



Where should we work
and what should we do?

Intermountain West Joint Venture

About the IWJV

The IWJV's
vision: An
*Intermountain
West where
people, birds,
and other
wildlife thrive.*



www.iwjv.org

About the IWJV

Our approaches



INTERMOUNTAIN WEST
JOINT VENTURE

Science-to-implementation

Strategic communications

On-the-ground capacity

Partnership development

Government relations



Why do we
care about
pinyon-
juniper?



**Conservation
benefits**



**Partnership
spark**



**Strategic
location**



**Funding &
policy**



Knowledge gaps for managing pinyon-juniper woodlands



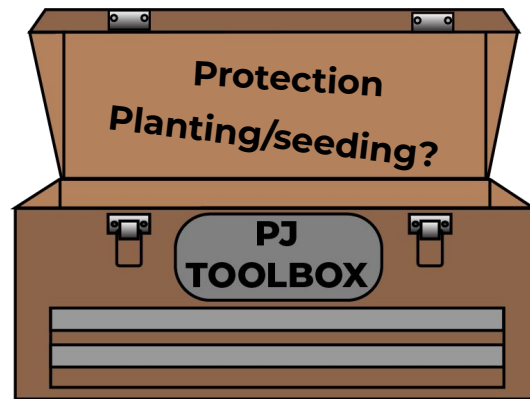
Where do we work?

**Invasives
removal**

**Silvicultural
treatments?**

**Conservation
easements?**

**Fuel
reduction?**



What can we do?

Coordination
is needed to
close
knowledge
gaps



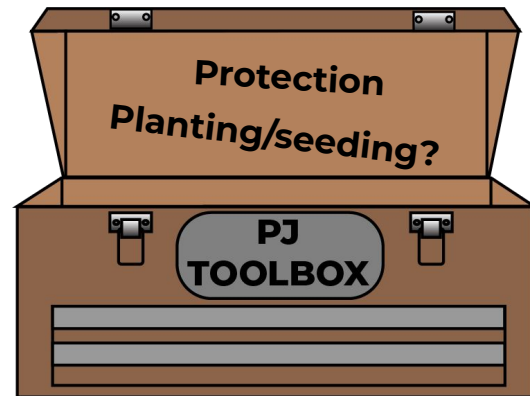
Where do we work?

**Invasives
removal**

**Silvicultural
treatments?**

**Conservation
easements?**

**Fuel
reduction?**



What can we do?

