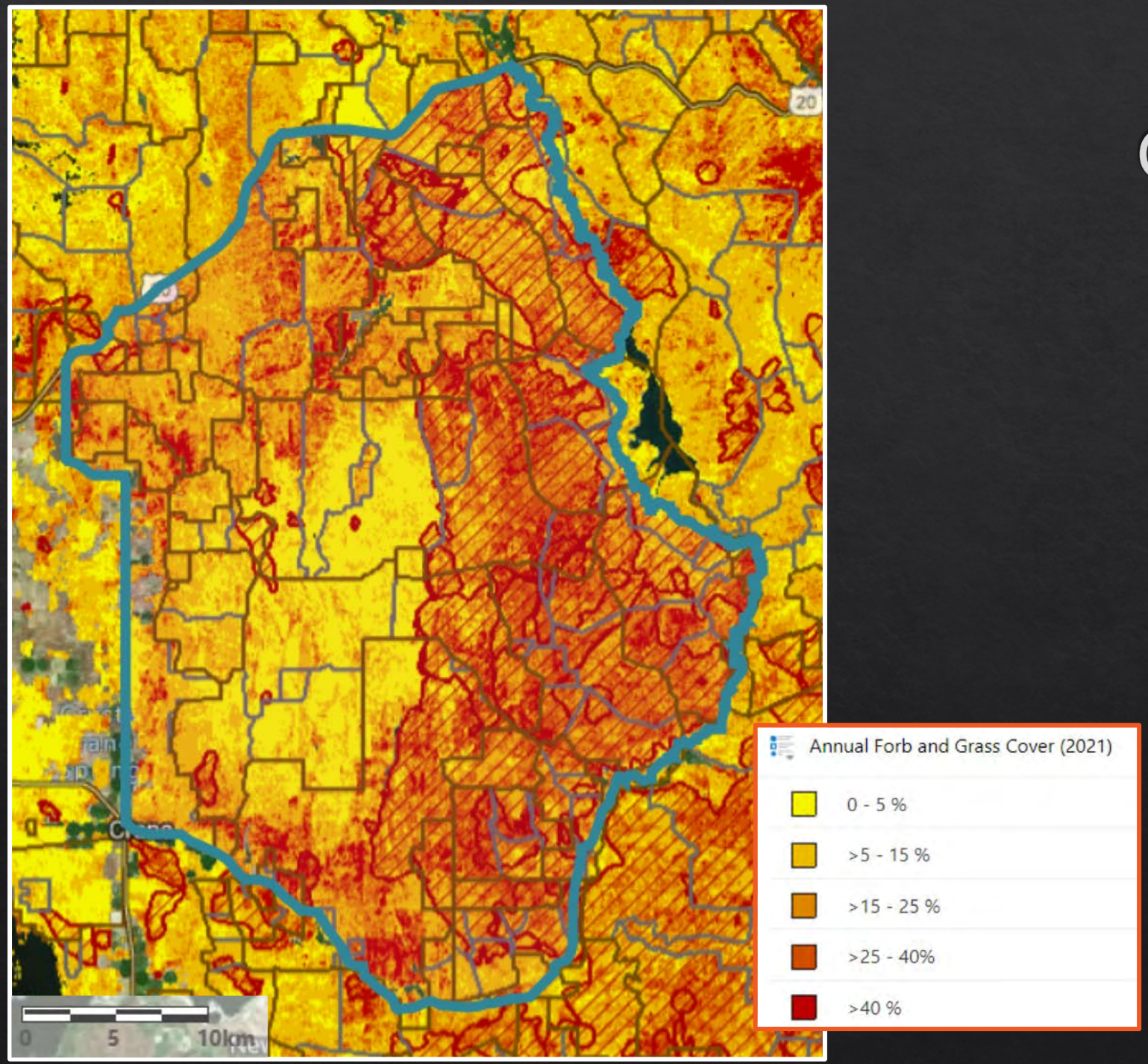
Get to know the Stinkingwaters

Ecological Threats



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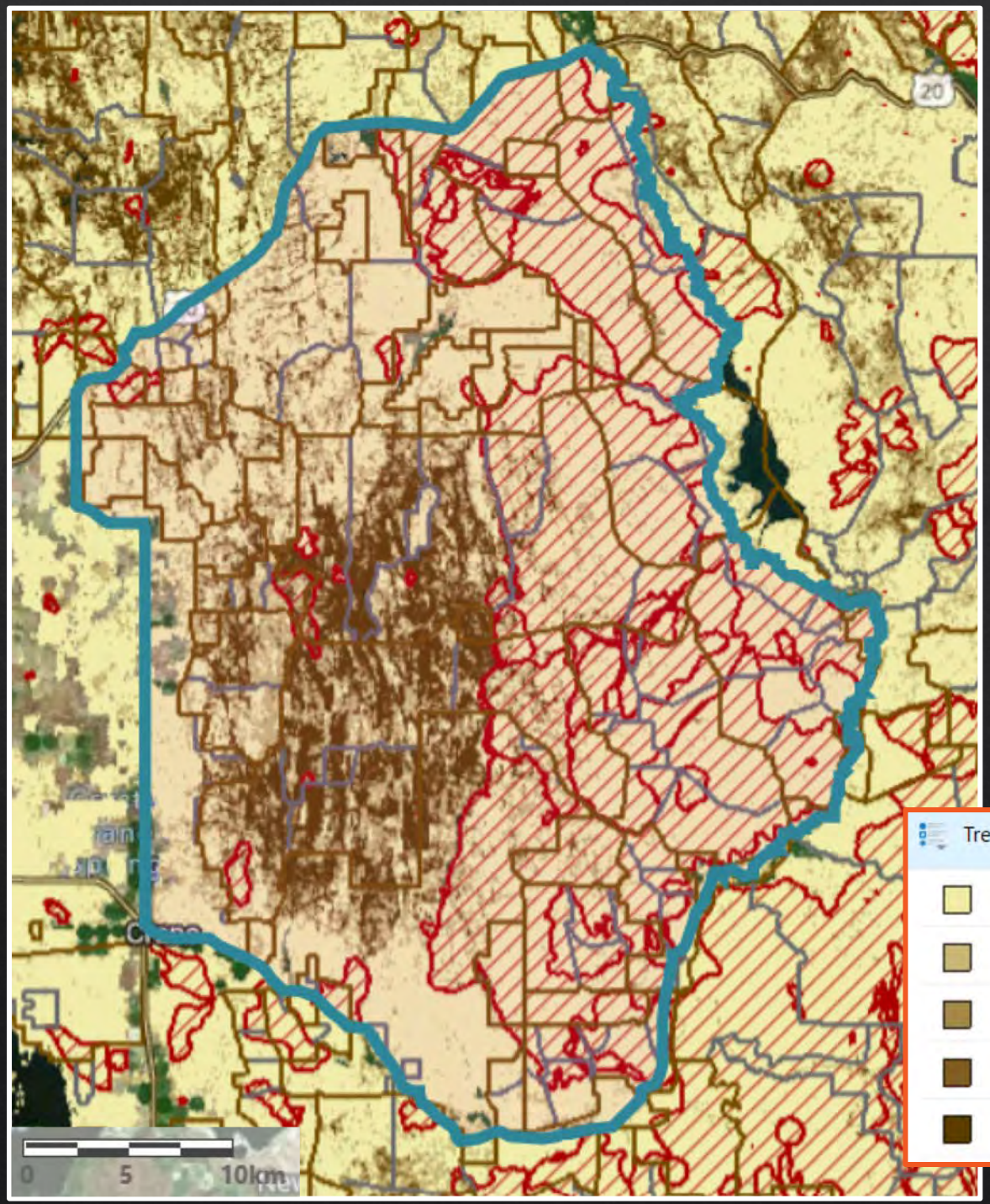

Get to know the Stinkingwaters

Ecological Threats

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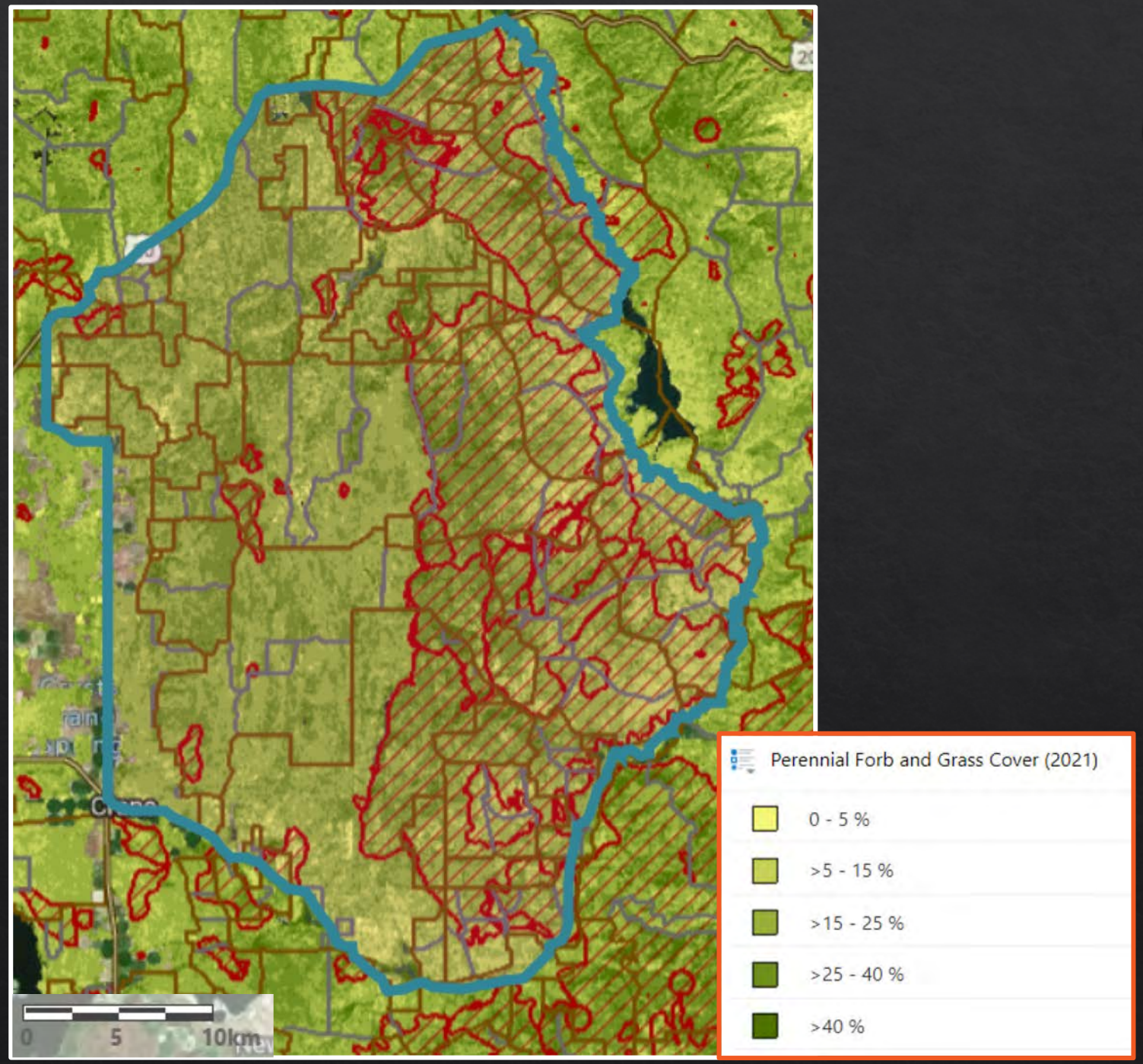
Get to know the Stinkingwaters

Ecological Conditions



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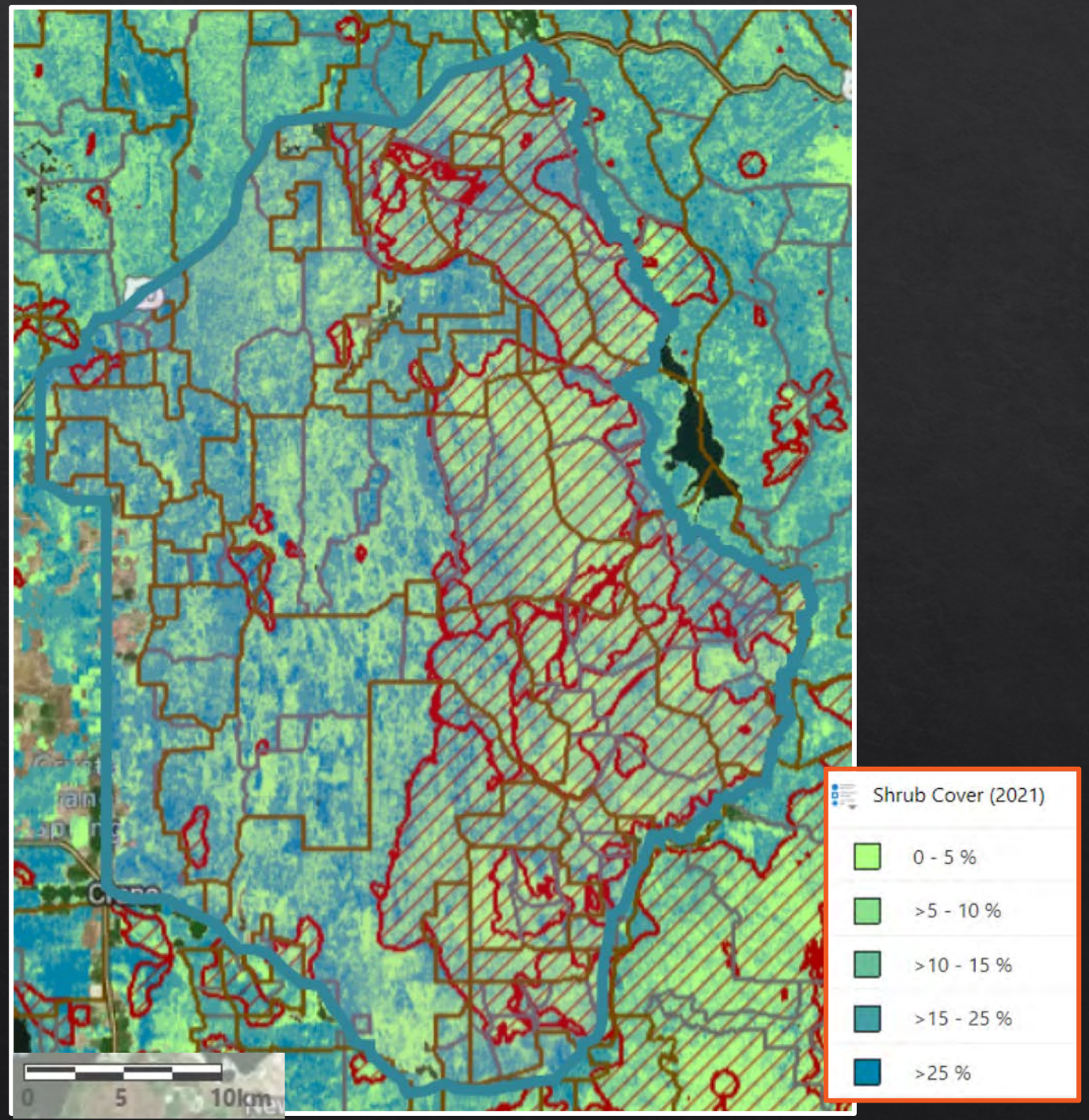
Ecological Conditions



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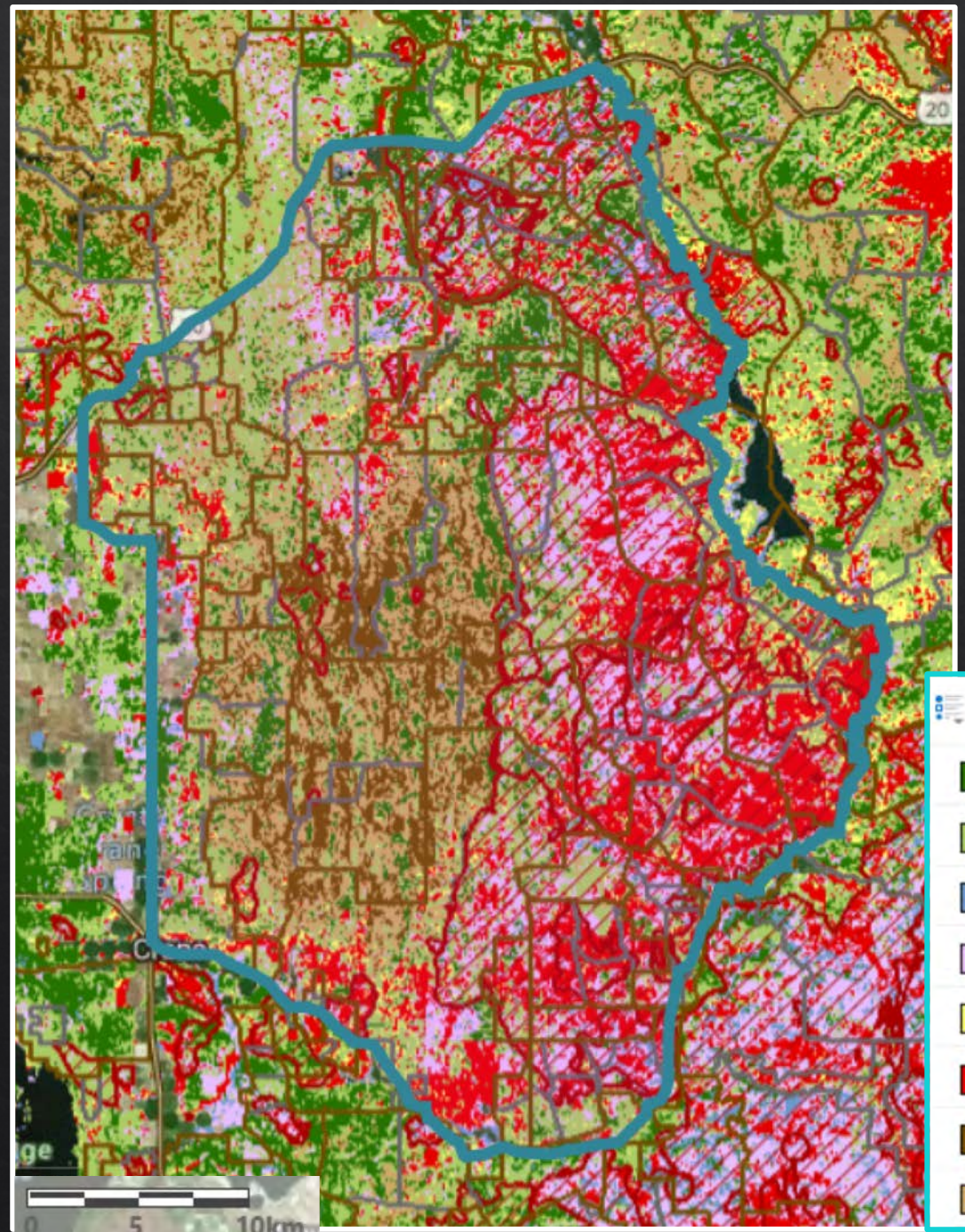

Threat Based Ecostates (2019 to 2021)

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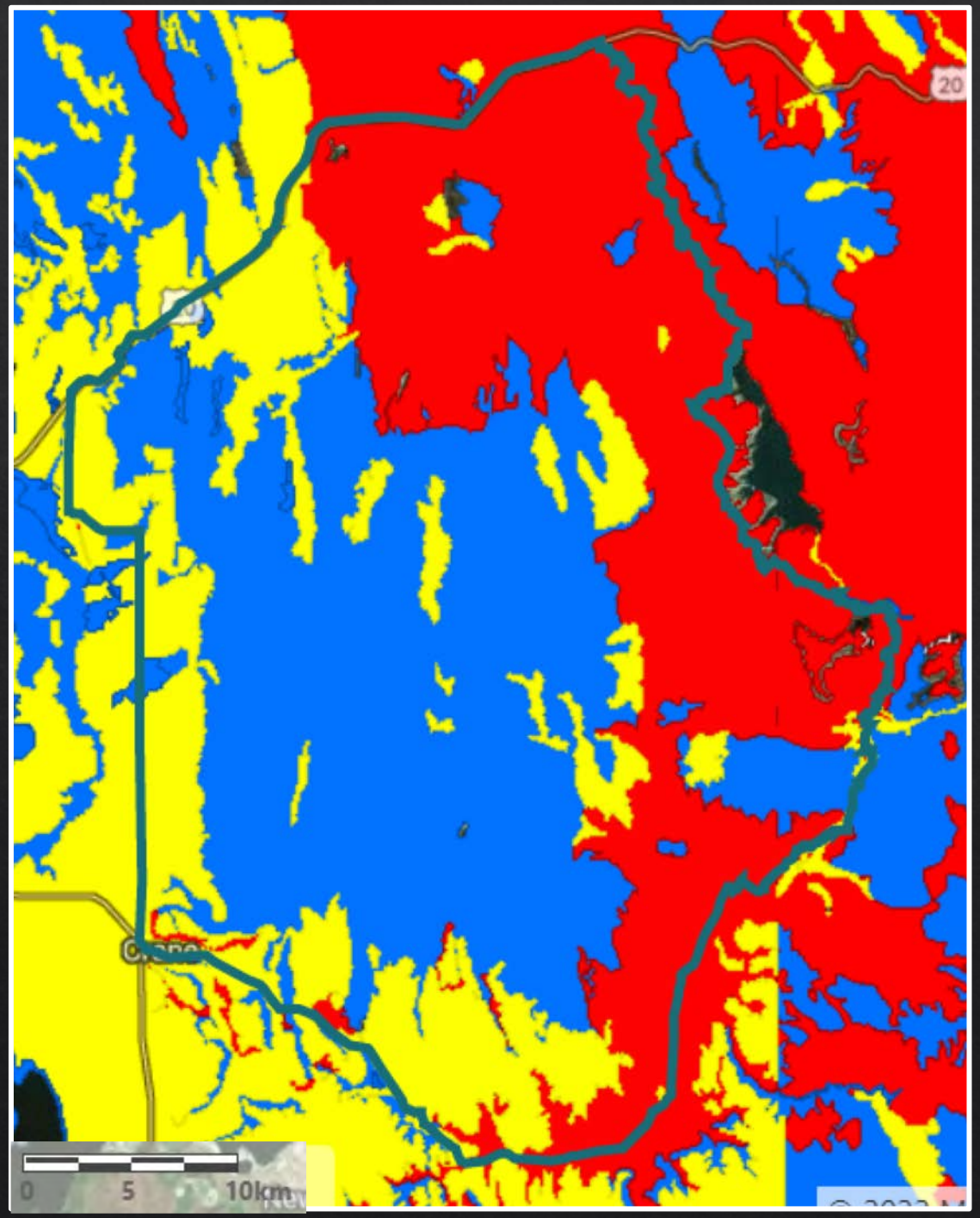

