Whitebark Pine Survey

PRELIMINARY RESULTS FROM AN ONLINE SURVEY OF WHITEBARK PINE HABITAT MANAGERS DURING THE FALL OF 2017

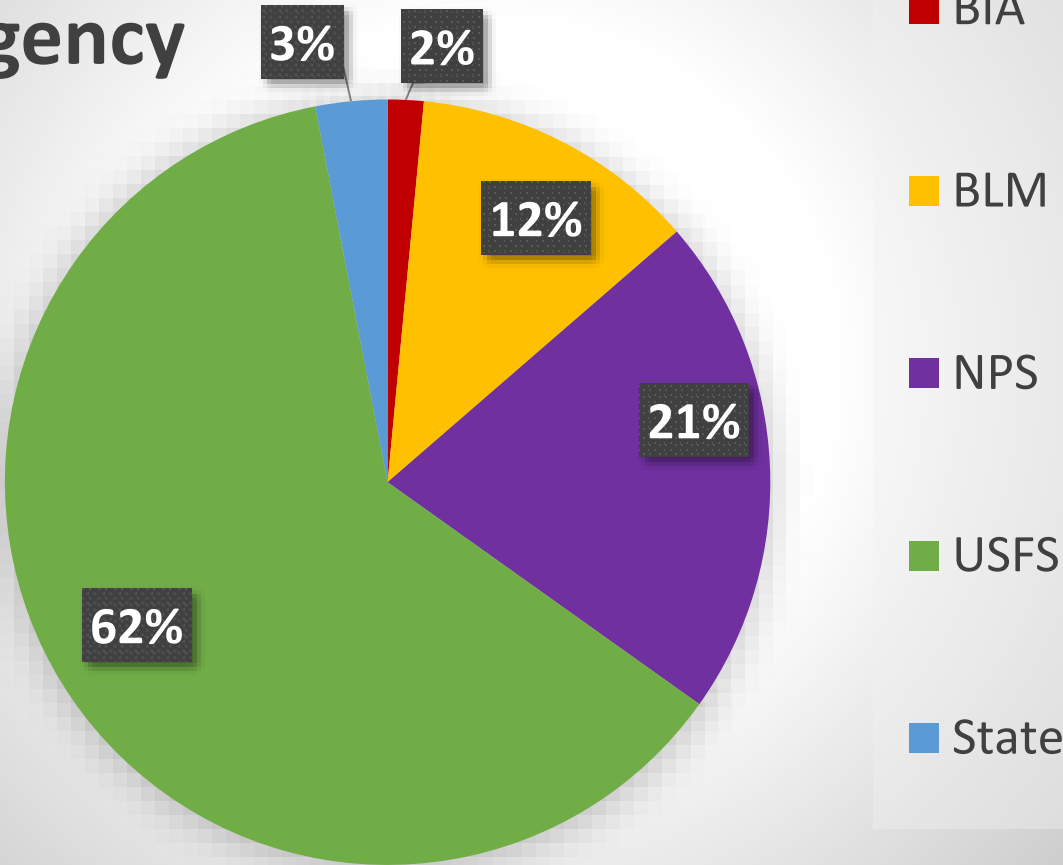Julee Shamhart, Executive Assistant, Whitebark Pine Ecosystem Foundation

Objectives

▶ Identify what data is currently available

▶ Identify gaps in data geographically and by agency

▶ Develop understanding of resources needed to fill gaps in data

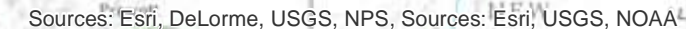▶ Expand knowledge of resources needed to meet restoration goals