Pinyon-
juniper
woodland
learning
network

Coordination & Funding

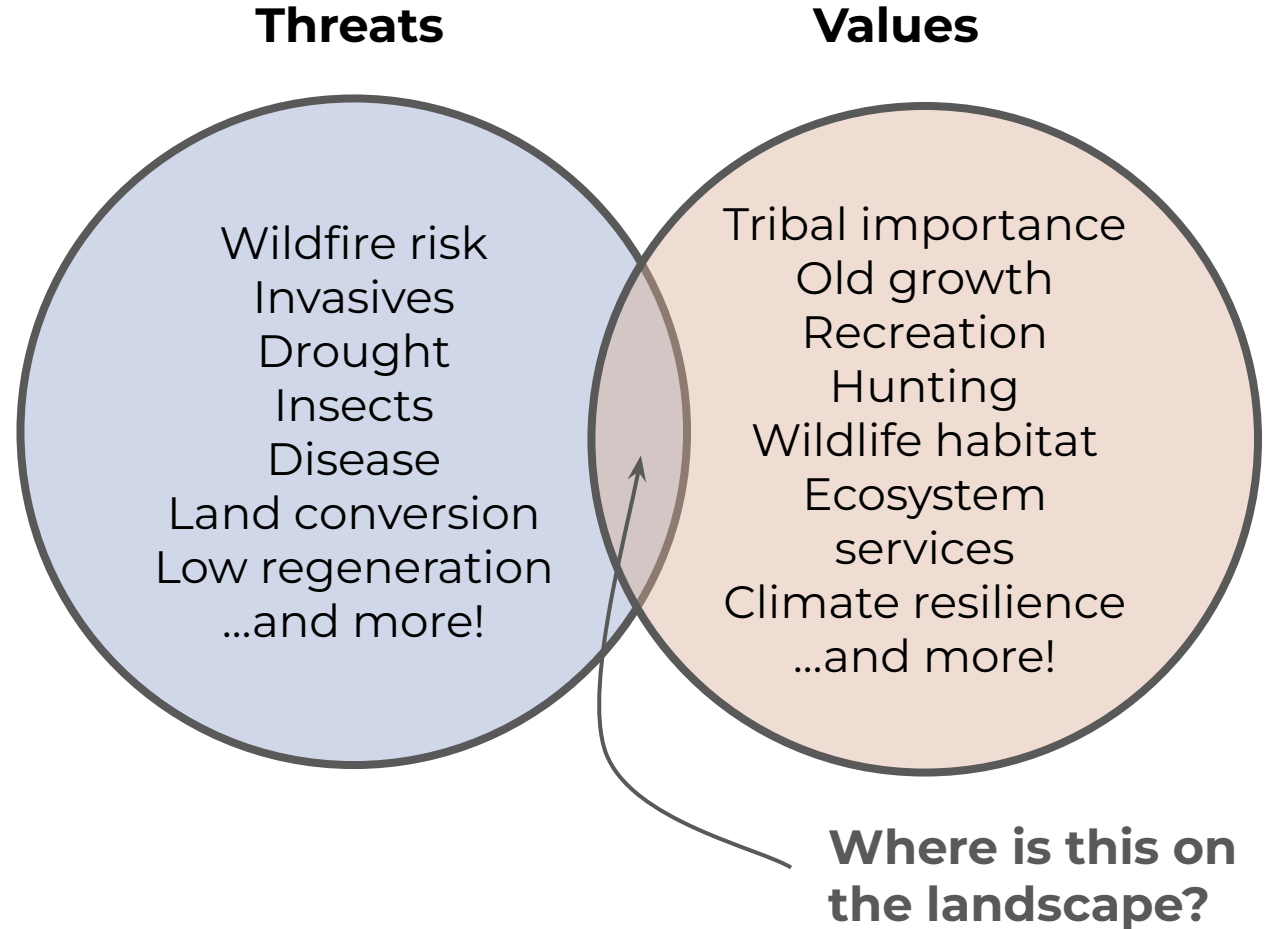
Multi-Agency and Interdisciplinary Participation

Part 1: Where?
**Biome-Wide Spatial
Assessment of Threats and
Values**

Part 2: What?
**Experimental Assessment
of Treatments and Effects
on Woodlands, Wildlife**