Get to know the Stinkingwaters

Resistance and Resilience

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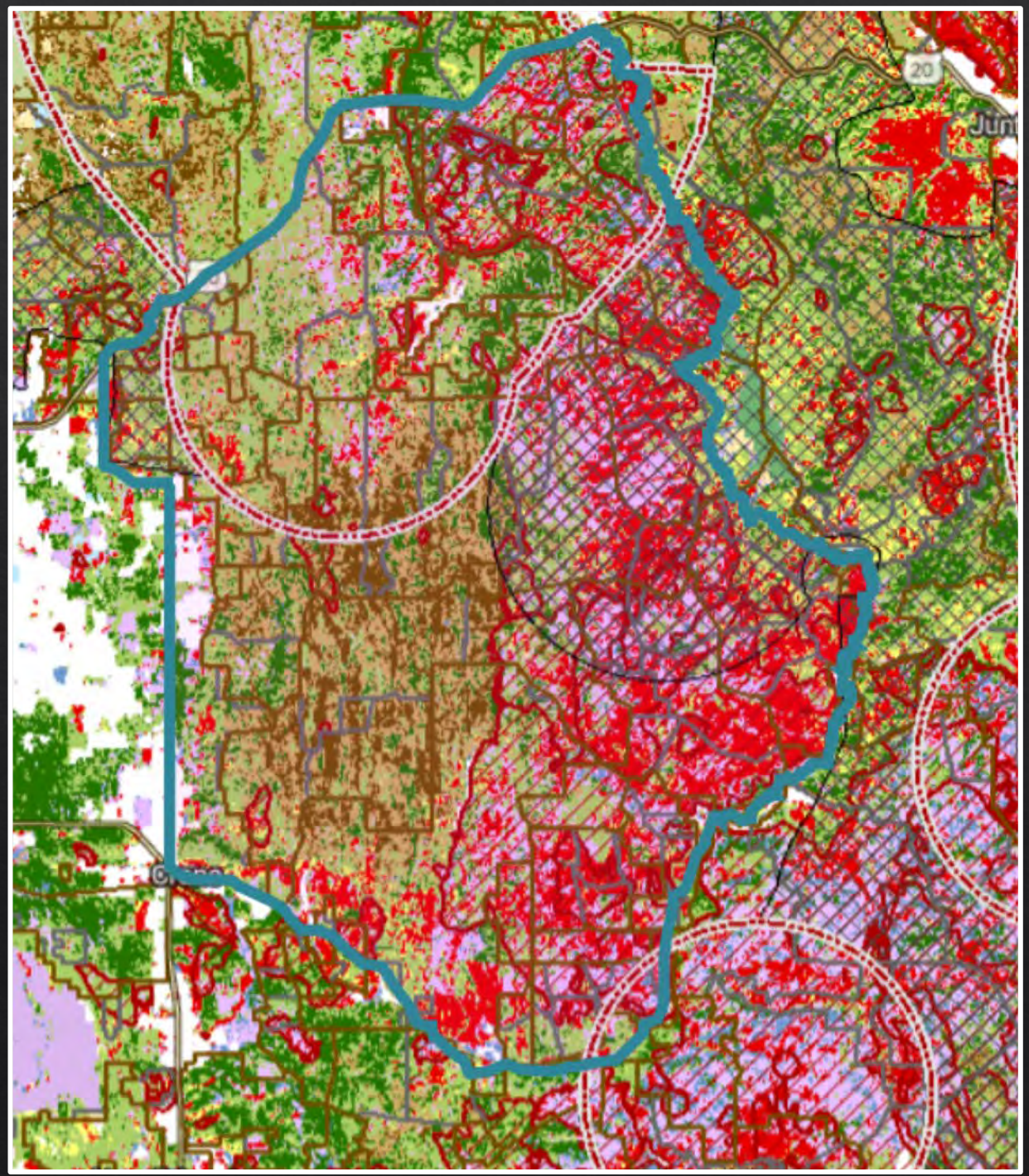

Get to know the Stinkingwaters

Wildlife: Sage-grouse

- Sage-Grouse Priority Areas for Conservation (PACs)
- Sage-Grouse Low Density Habitat

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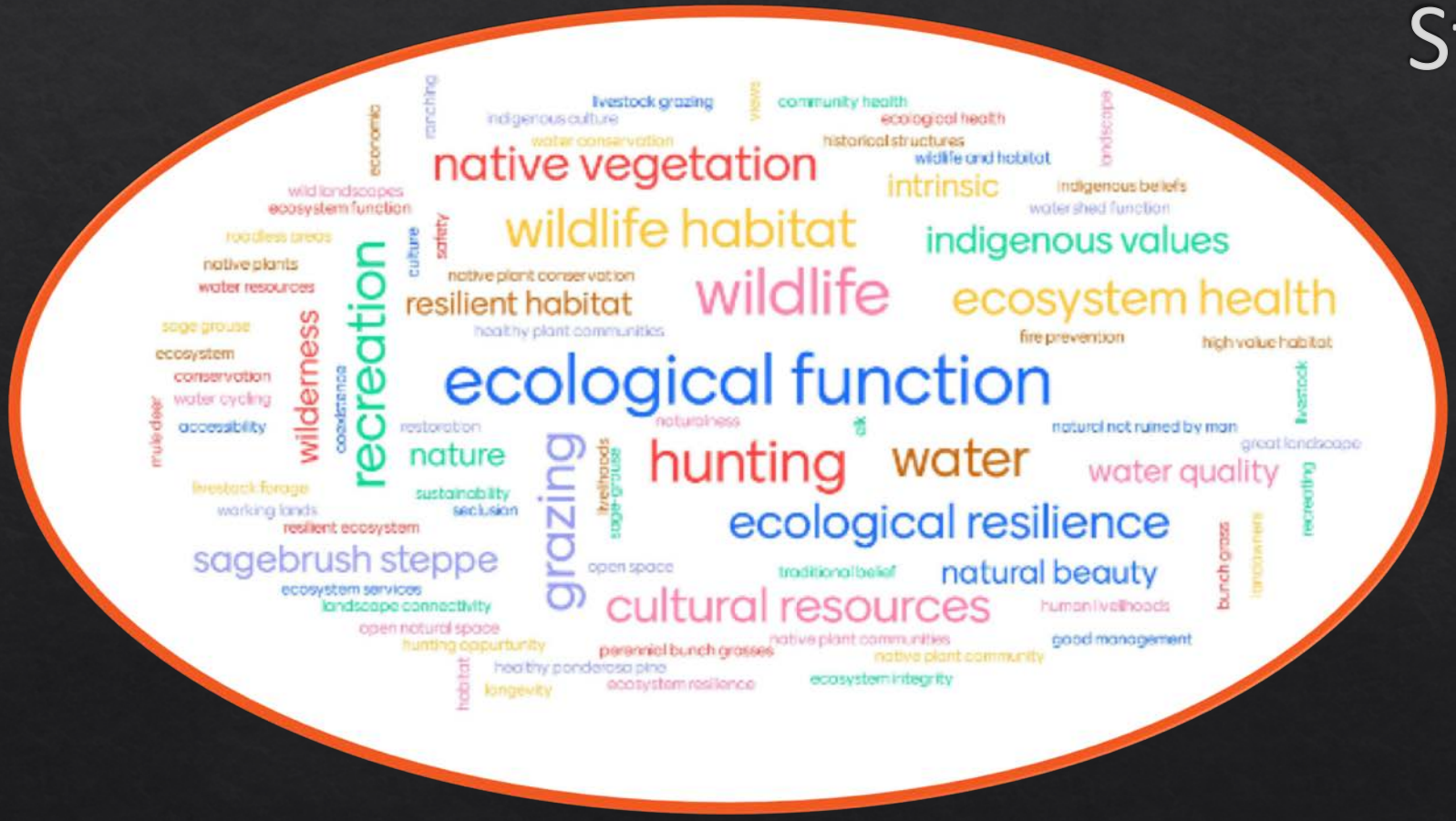
Get to know the Stinkingwaters



Non-mappable Values

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Goal: Promote values at risk from frequent and severe wildfire

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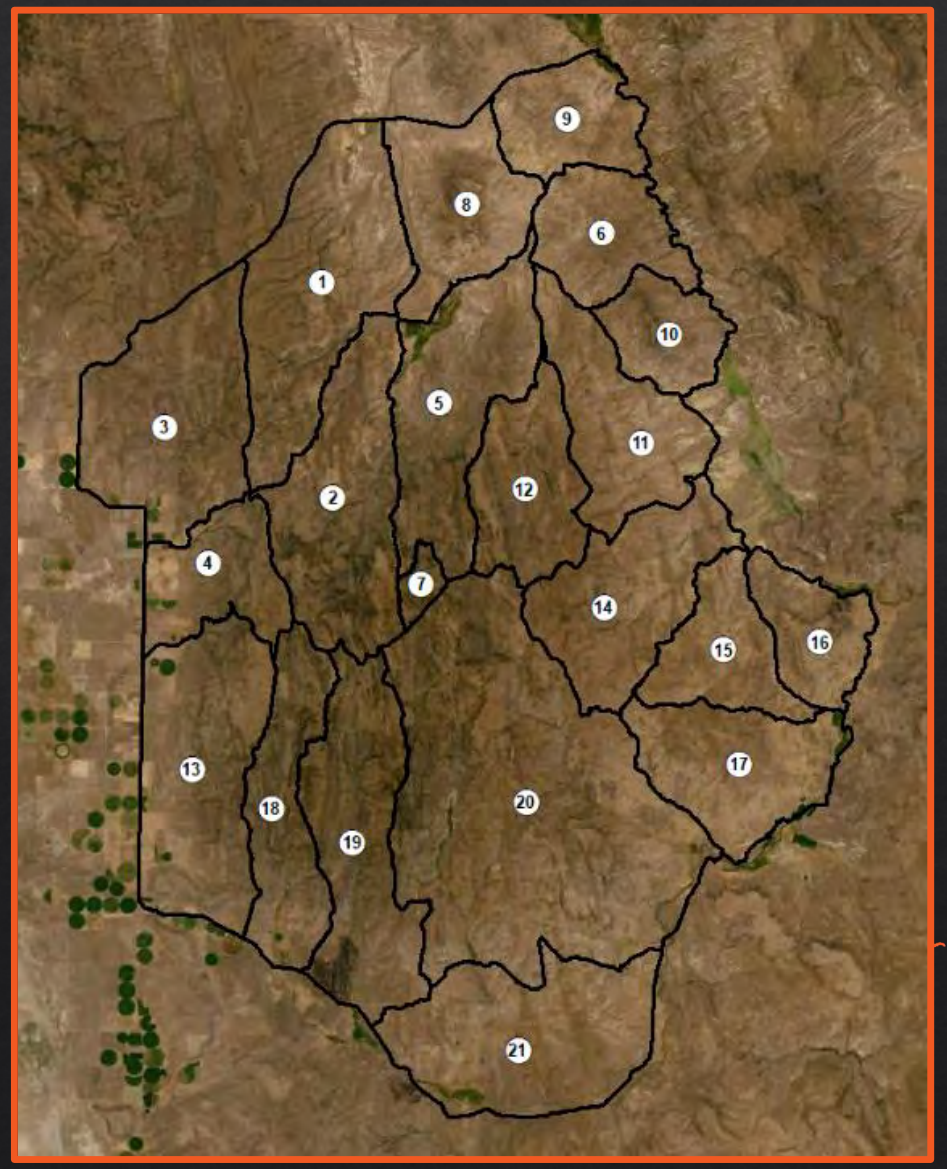
Frameworks make the game work

- Potential Operational Delineations (PODs)
- Potential Control Lines (PCLs)



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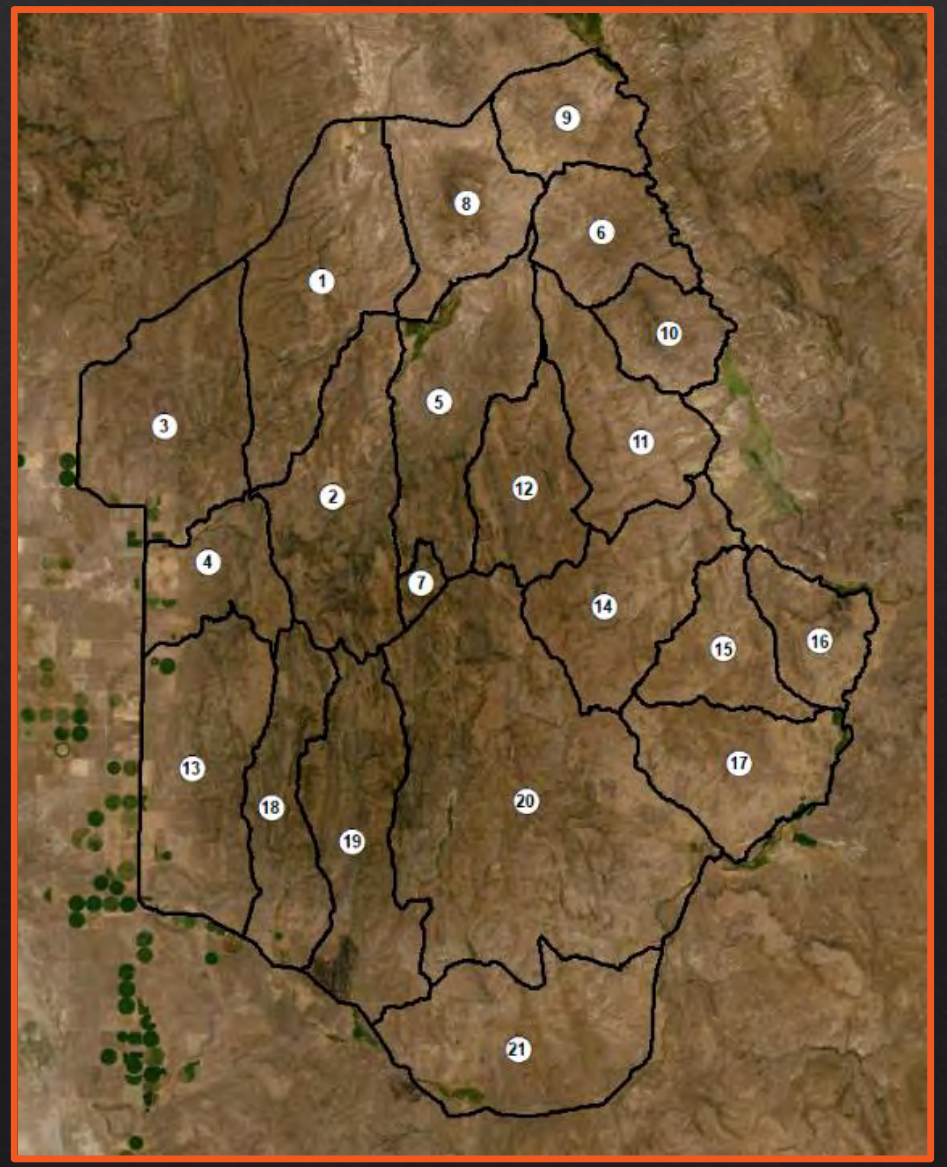
PODs Development with HCWC

- Potential Control Lines (PCLs) proposed
- Landowner input
- Validation by RFPAs
- PCL inventory



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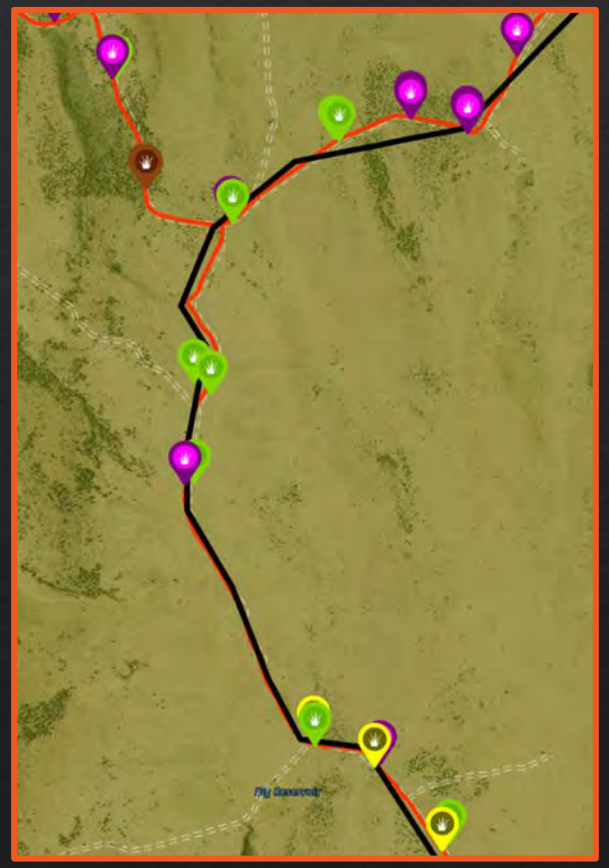
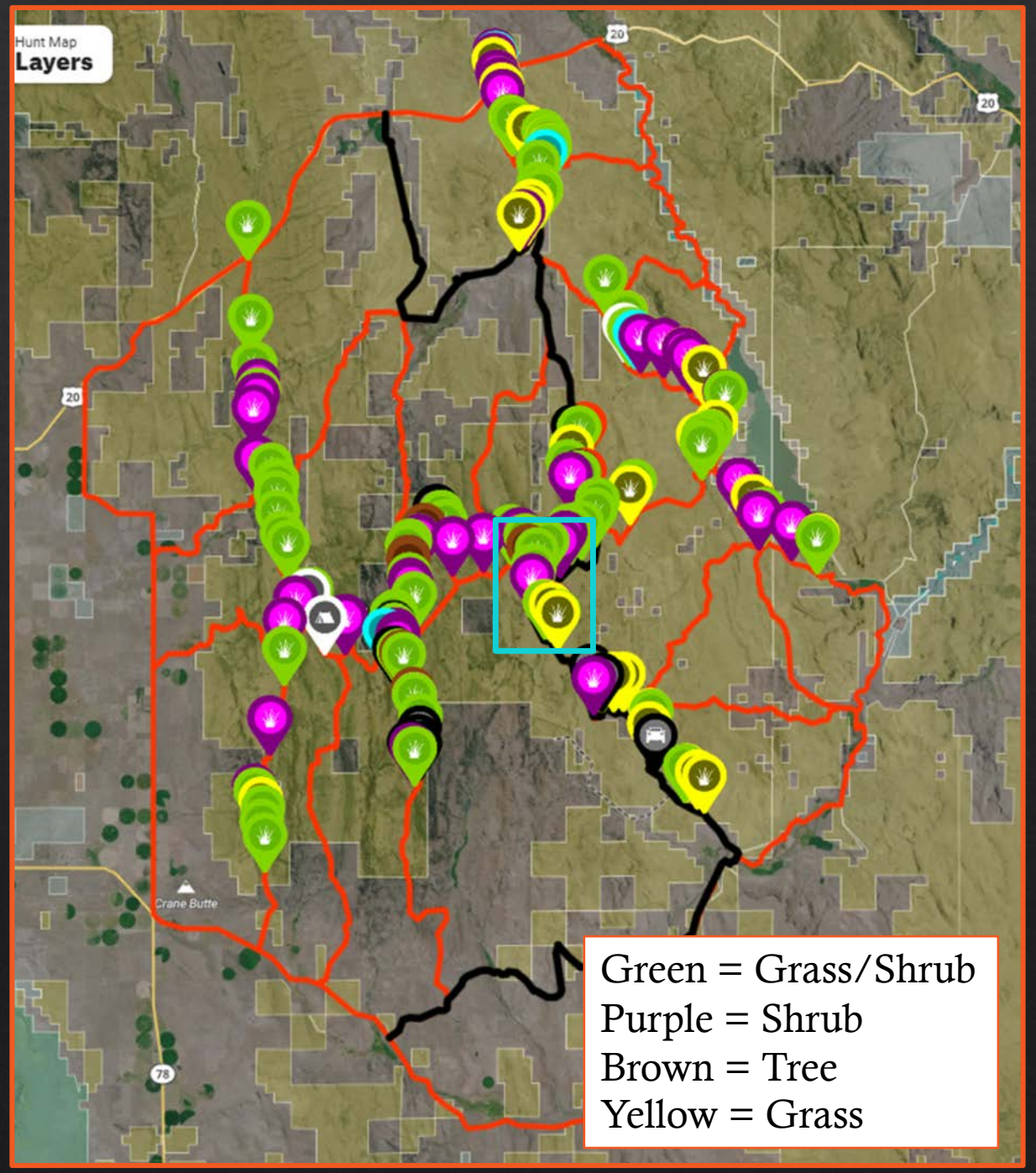
PCL Inventory

Assign fuel models to the landscape using Scott & Burgan models and inventory the condition of the roads.





HARNEY COUNTY Wildfire COLLABORATIVE

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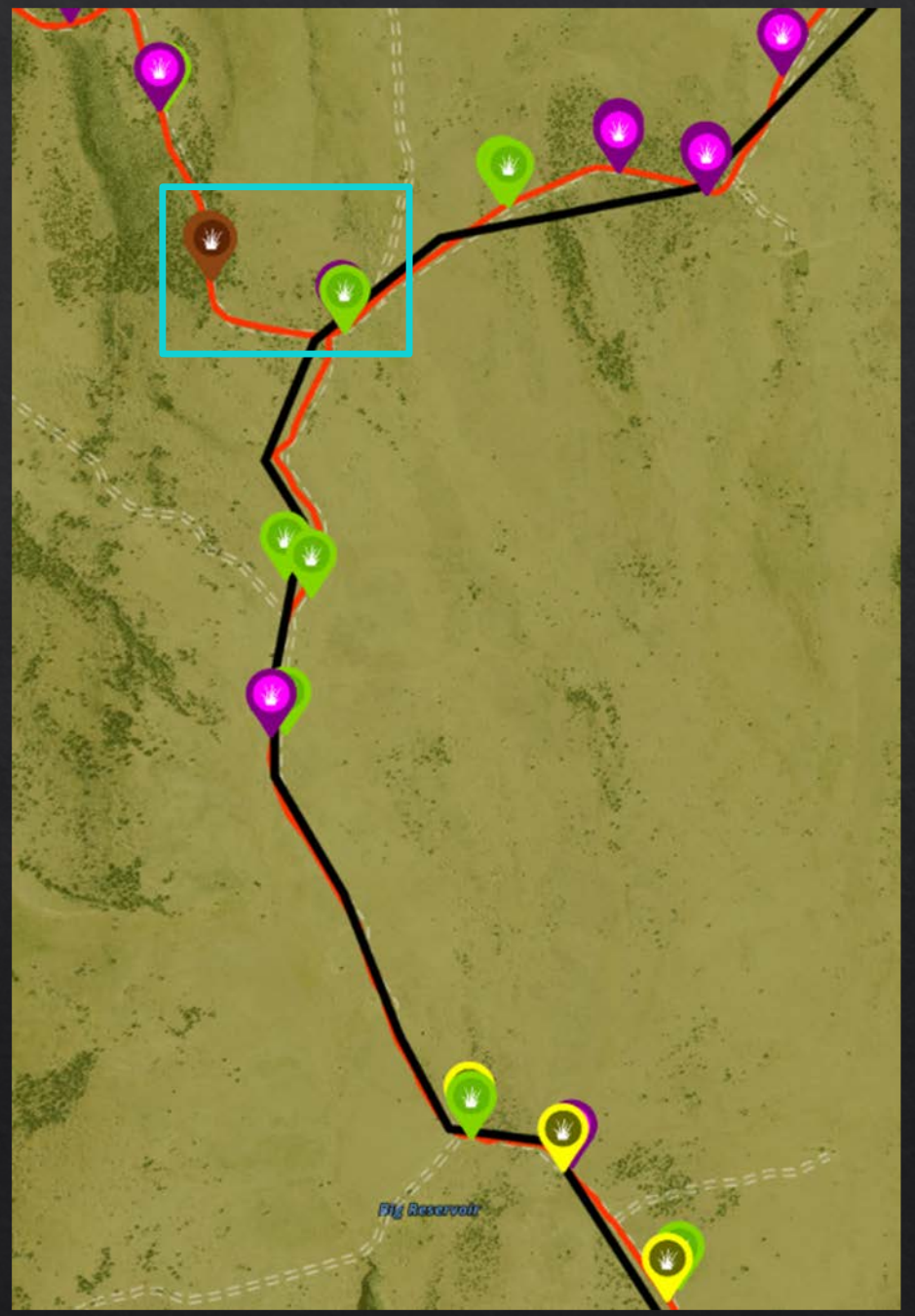

HARNEY COUNTY Wildfire COLLABORATIVE

Goal: Prevent Transition to IAGs

What is the condition of current vegetation? (**biotic condition**)

Threat-based model ecostates

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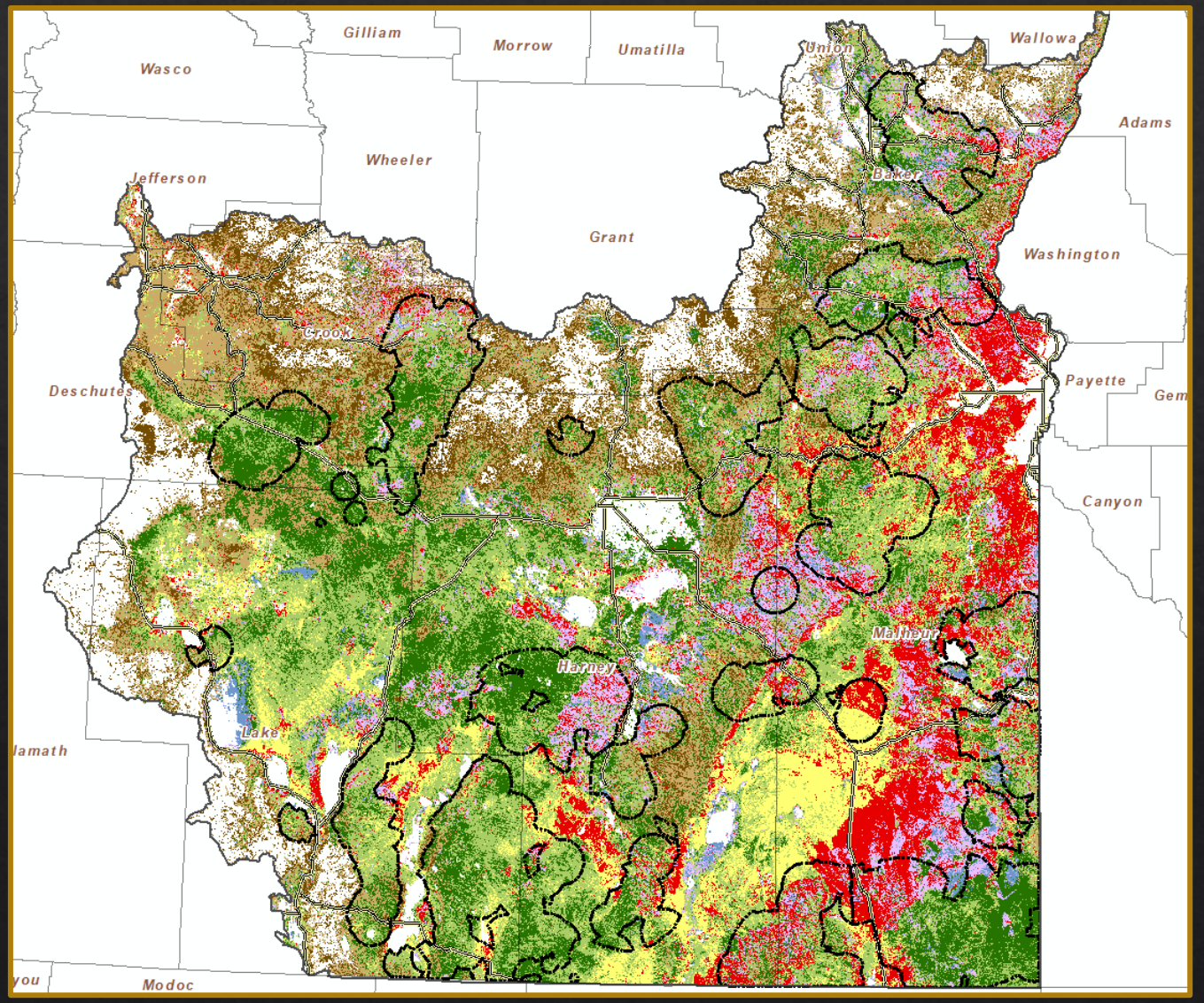

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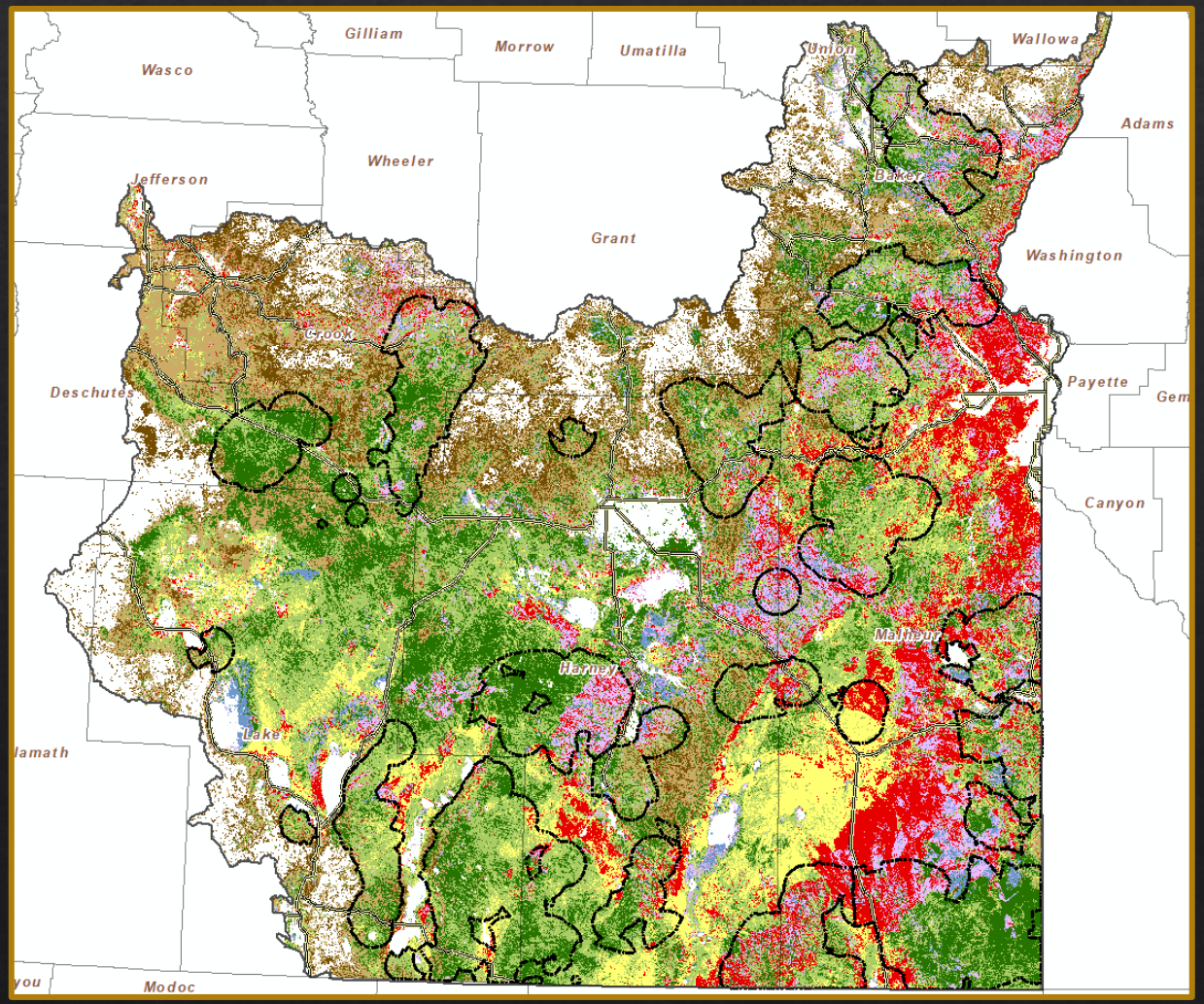


Rule set: Shrub >=10%, AFG:PFG 0.333-1.0, Tree <5%

Rule set: Shrub >=10%, AFG:PFG <0.333, Tree <5%

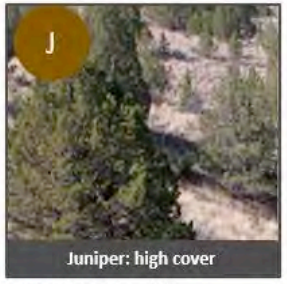
Rule set: Shrub <10%, AFG:PFG <0.333, Tree <5%

Rule set: Shrub <10%, AFG:PFG 0.333-1.0, Tree <5%

Rule set: Shrub >=10%, AFG:PFG >=1.0, Tree <5%

Rule set: Shrub <10%, AFG:PFG >=1.0, Tree <5%

Rule set: Tree 5-20%



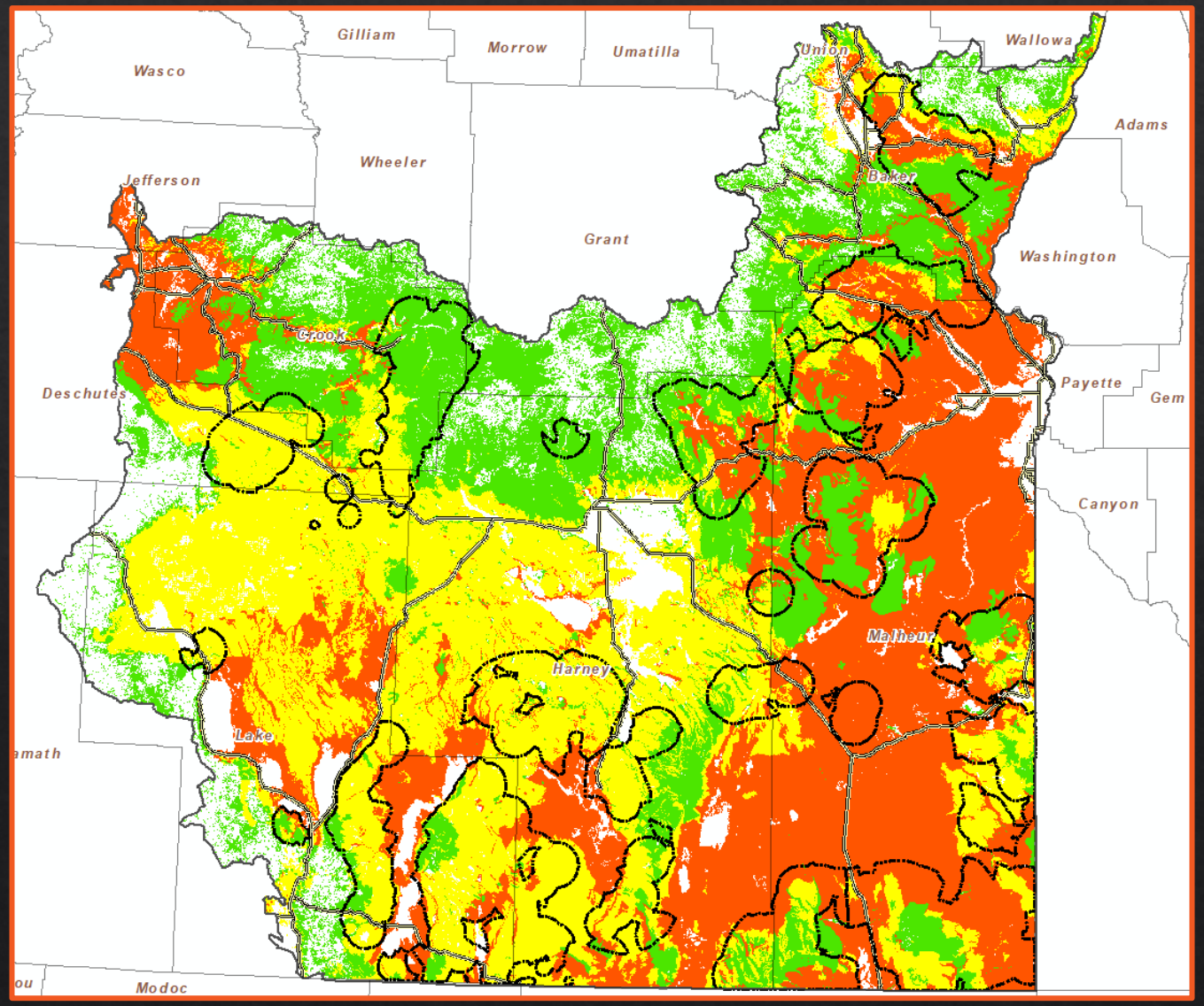
Rule set: Tree >=21%

Goal: Prevent Transition to IAGs

What are **abiotic conditions** (Resistance and Resilience)?

Resistance & Resilience (R&R)

- Other
- Moderate
- Low
- High



Source: NRCS, updated with 2020 soil surveys in Oregon

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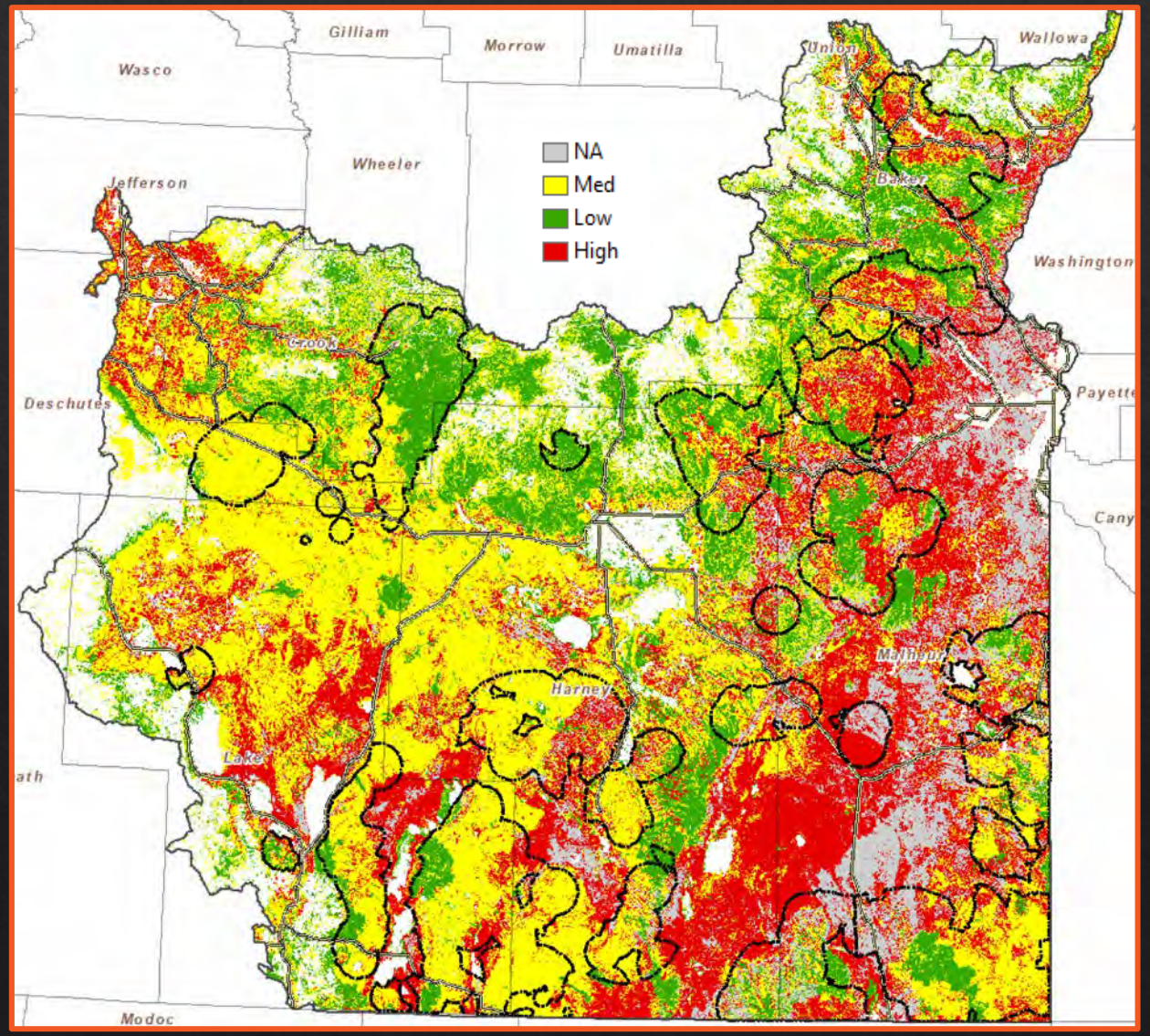
Goal: Prevent Transition to IAGs