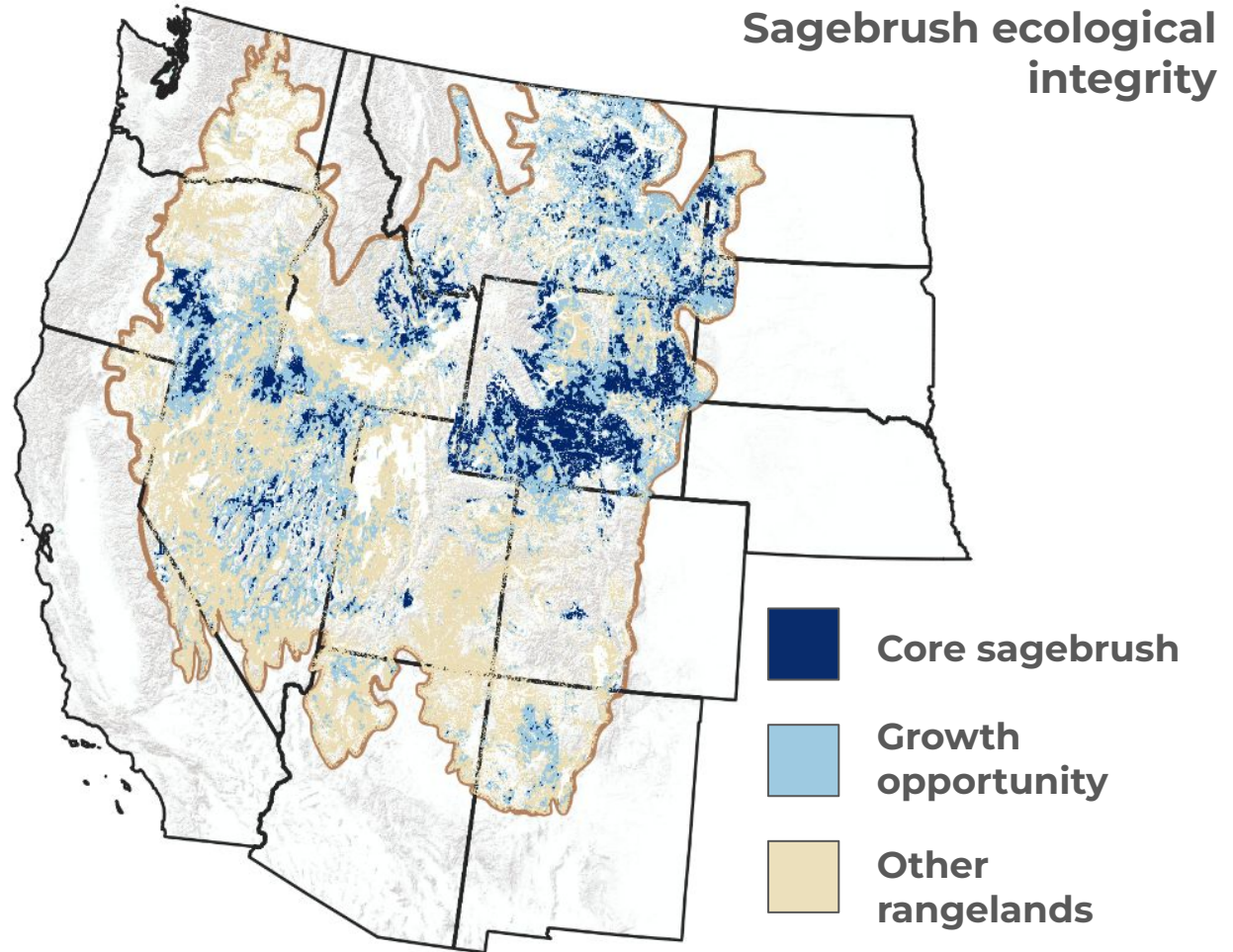
Technical Transfer and Outreach to Managers

Part I: Where?