Abiotic conditions + Biotic Conditions = Likelihood of Transition

Estimated likelihood of post-fire transition to invasive annuals



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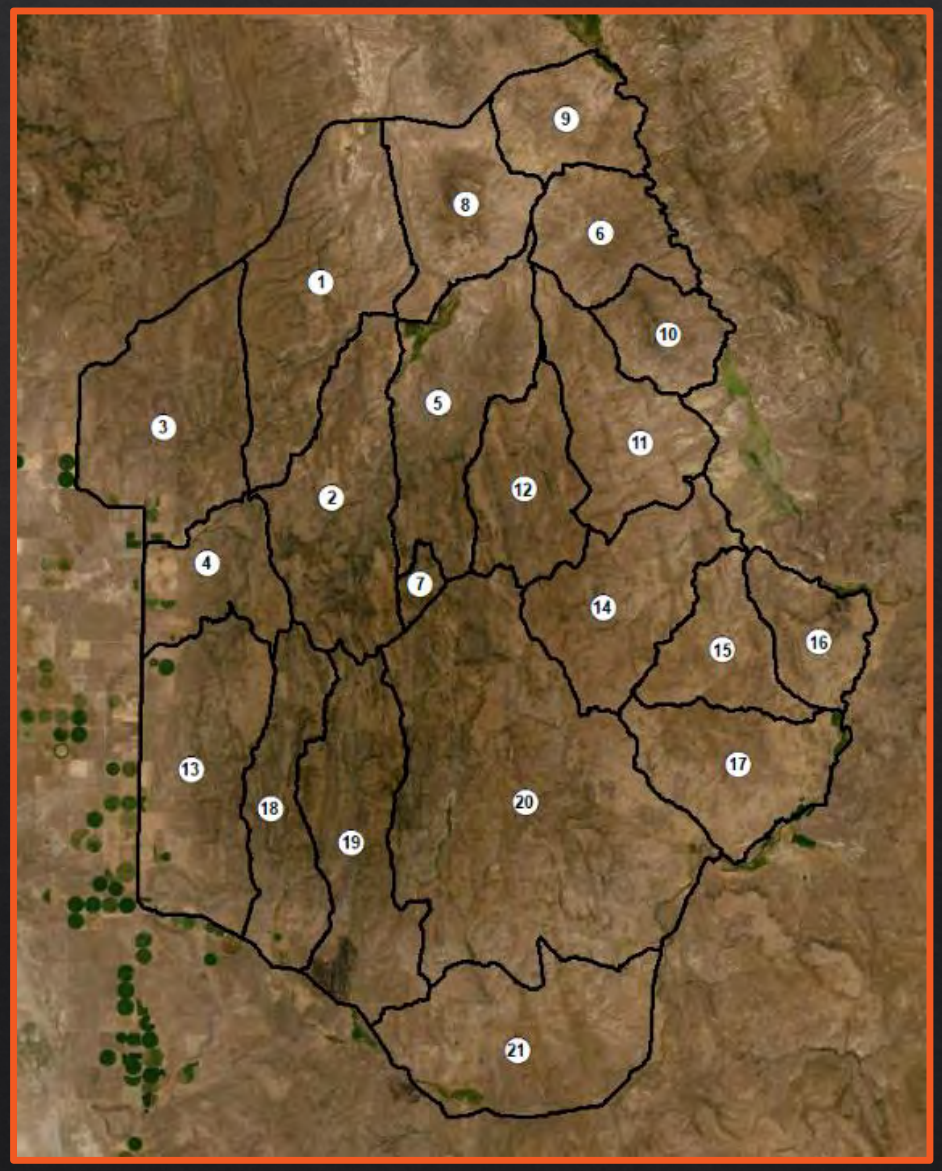
Ecostate × R&R

		A	A-C	C (IAG model)	B
R&R	Low	med	high	high	med
	Moderate	med	med	high	low
	High	low	low	med	low

Goal: Prevent Transition to IAGs



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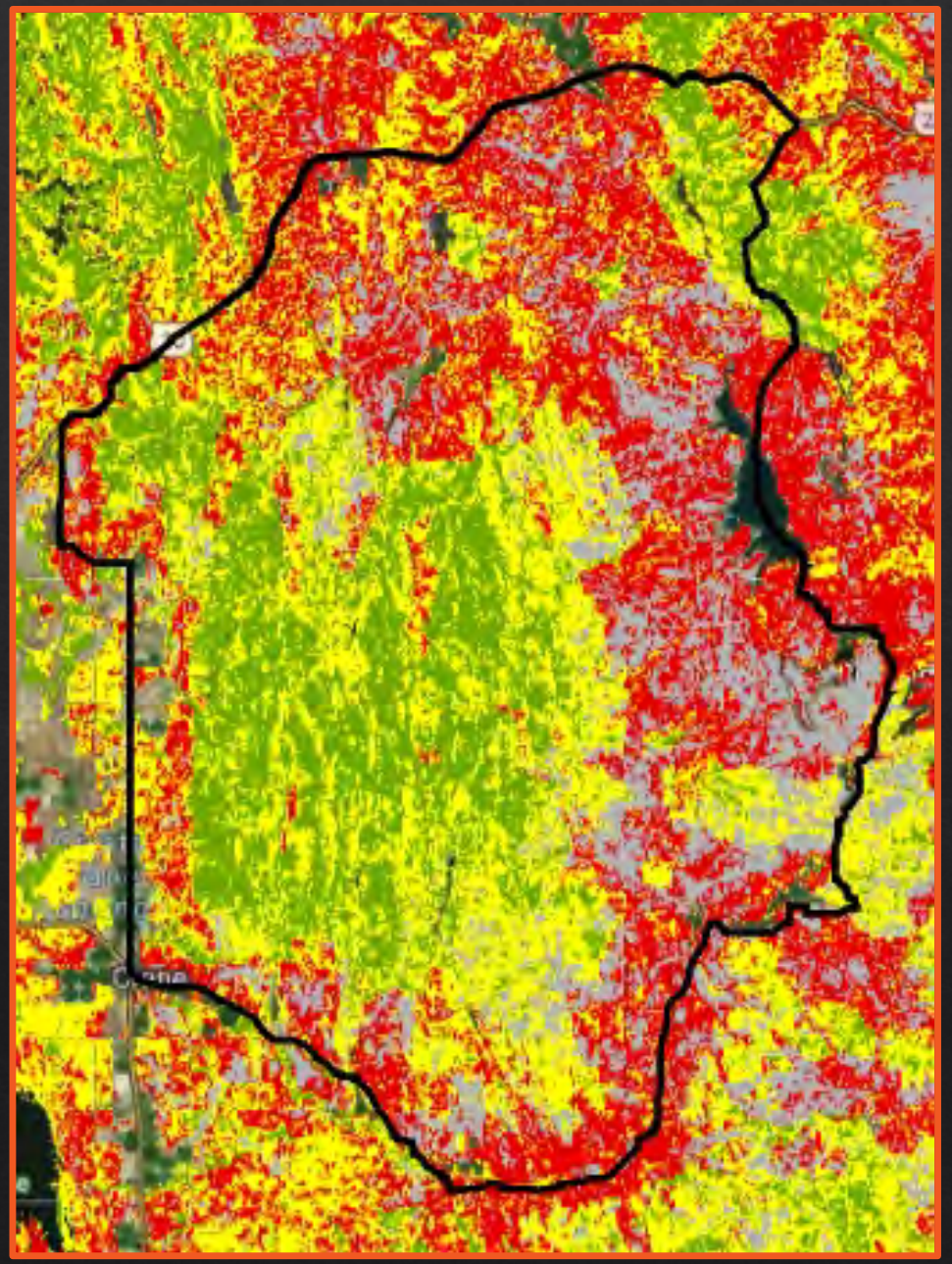
COLLABORATIVE

Goal: Prevent Transition to IAGs



Likelihood of Post-Fire Transition to Annuals

- Low
- Medium
- High
- NA

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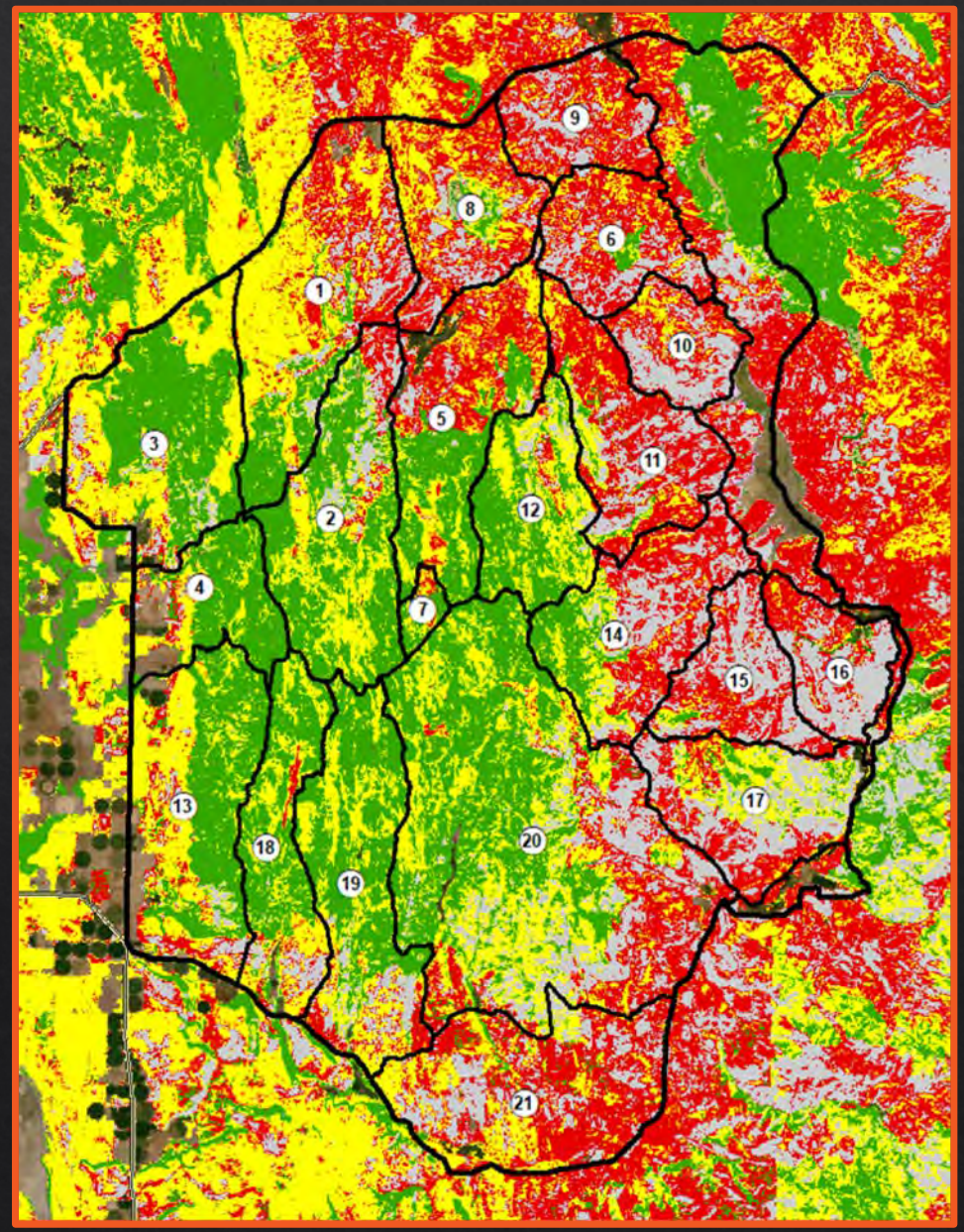
Goal: Prevent Transition to IAGs



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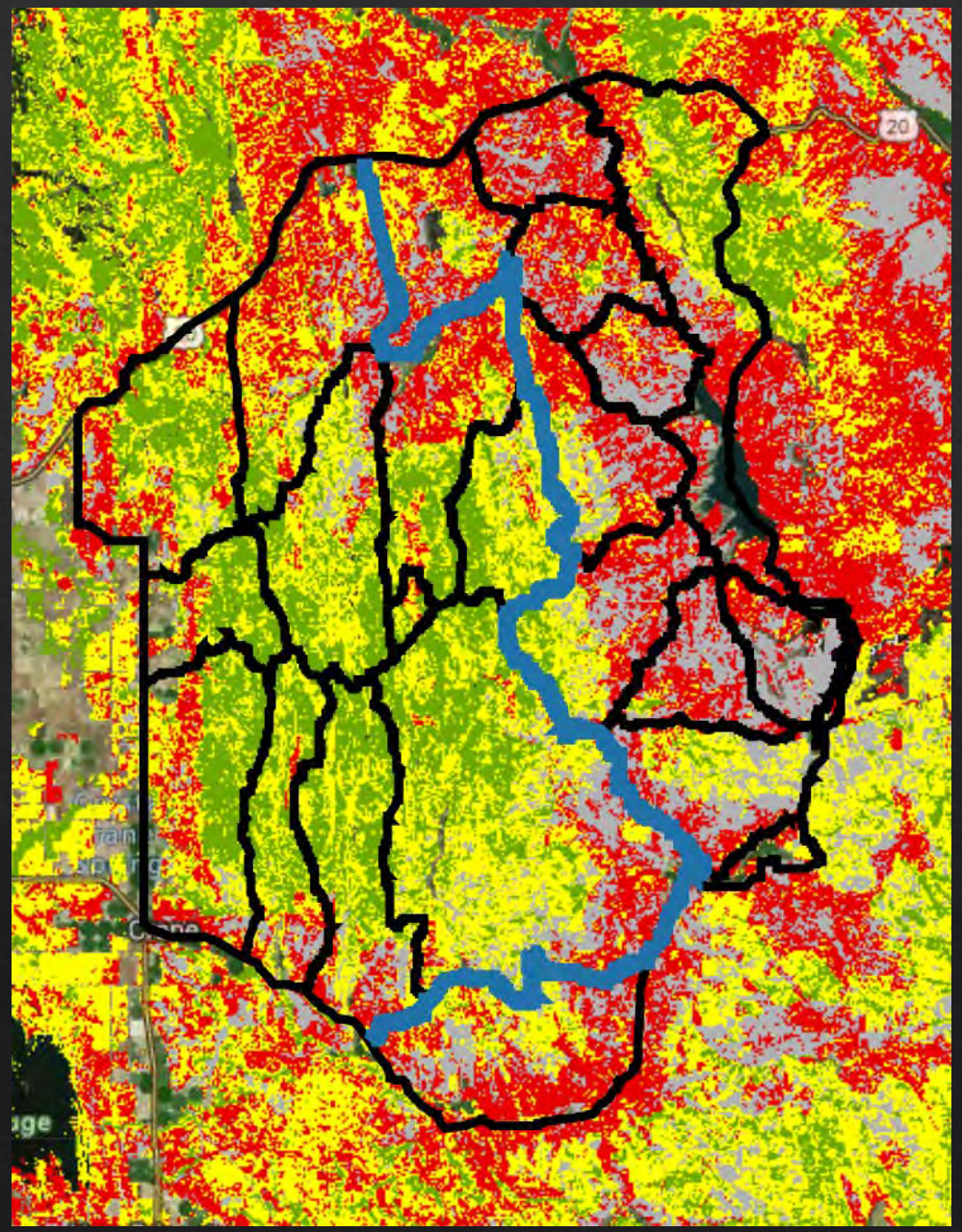
HARNEY COUNTY Wildfire COLLABORATIVE

Goal: Prevent Transition to IAGs



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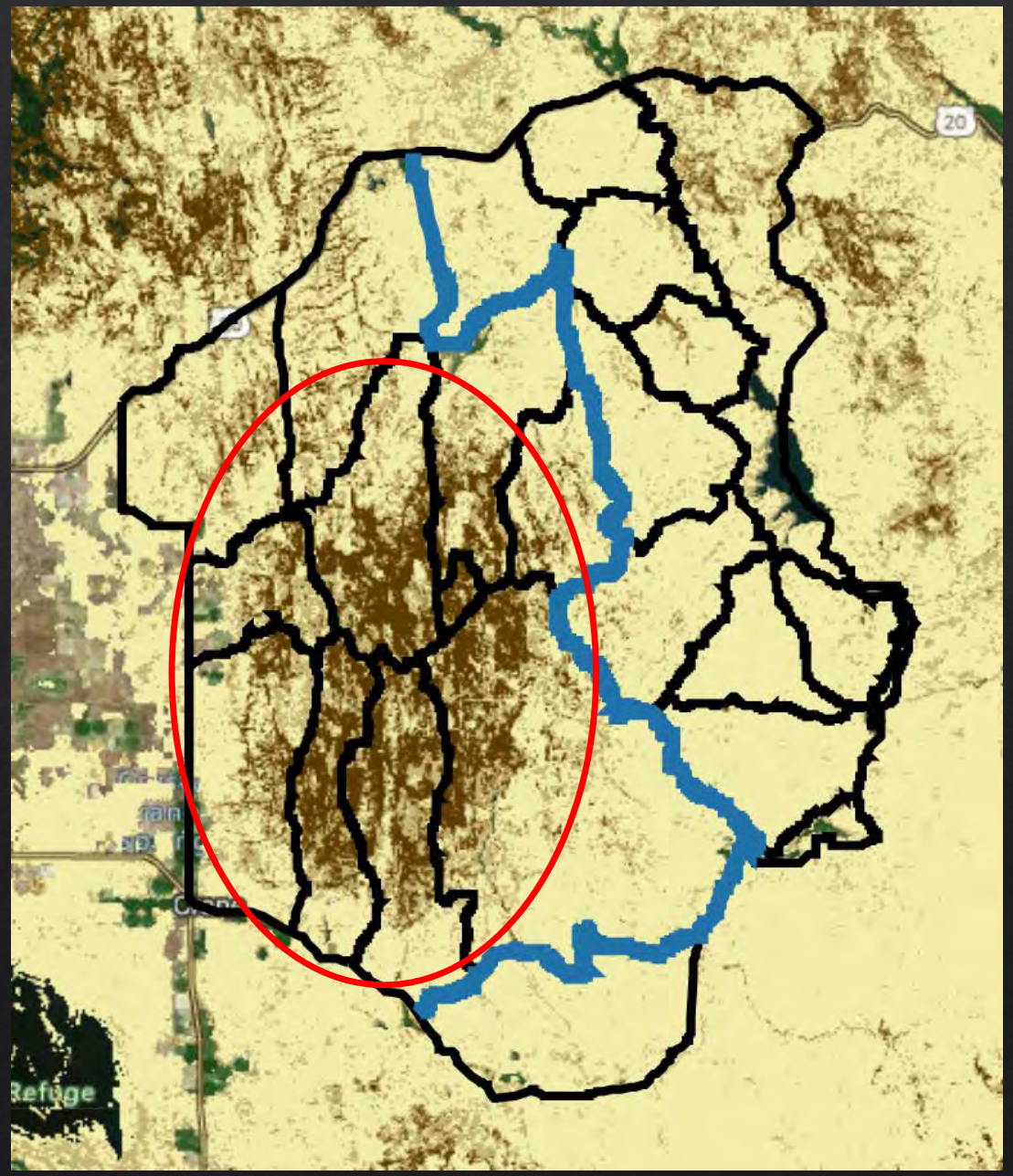

Tree Cover (2021)

- 0 %
- >0 - 5 %
- >5 - 10 %
- >10 - 20 %
- >20 %

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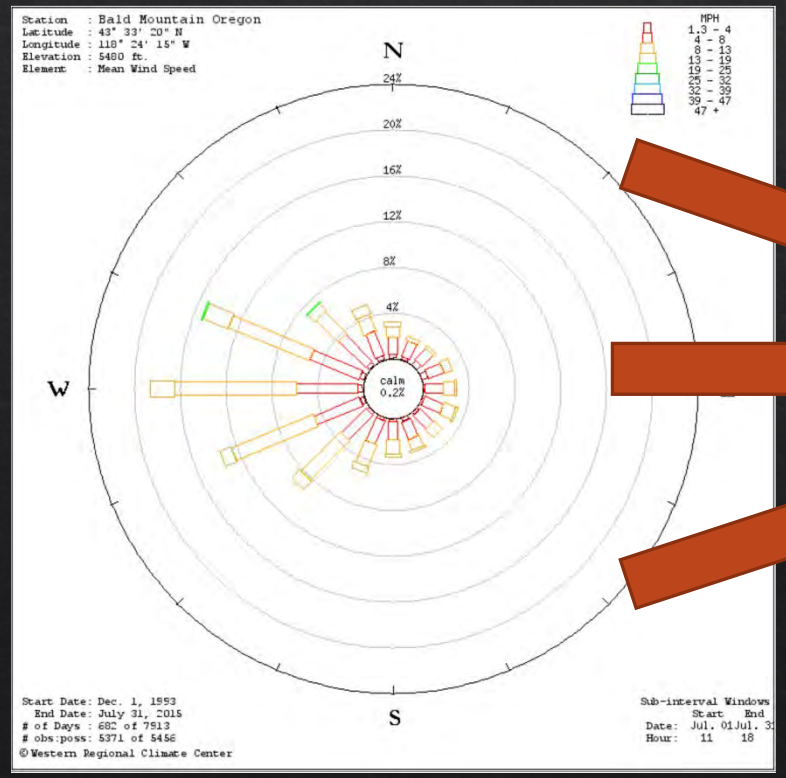

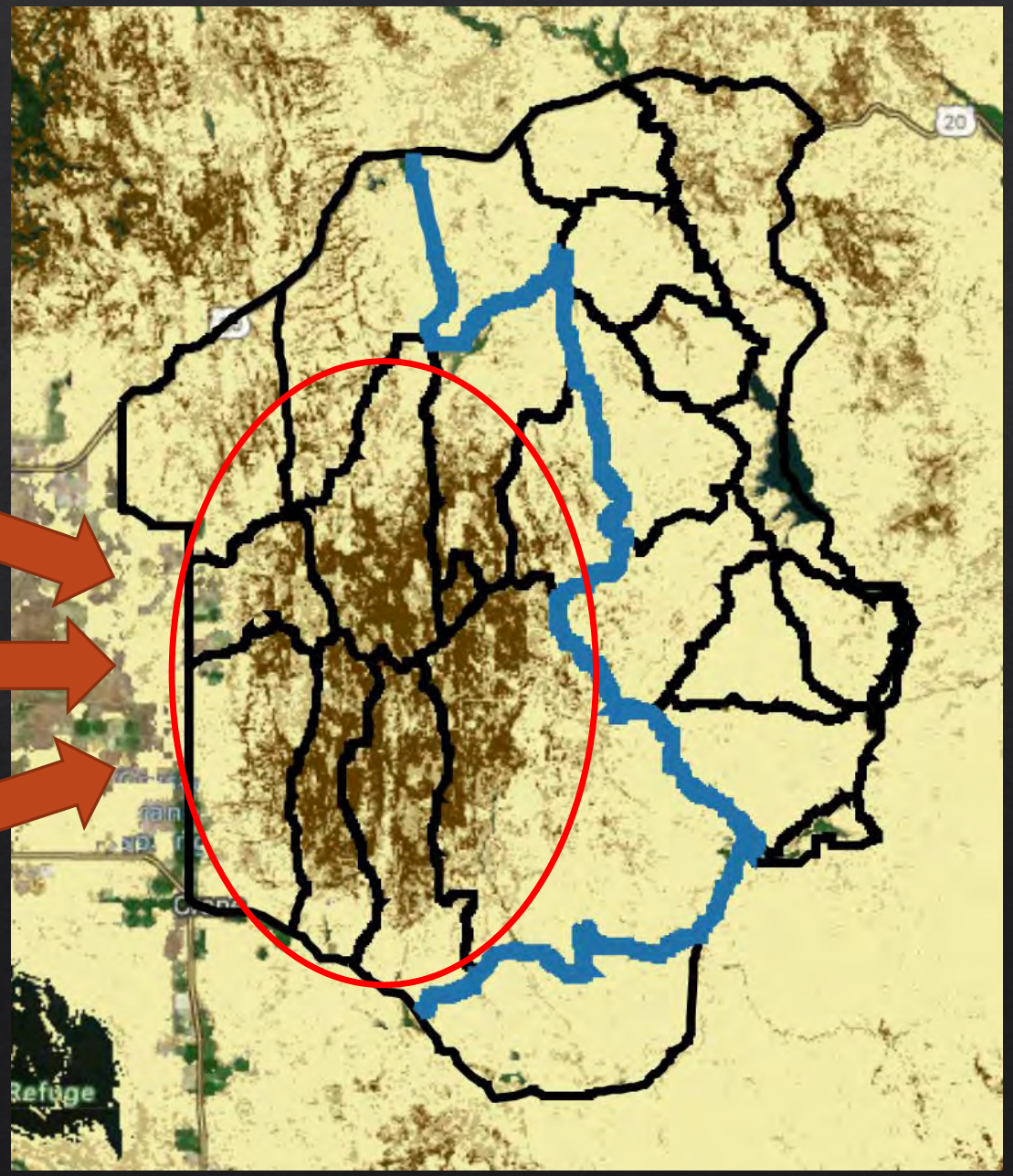

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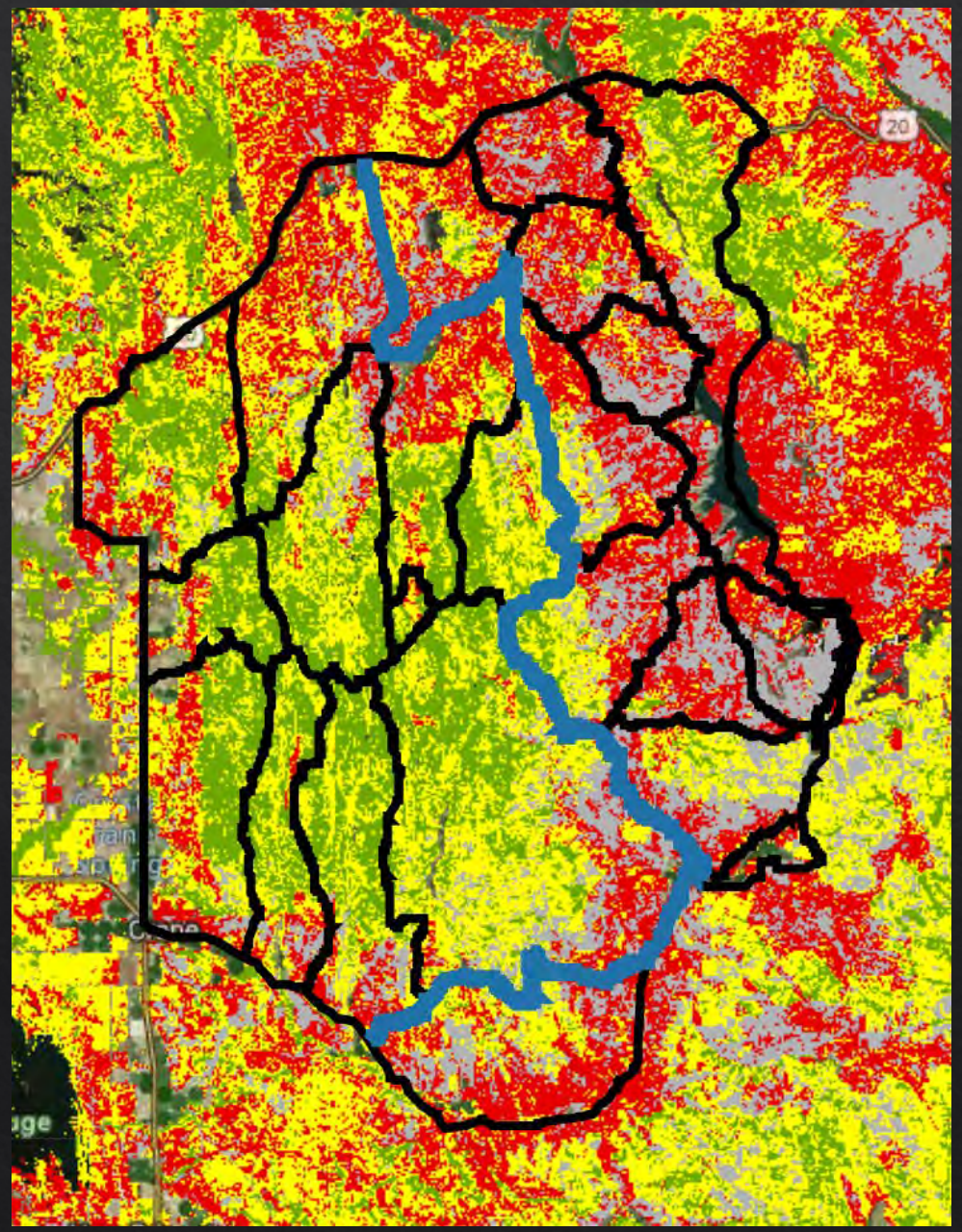

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HARNEY COUNTY Wildfire COLLABORATIVE

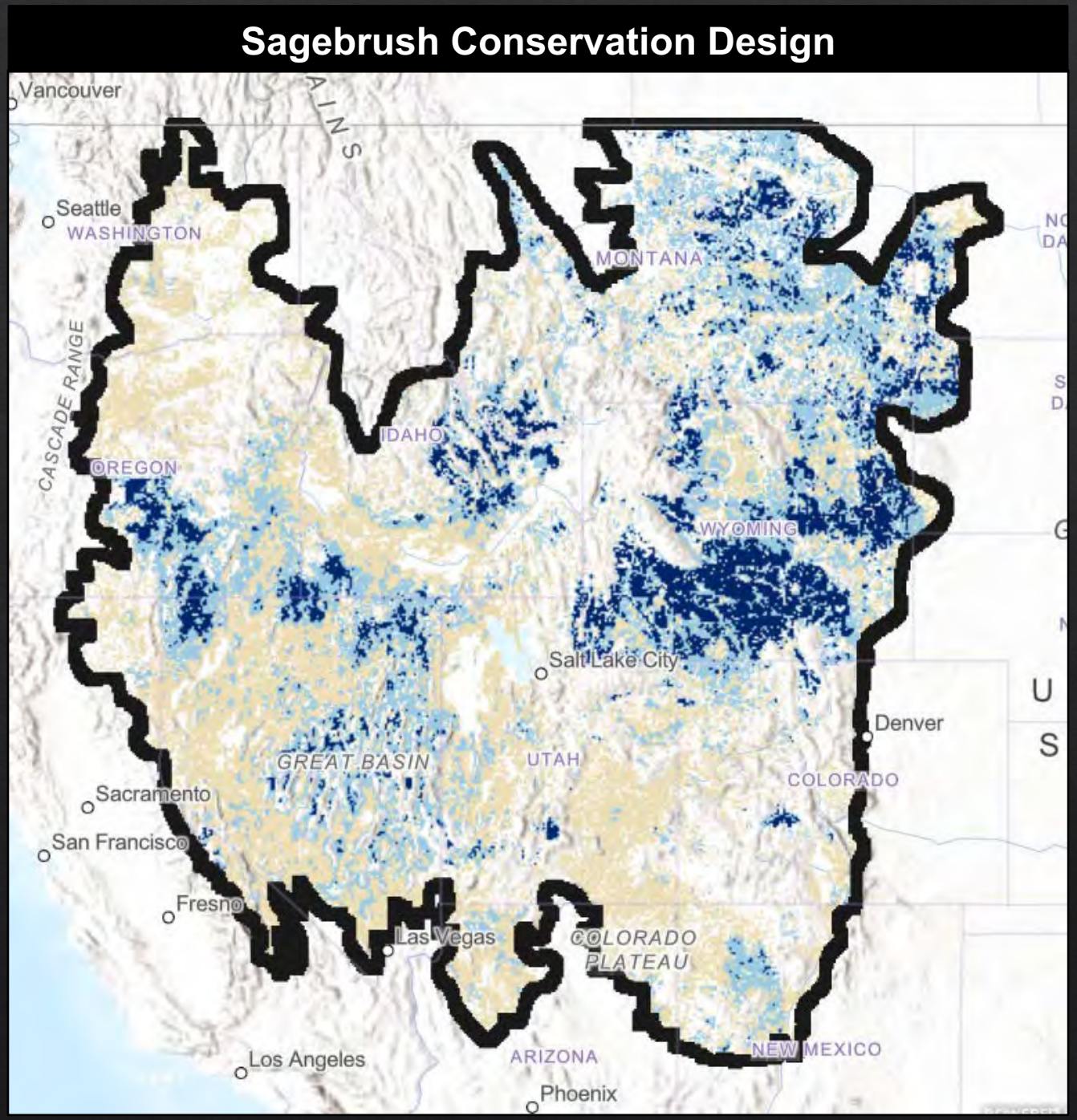
BREAK- Walk to Elks Lodge
10:00 – 10:25 AM

Hands on Activity

Click for WAFWA Map

Oregon State University

Sagebrush Conservation Design



Legend

US Sagebrush Biome 2019 (Jeffries, Finn)

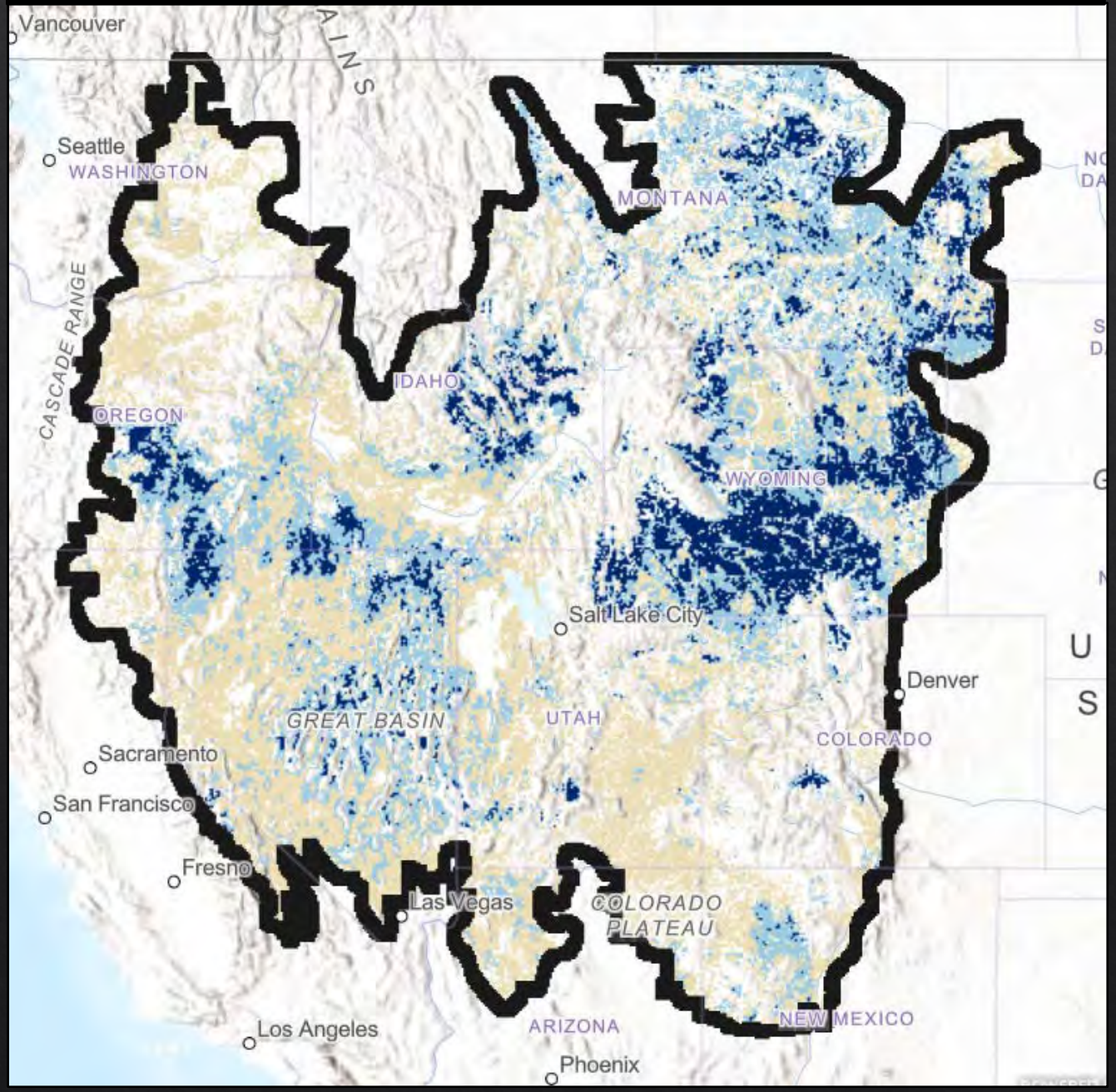
Core Sagebrush Areas 2020 (Fig. 5, click "show item details" for report link)

Core Sagebrush Areas 2020

Value

- No Data
- Core Sagebrush Area
- Growth Opportunity Area
- Other Rangeland Area

Sagebrush Conservation Design



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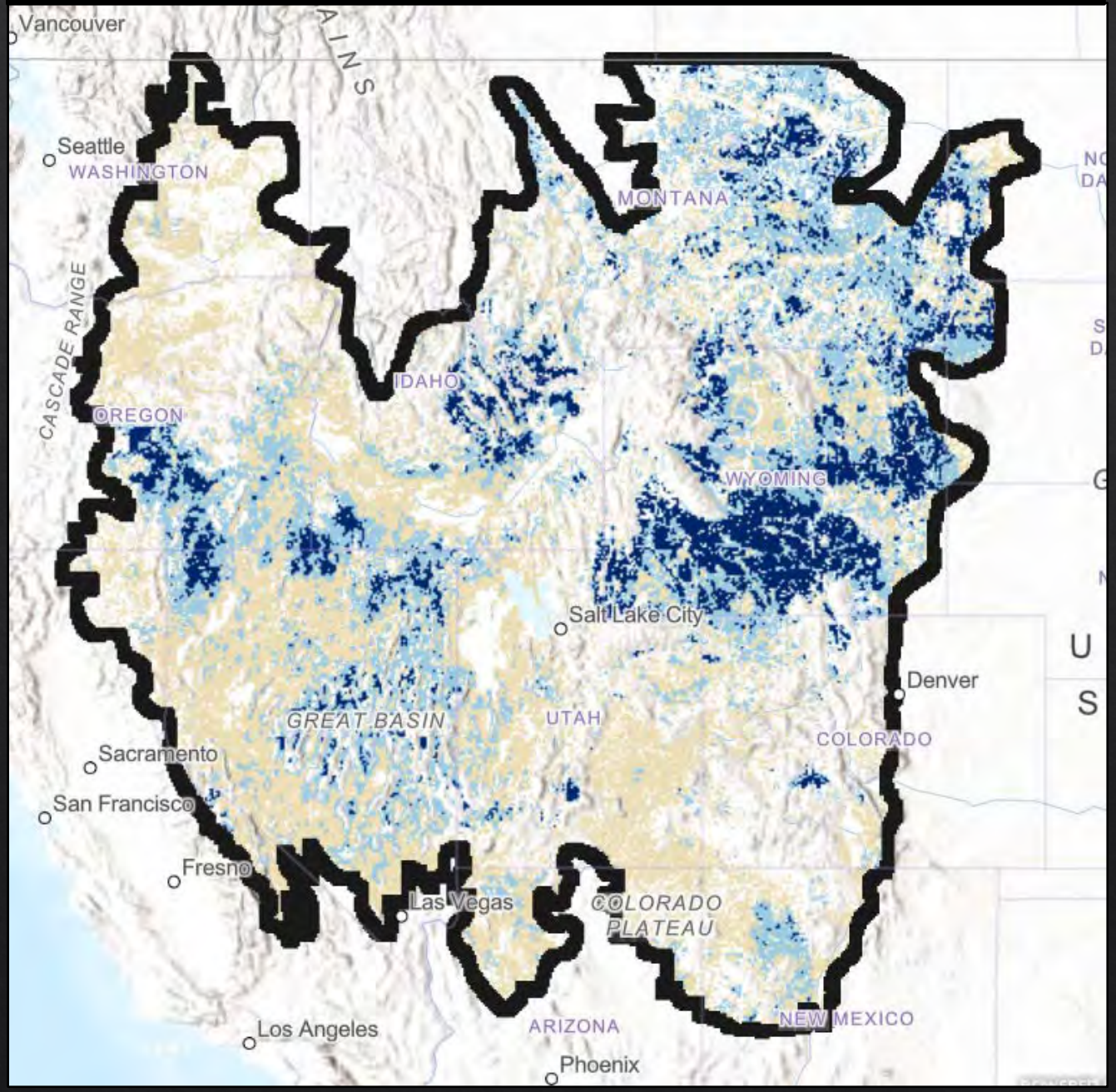

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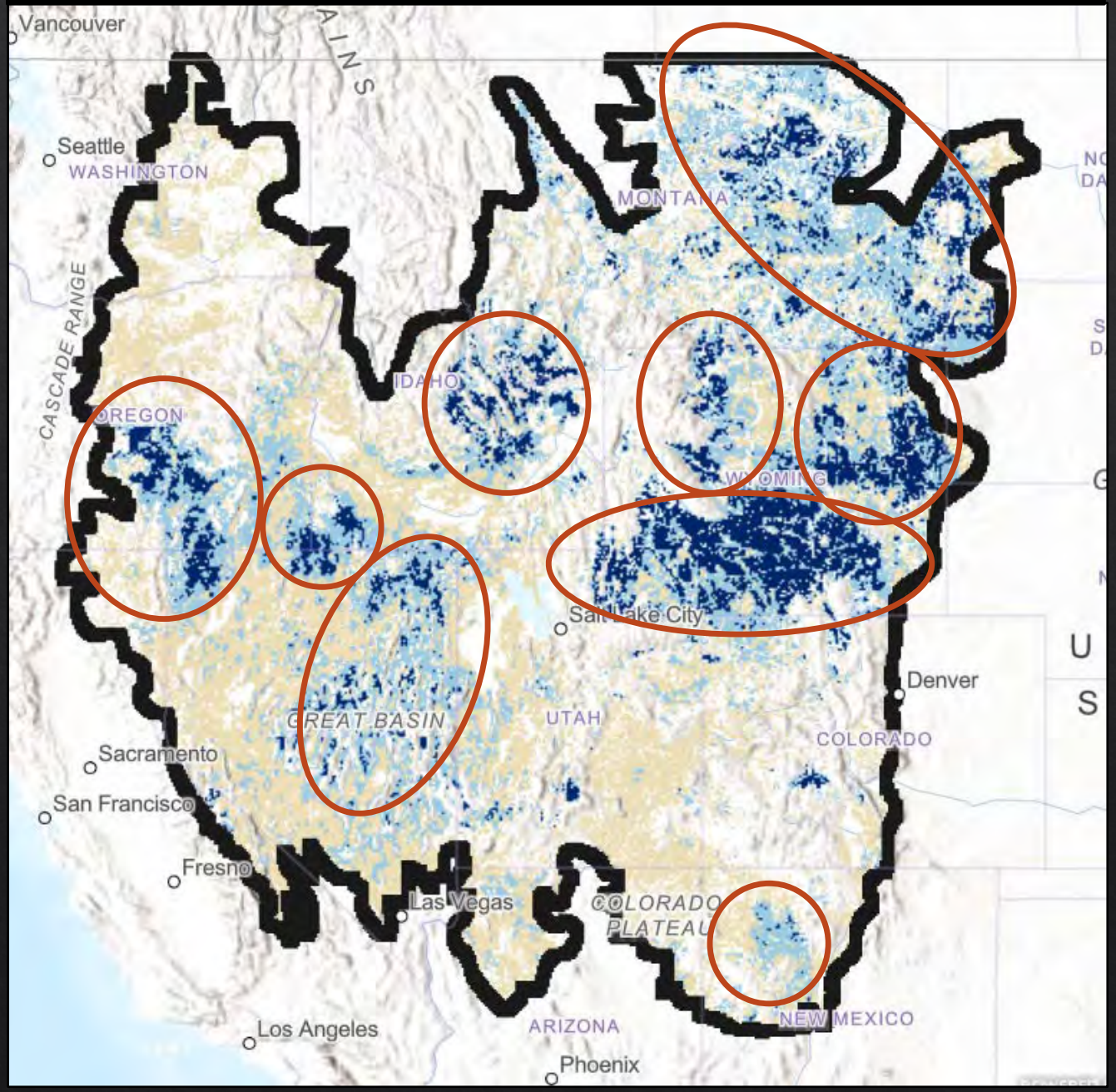