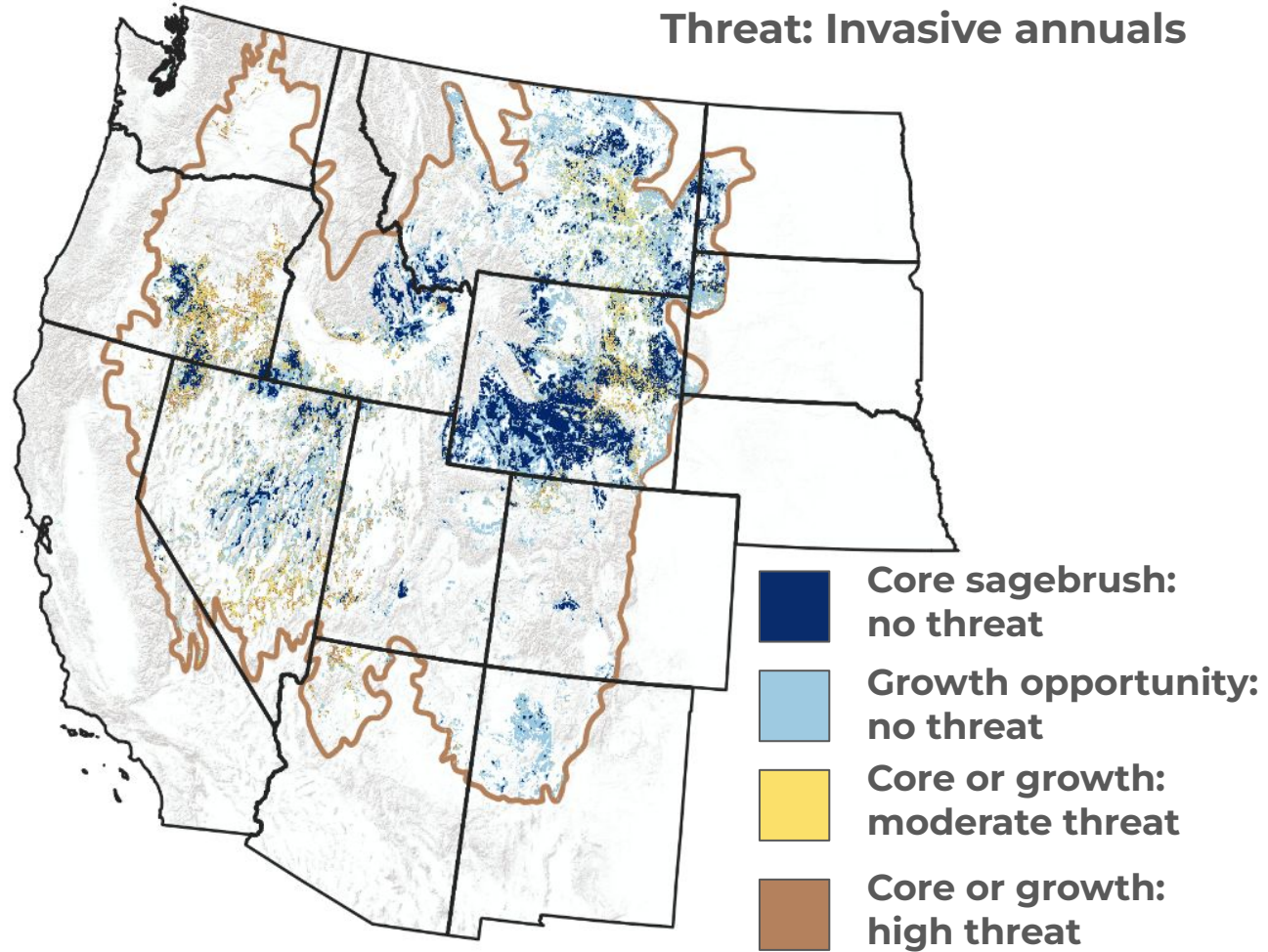
Part I: Where?

The Sagebrush
Conservation
Design as an
example
biome-wide
framework



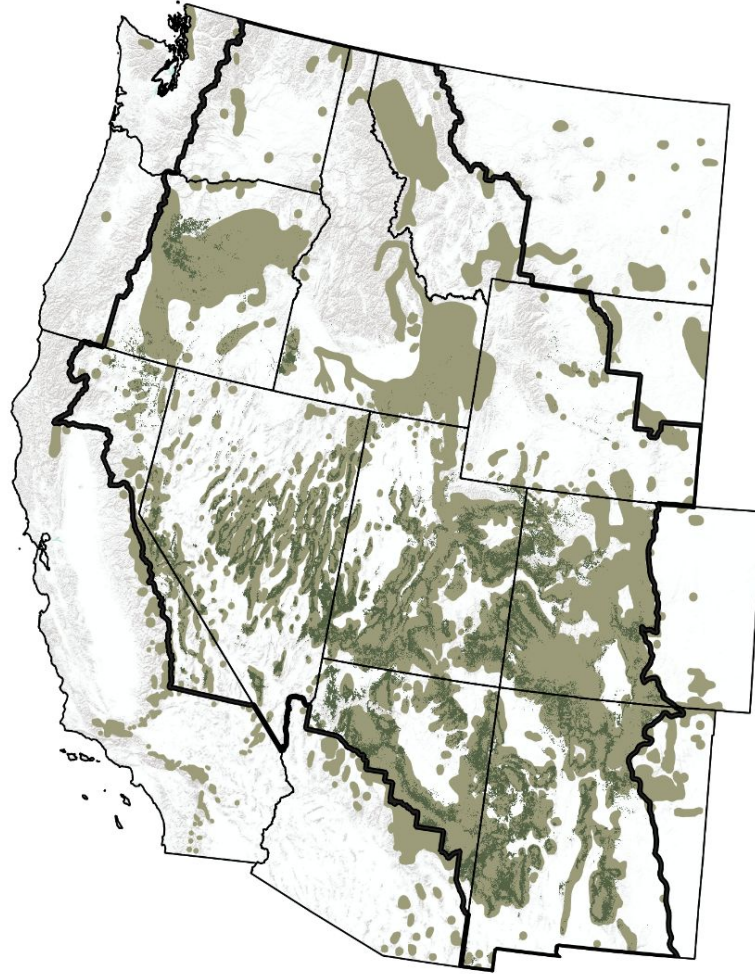
Part I: Where?