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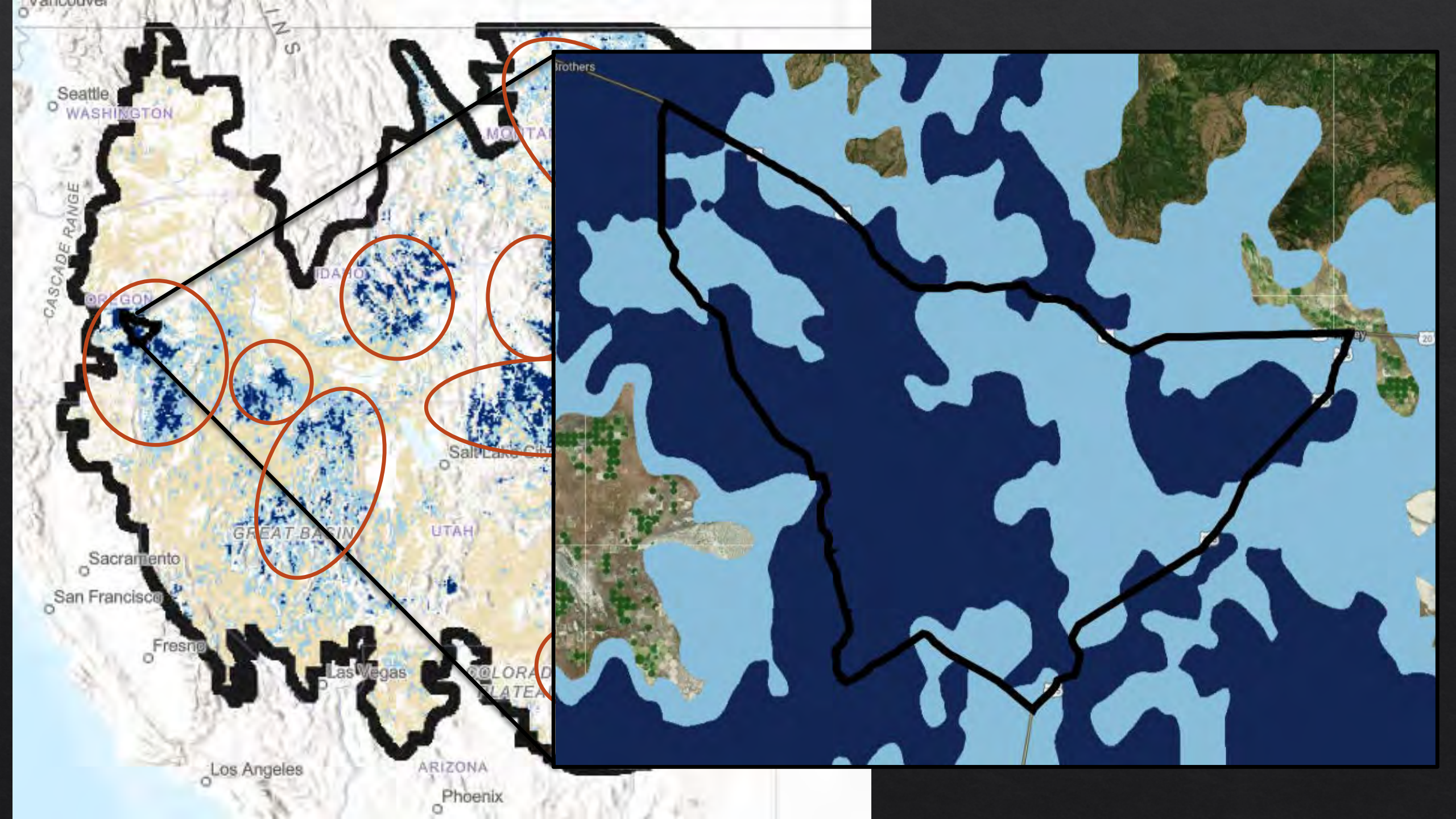

Seattle
WASHINGTON
CASCADE RANGE
OREGON
IDAHO
Salt Lake City
UTAH
GREAT BASIN
Sacramento
San Francisco
Fresno
Las Vegas
COLORADO PLATEAU
Los Angeles
ARIZONA
Phoenix

Project Area: Cinder Butte Area

Your group's task

You are a mixed-stakeholder group working together to identify management priorities.

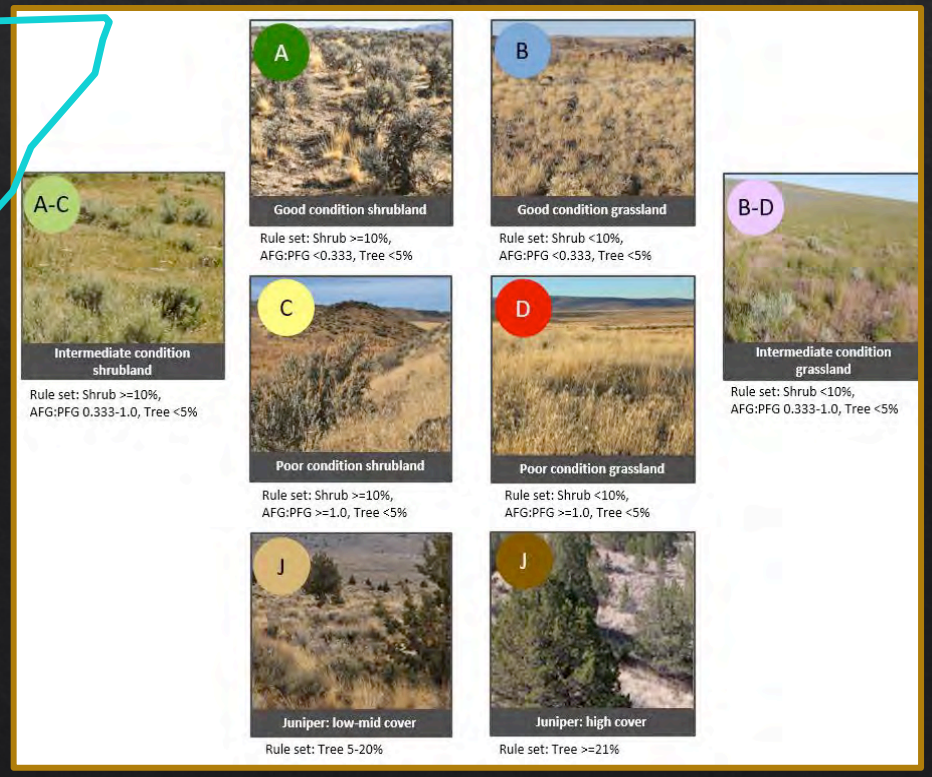
Participants' objective:

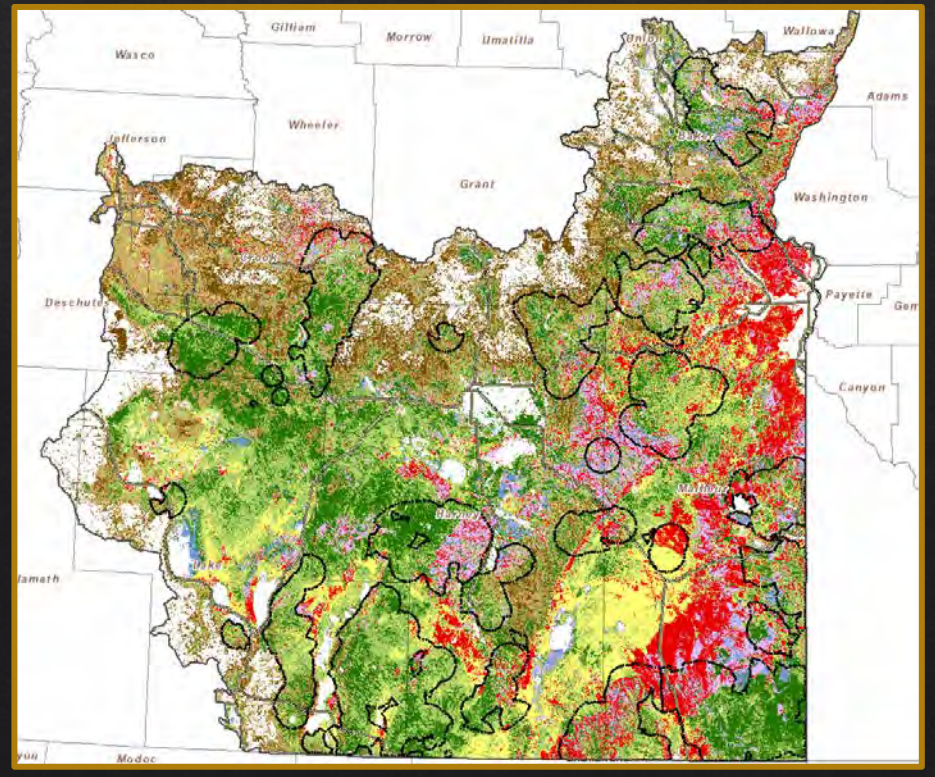
- Where can you defend, grow the core, and mitigate impacts on this novel landscape?
- How might you do this in the area around the Cinder Butte Fire?

Oregon State University

Participants' objective:

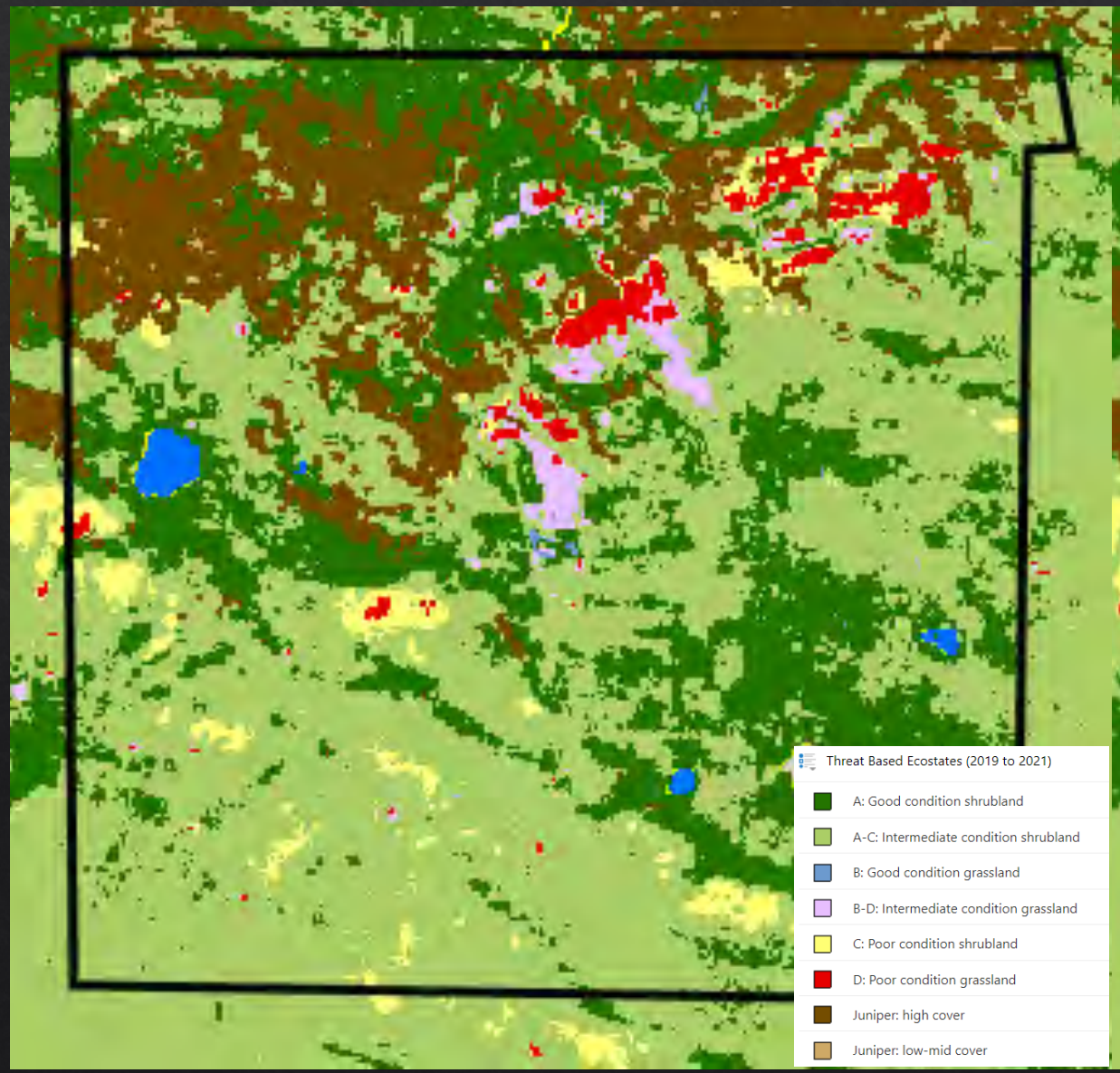
How to break up this landscape into manageable units/priorities/activities?
3 Step Process
Starting with Ecostate Map

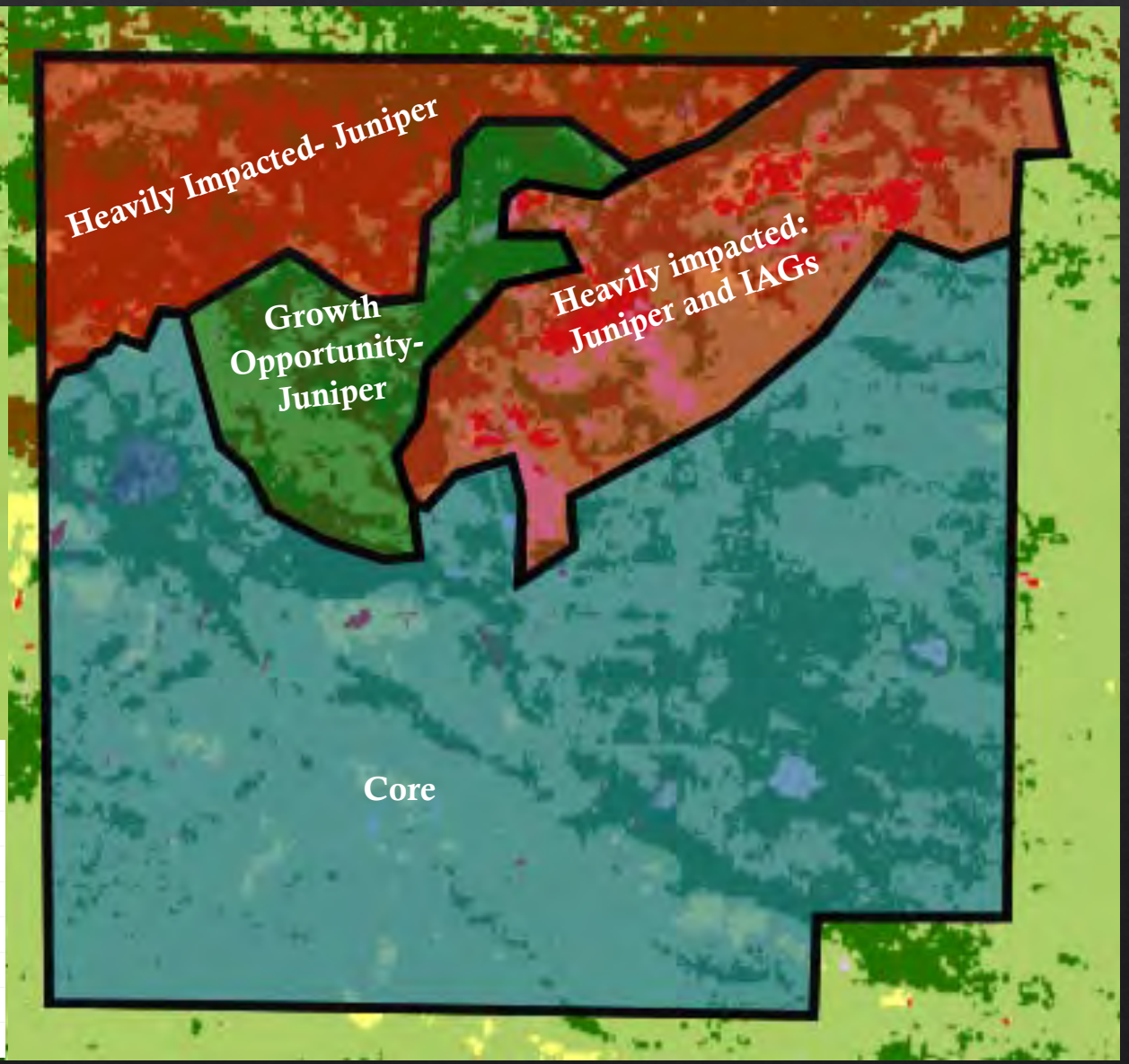




Oregon State University

Hypothetical Example: Step 1

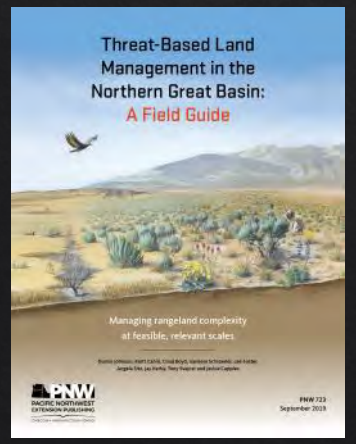


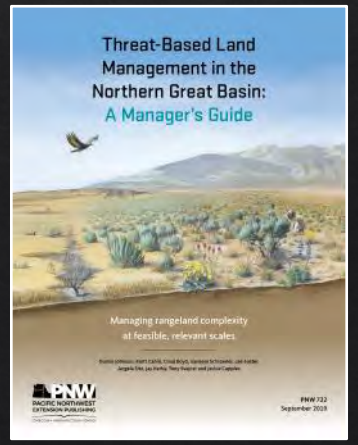


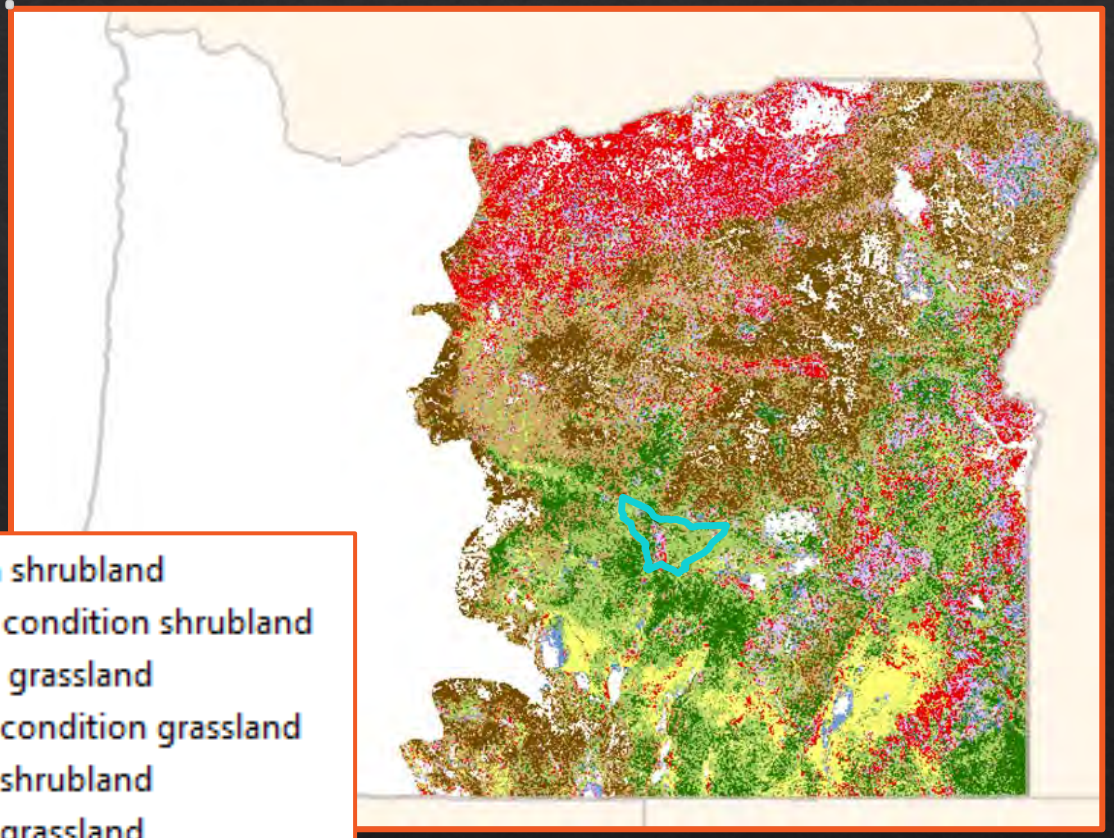
Your Turn: Cinder Butte Area Activity

Use the ecostate map to identify:

1. Core sagebrush areas
2. Growth opportunity areas
3. Heavily impacted Areas (where you want to contain the problem)







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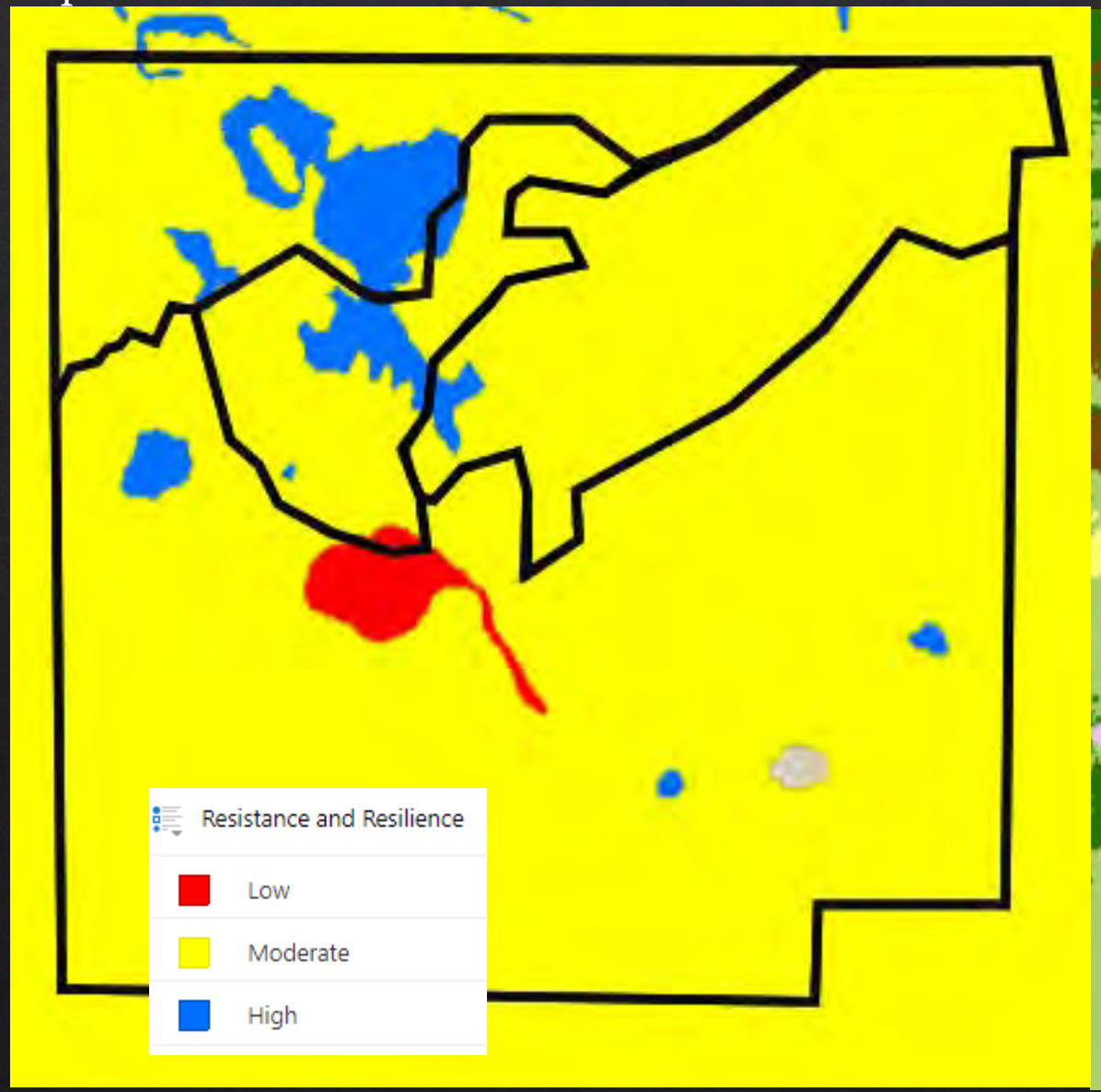
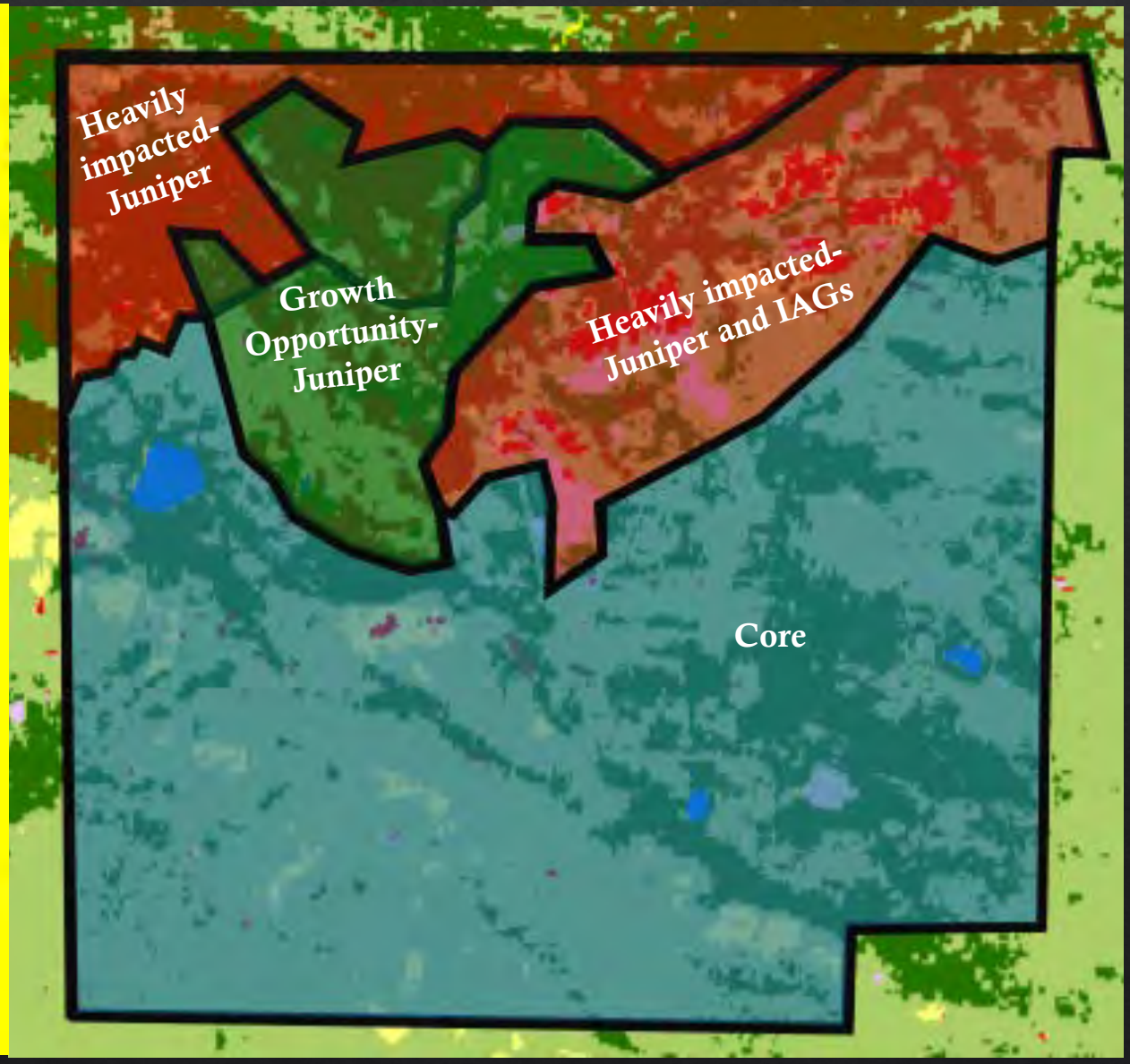
Complete step 1 by 11:00

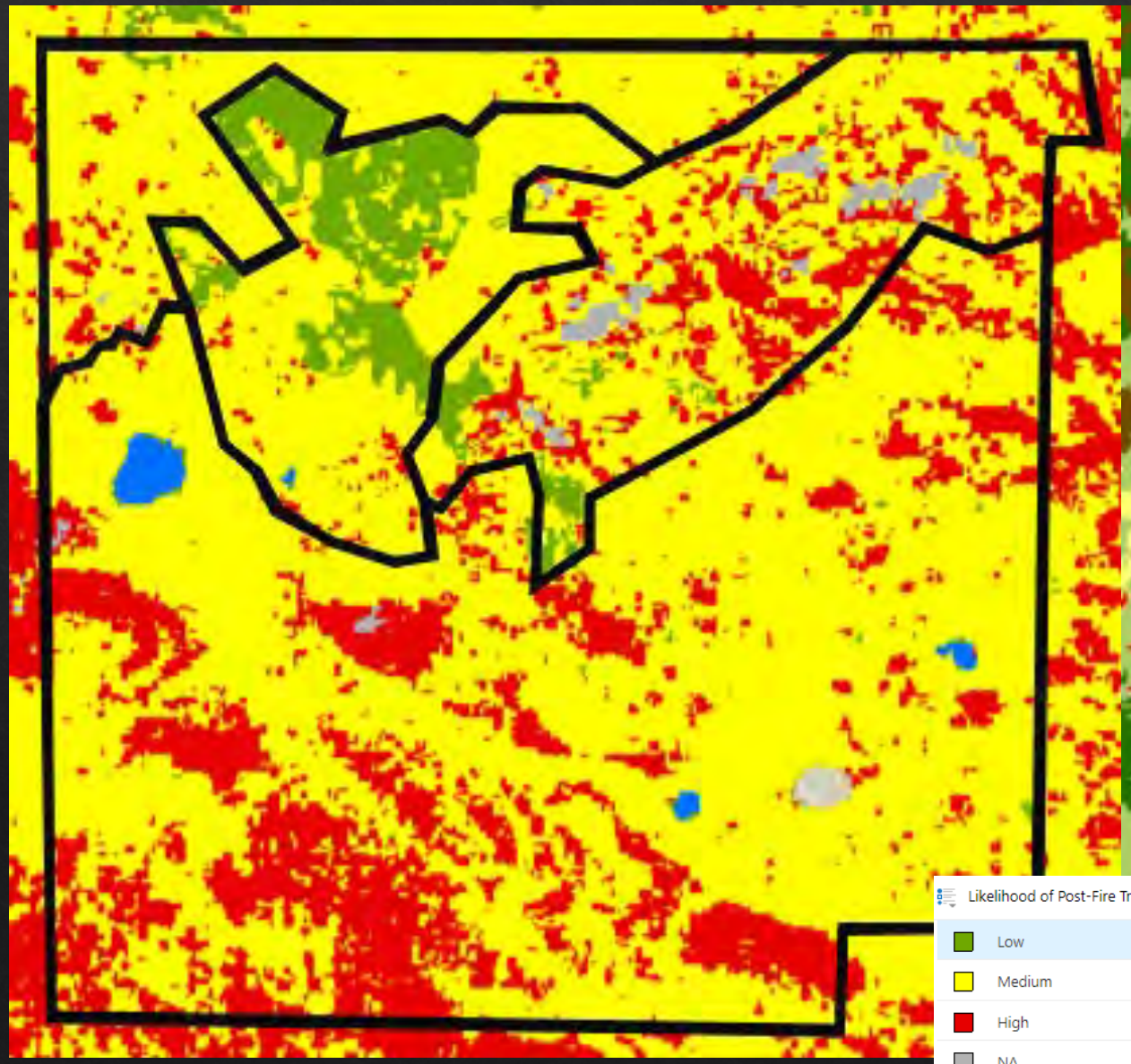
Hypothetical Example: Step 2

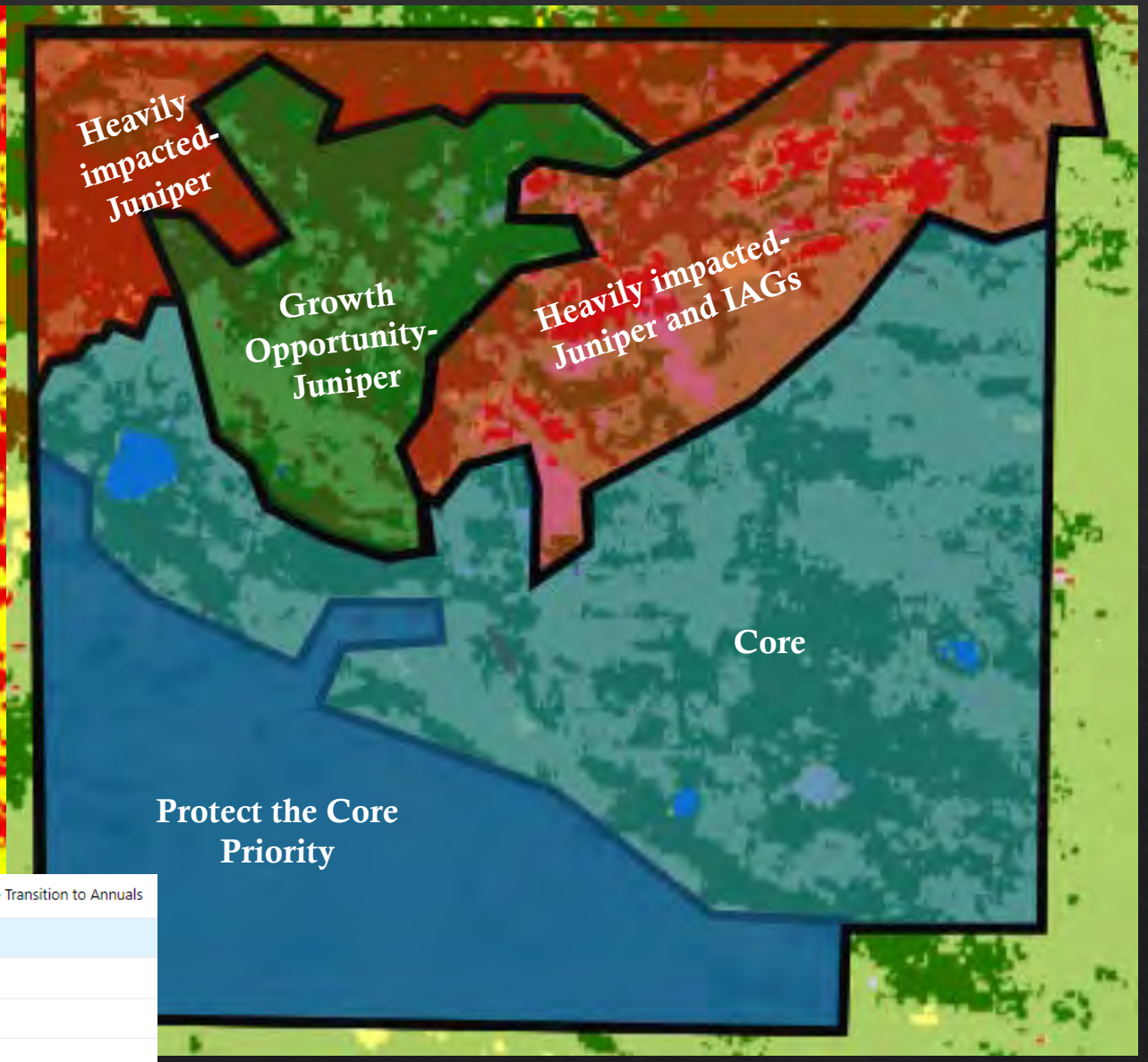
Step 1 boundaries:

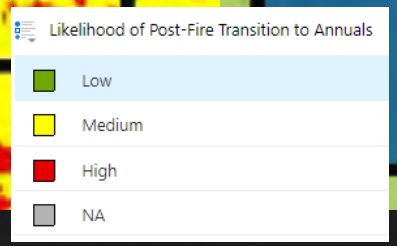




Hypothetical Example: Step 2



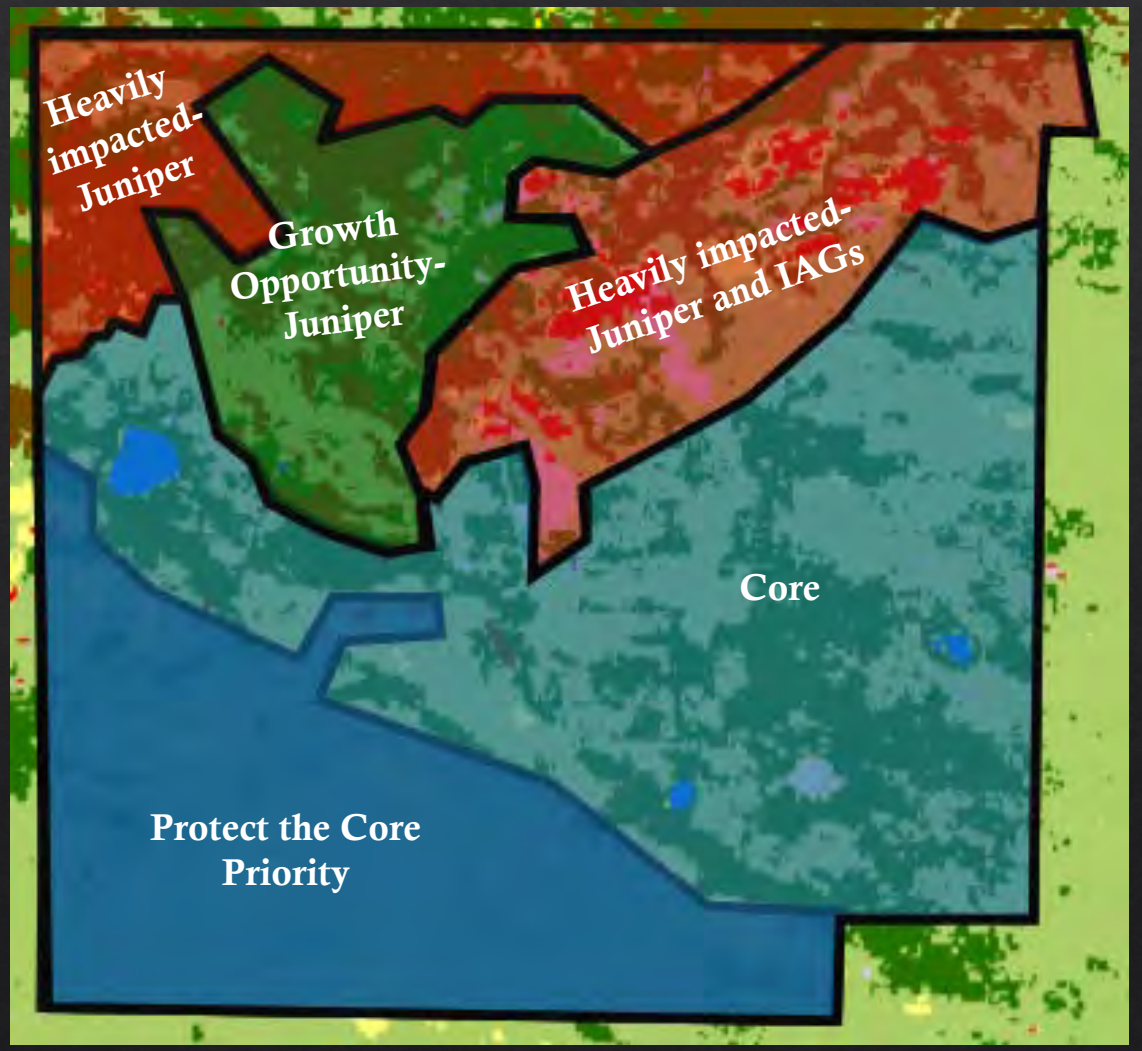


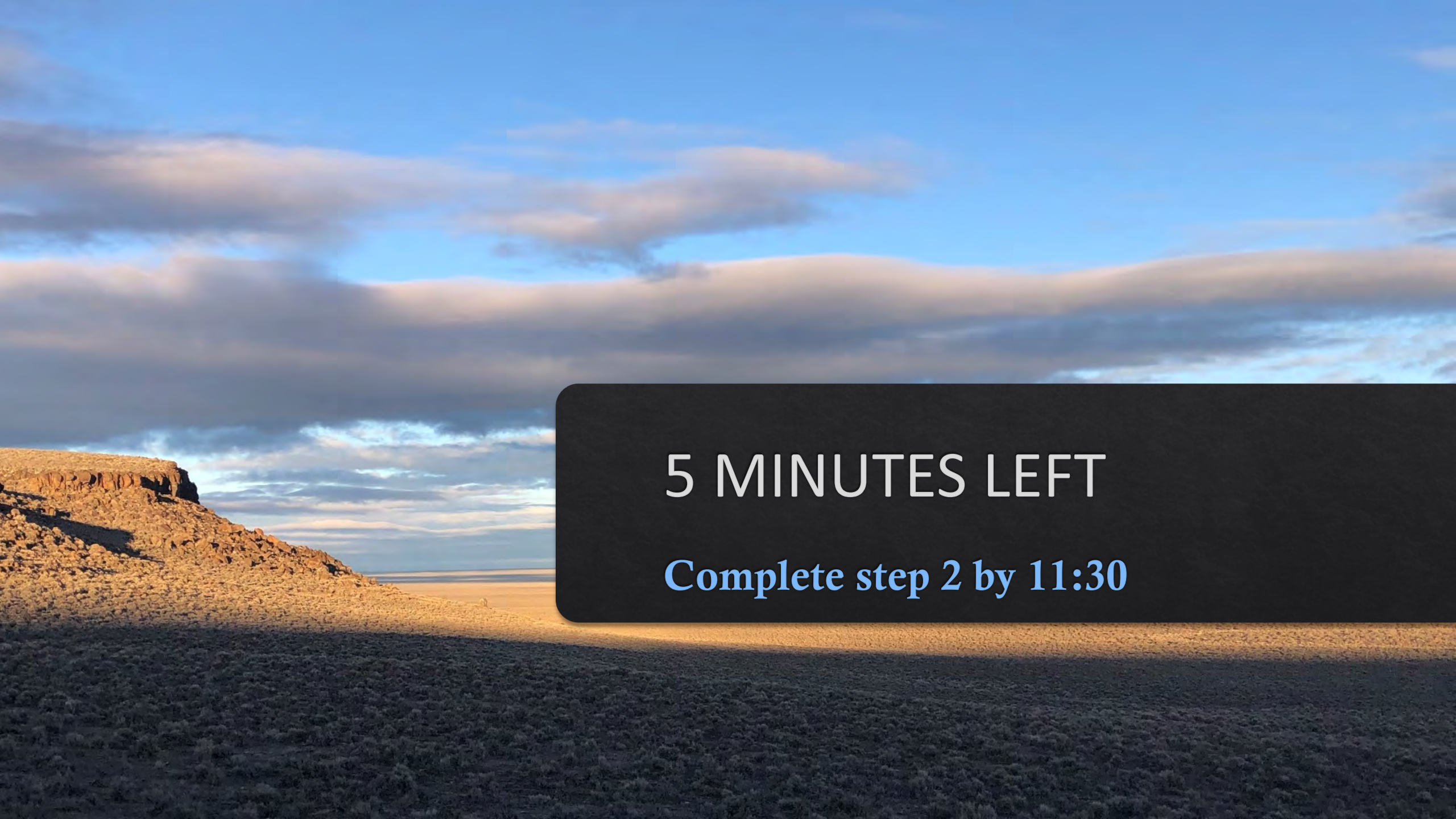


Cinder Butte Area Activity

Step 2: Further refine the core area polygons on your map

- What are the threats in/around this core sagebrush polygon?
- Do you want to limit threats to some of these polygons?
- Infestations you want to contain?