The Sagebrush
Conservation
Design as an
example
biome-wide
framework



Part I: Where?

First steps:
Assessing
threats and
values



**What would it
look like for a
group of
researchers and
managers to
co-assess
threats and
values at the
biome scale?**

Part 2: What?



...To reduce the likelihood of drought- and beetle-induced tree die-off events?



...Following drought- and beetle- induced tree mortality events?



...To prevent wildfire-facilitated landscape conversion to invasive species?



...To protect or improve wildlife habitat?

Part 2: What?

SW Colorado
Pinyon-Juniper
Adaptive
Silviculture
Project

Goal: Experimentally assess the efficacy of different silvicultural treatments for increasing vegetation resilience and reducing fire risk across environmental gradients



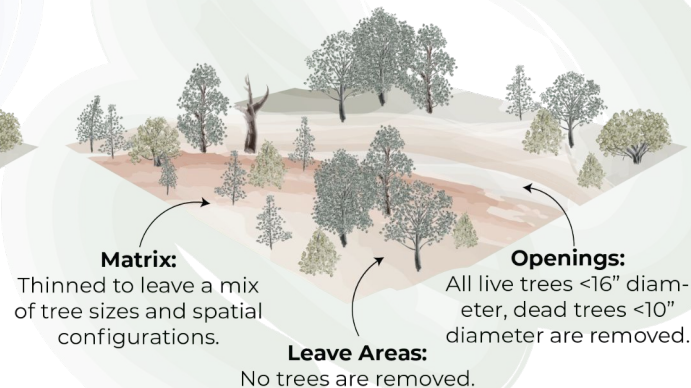
Part 2: What?

Experimental treatments

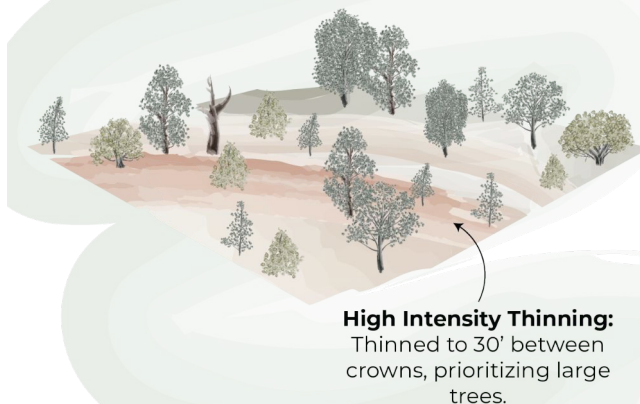
NO TREATMENT



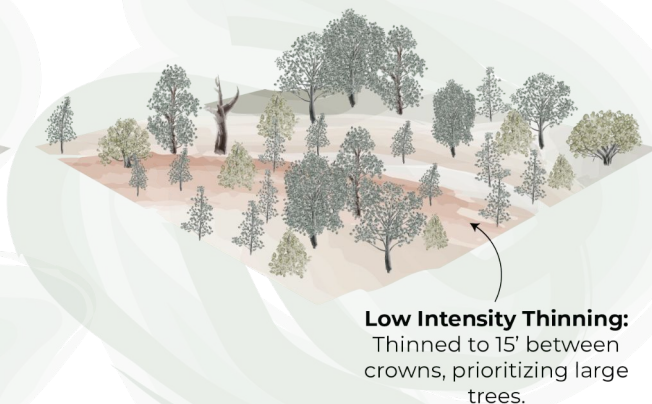
HETEROGENEOUS THINNING



HIGH INTENSITY UNIFORM THINNING



LOW INTENSITY UNIFORM THINNING



Part 2: What?