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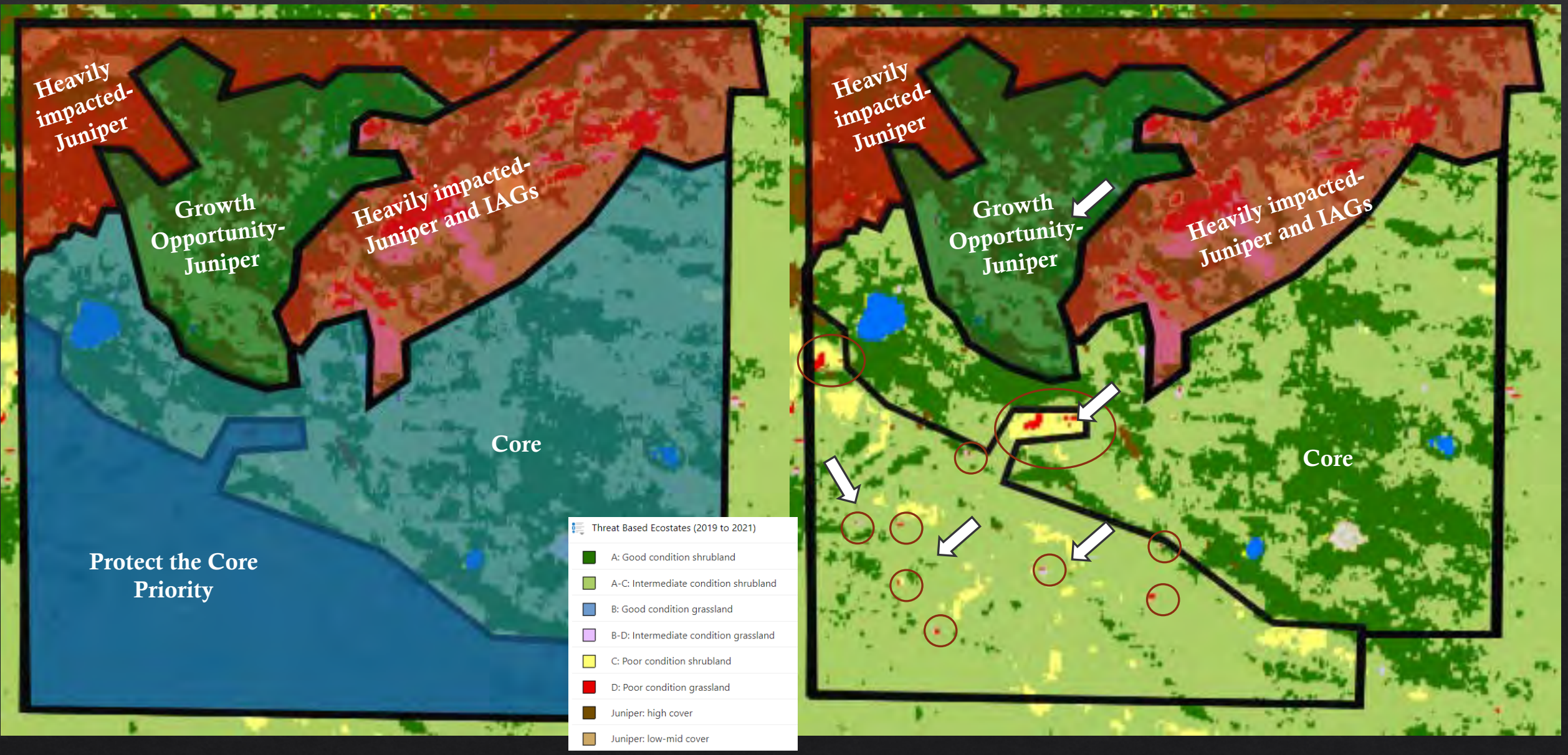
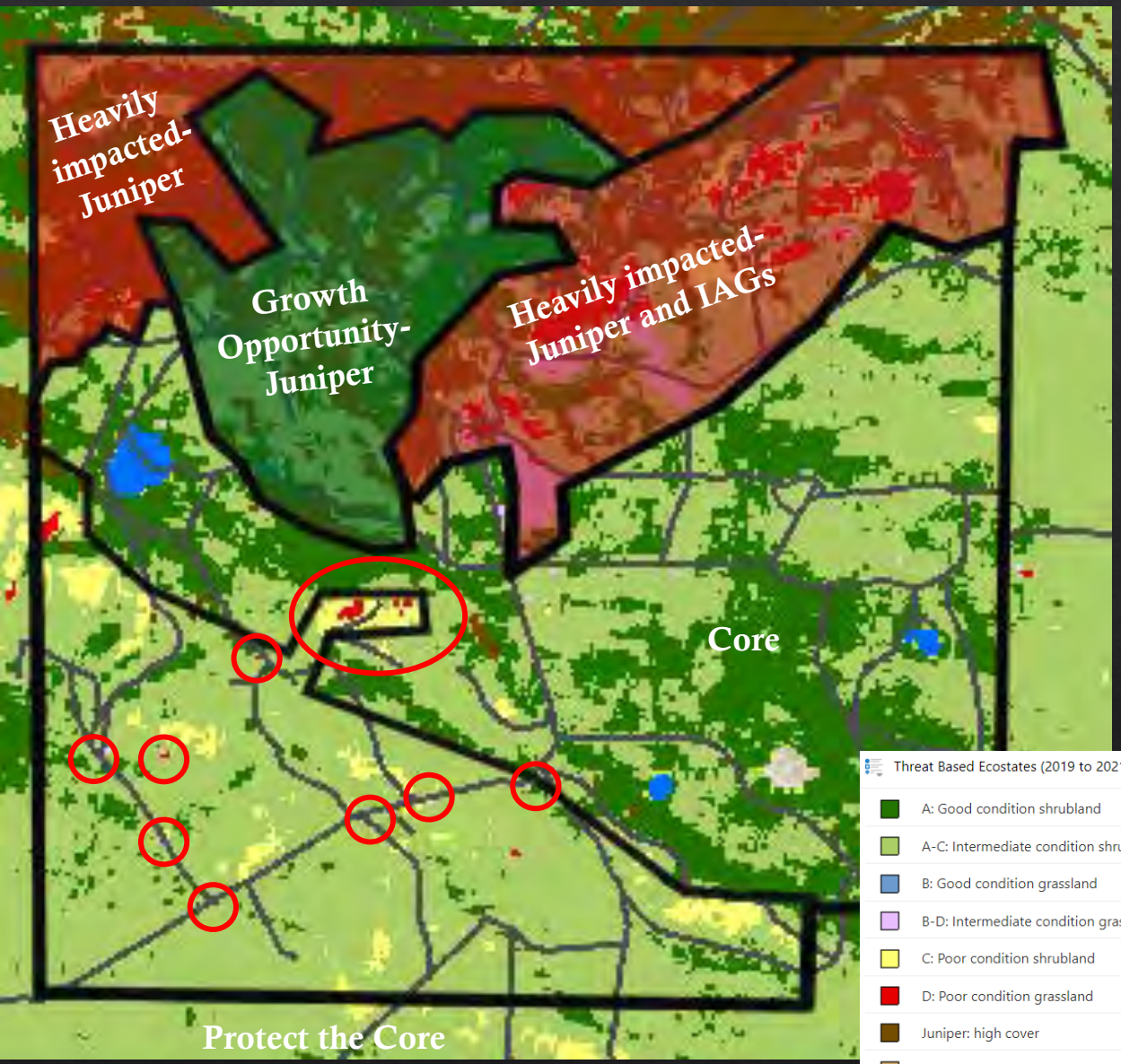
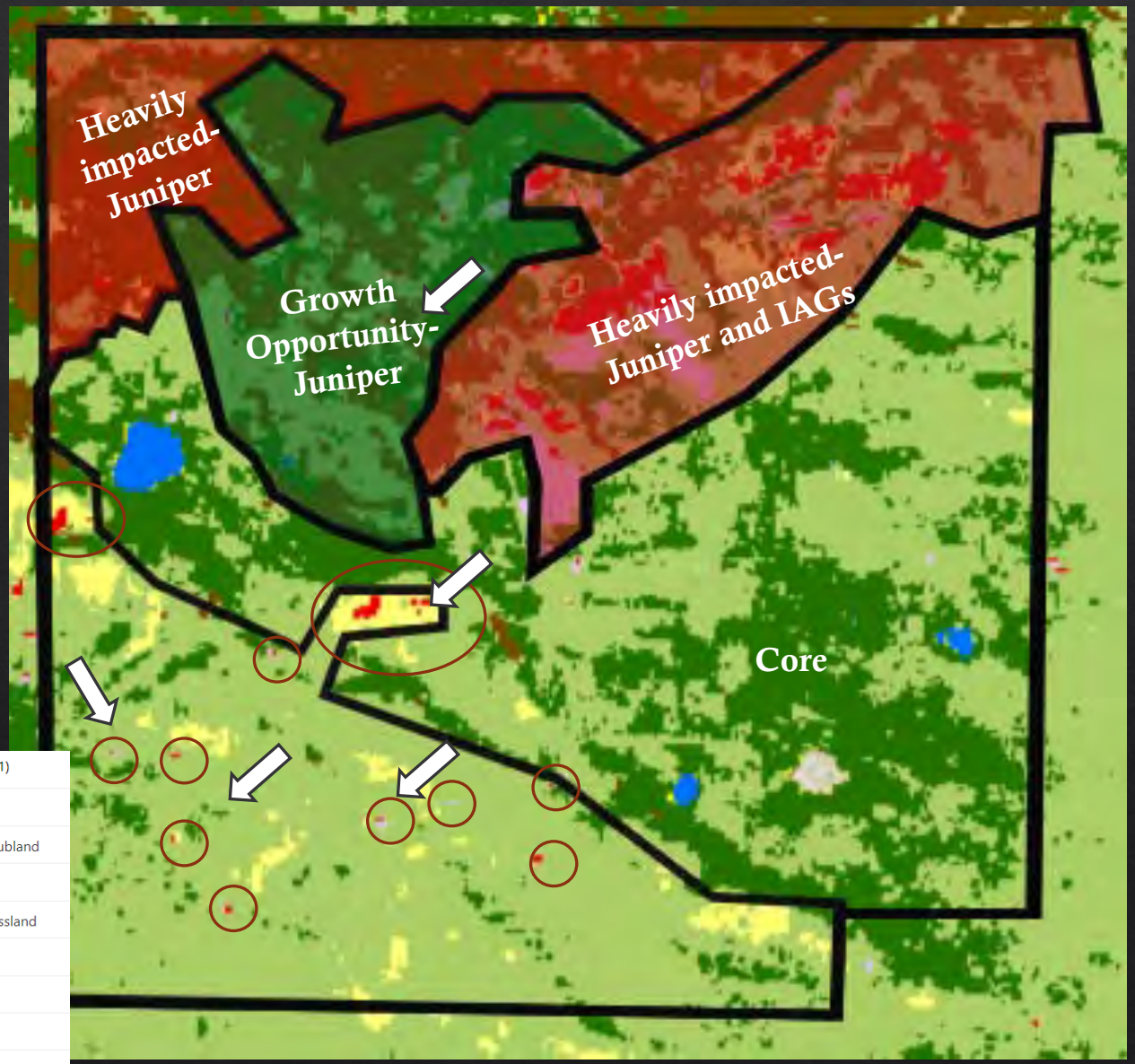
Complete step 2 by 11:30

Hypothetical Example: Step 3

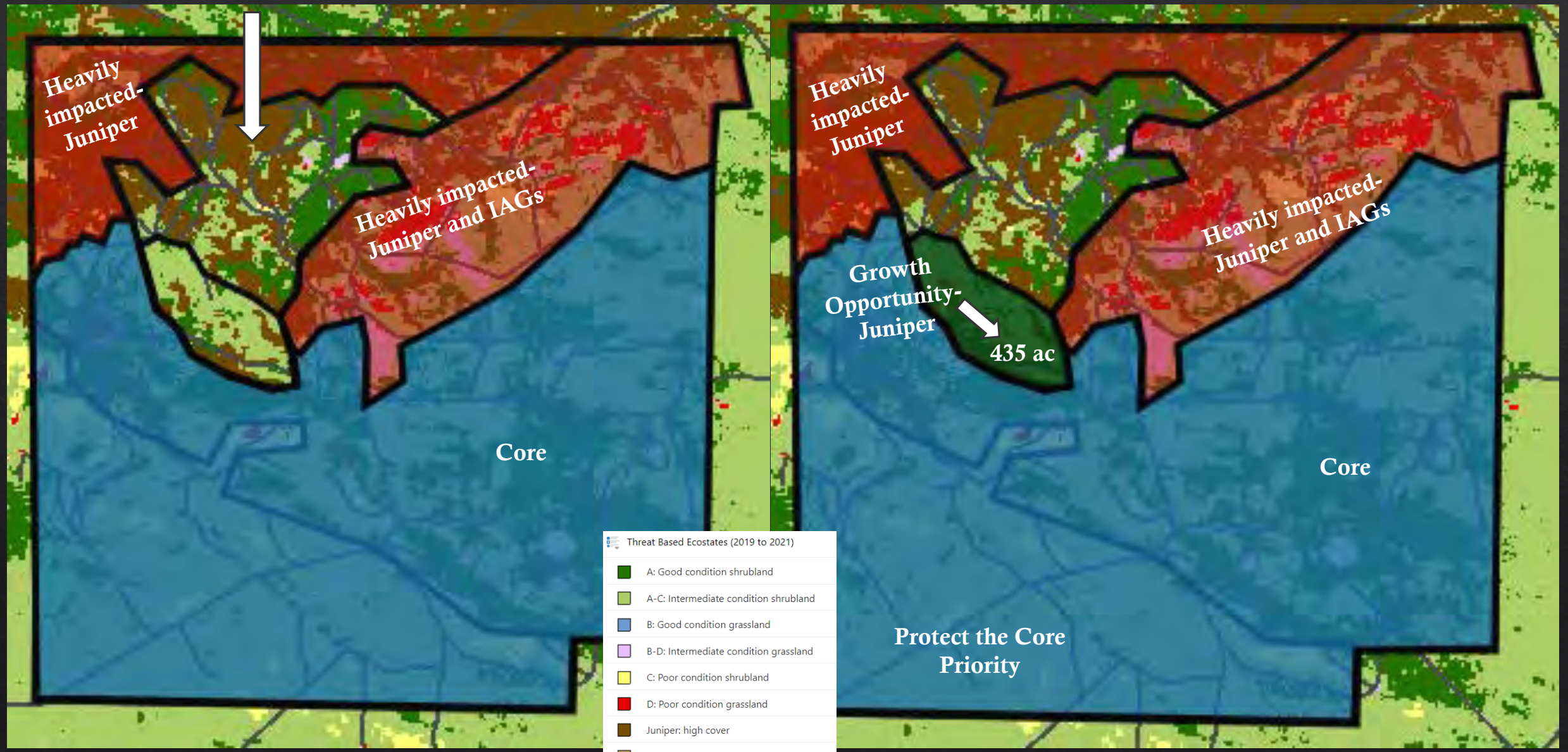


Hypothetical Example: Step 3





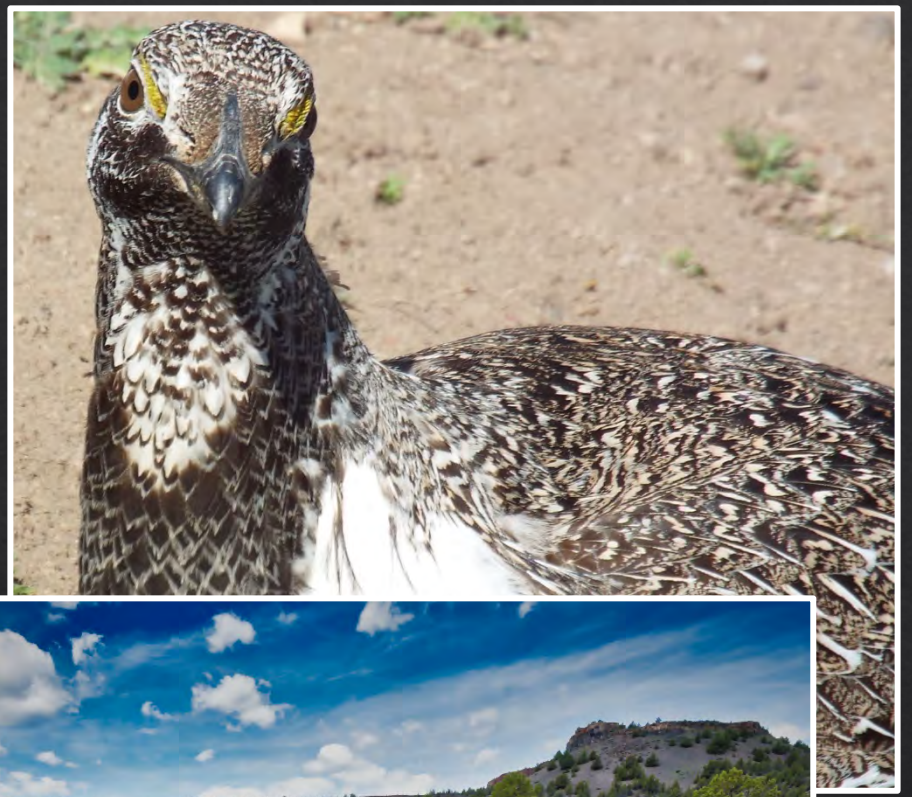
Hypothetical Example: Step 3



Cinder Butte Area Activity

Step 3: Identify priorities

- What do you care about?
- Where are the most important areas?
- How would you protect your investments?



10 MINUTES LEFT
Complete step 3 by 12:00

Cinder Butte Area Activity

Create map and justification

- Why did you divide up the landscape how you did?
- What are your management priorities?
- Opportunities to defend/grow the core and mitigate impacts?
- **Prepare to report out!**

Complete step 3 by 12:00

Lunch
12:00 – 12:30

Group Discussion
12:30 – 1:15

The SageCon Partnership

> SageCon partners work together to build **resilience in Oregon's sagebrush rangelands**, including ecological resilience, social & economic resilience, and partnership resilience.

Our work addresses challenges that operate at a landscape scale where no single agency or organization can make a big enough difference alone.

We strive to create a **supportive, enabling environment for successful and strategic on-the-ground actions** through:

- funding and policy
- shared strategic priorities & monitoring progress
- forums for communication
- technical support and tools