Variables being
monitored



Tree health

- Tree mortality
- Pine nut production
- Tree regeneration
- Disease and pathogen prevalence

Understory health and groundcover

- Understory plant cover (by species) and diversity
- Ground cover (bare soil, biological soil crust, litter, etc.)

Fire behavior

- Down wood / fuel loads by size class (feed into fire behavior modeling, also potentially important for tree disease risk)
- Canopy structure (terrestrial lidar scans)

Part 2: What?

Key collaborators

Miranda Redmond U.C. Berkeley

Ali Urza U.S. Forest Service

Peter Weisberg and Krisi Ramsey University of Nevada, Reno

John Bradford U.S. Geological Survey

Chad Hoffman Colorado State University

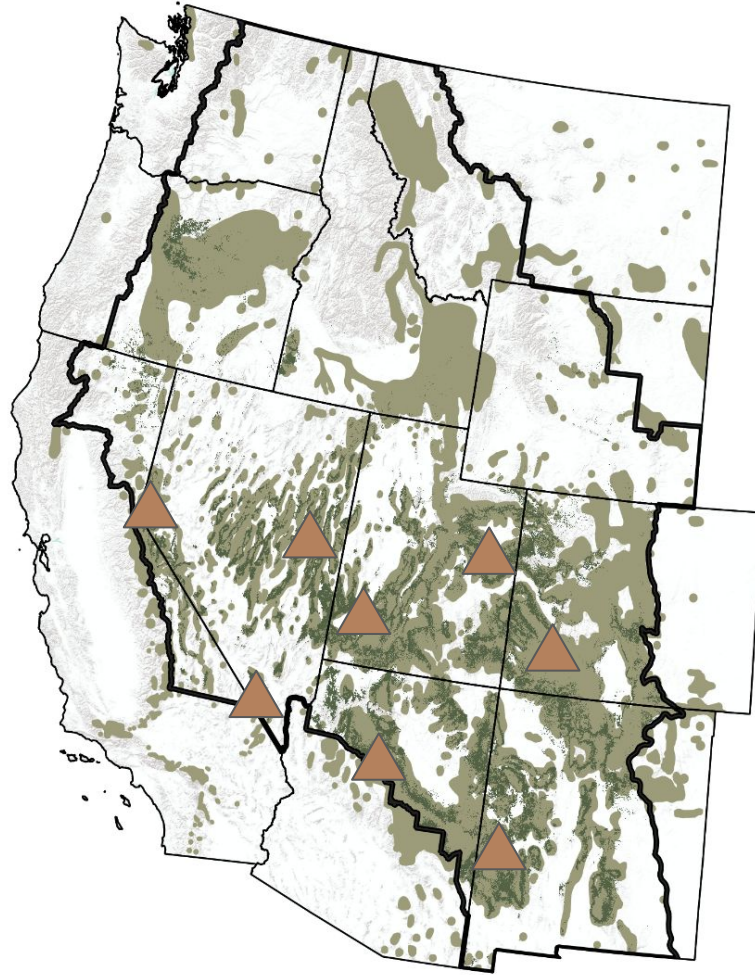
Ian Barrett, James Savage, Tyler Corbin, Nathaniel West, and Chris Domschke BLM

Rosie Frederick University of California, Berkeley



Part 2: What?

Assessing
experimental
treatments
across the biome



**What would it
look like to
replicate
experimental
treatments
within ongoing
management
efforts across
the biome?**



What do we
need to
move
forward?

Coordination & Funding

IWJV has capacity

**Cross-Agency and Interdisciplinary
Participation**

Could this be you?

**Part 1: Where?
Biome-Wide
Spatial
Assessment of
Threats and
Values**

**Part 2: What?
Experimental
Assessment of
Treatments and
Effects on
Woodlands,
Wildlife**

ISO:

- **Researchers working on spatial assessments**
- **Managers implementing treatments interested in collaborating on research**

**Technical Transfer and Outreach to
Managers**

IWJV has capacity

Thanks!

Questions?

Interested in working with us? Please reach out.

Mariah McIntosh
Science to Implementation Specialist
mariah.mcintosh@iwjv.org

Andrew Olsen
Science to Implementation Coordinator
andrew.olsen@iwjv.org



INTERMOUNTAIN WEST
JOINT VENTURE