Survey Response

Responses by Agency

	BIA	1	0.0152
	BLM	8	0.1212
	NPS	14	0.2121
	USFS	41	0.6212
	State	2	0.0303
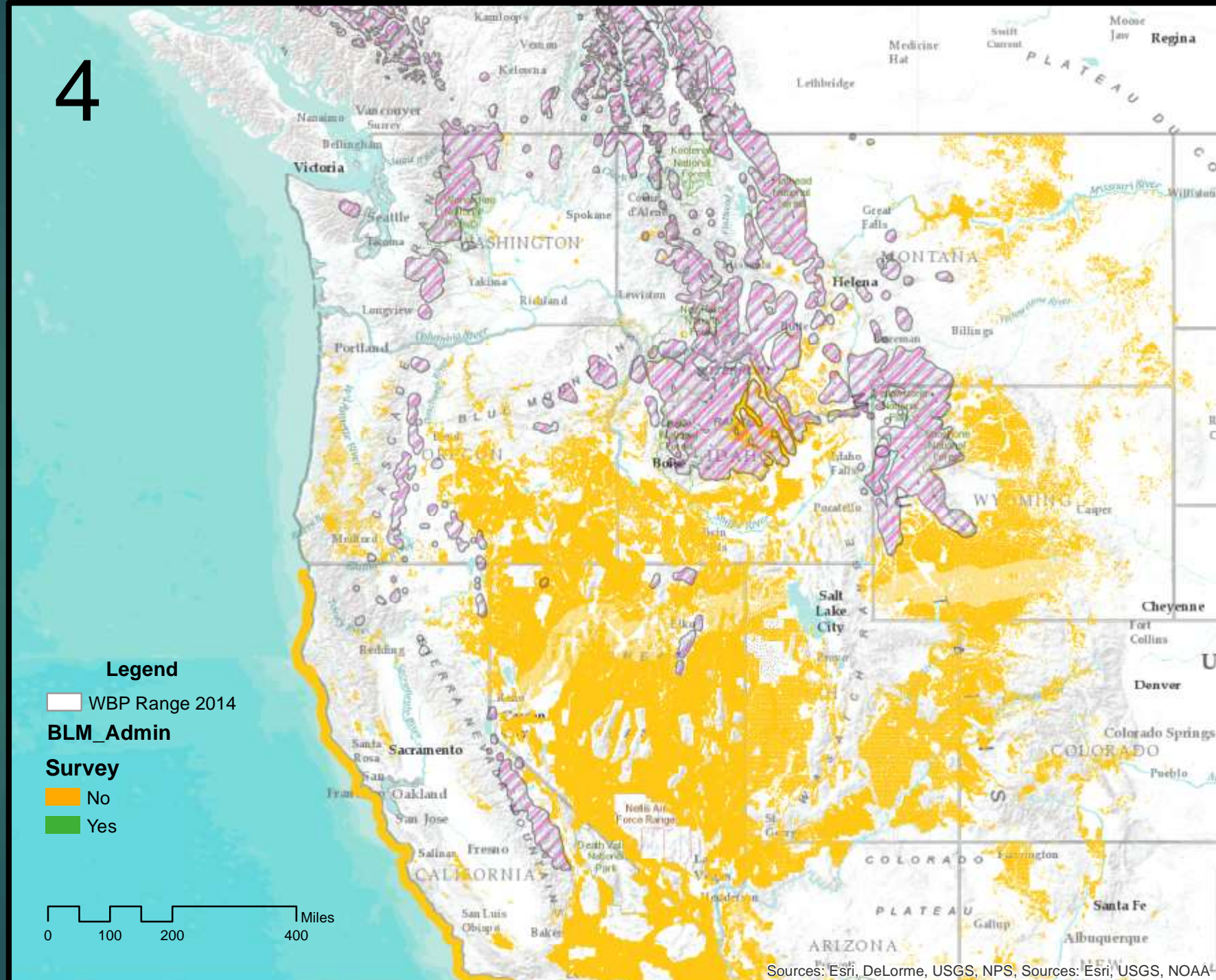
Geographic Coverage

Legend

▭ WBP Range 2014

Miles
0   100   200   400

Sources: Esri, DeLorme, USGS, NPS, Sources: Esri, USGS, NOAA

Geographic Coverage

- Bureau of Land Management

Legend

☐ WBP Range 2014

BLM_Admin

Survey

🟧 No

🟩 Yes

Geographic Coverage

- Bureau of Land Management

Legend

WBP Range 2014

BLM_Admin

Survey

No

Yes

0   100   200   400 Miles

Sources: Esri, DeLorme, USGS, NPS, Sources: Esri, USGS, NOAA

Geographic Coverage

- Bureau of Land Management

- National Park Service

Legend

WBP Range 2014

NPS_Admin

Sources: Esri, DeLorme, USGS, NPS, Sources: Esri, USGS, NOAA
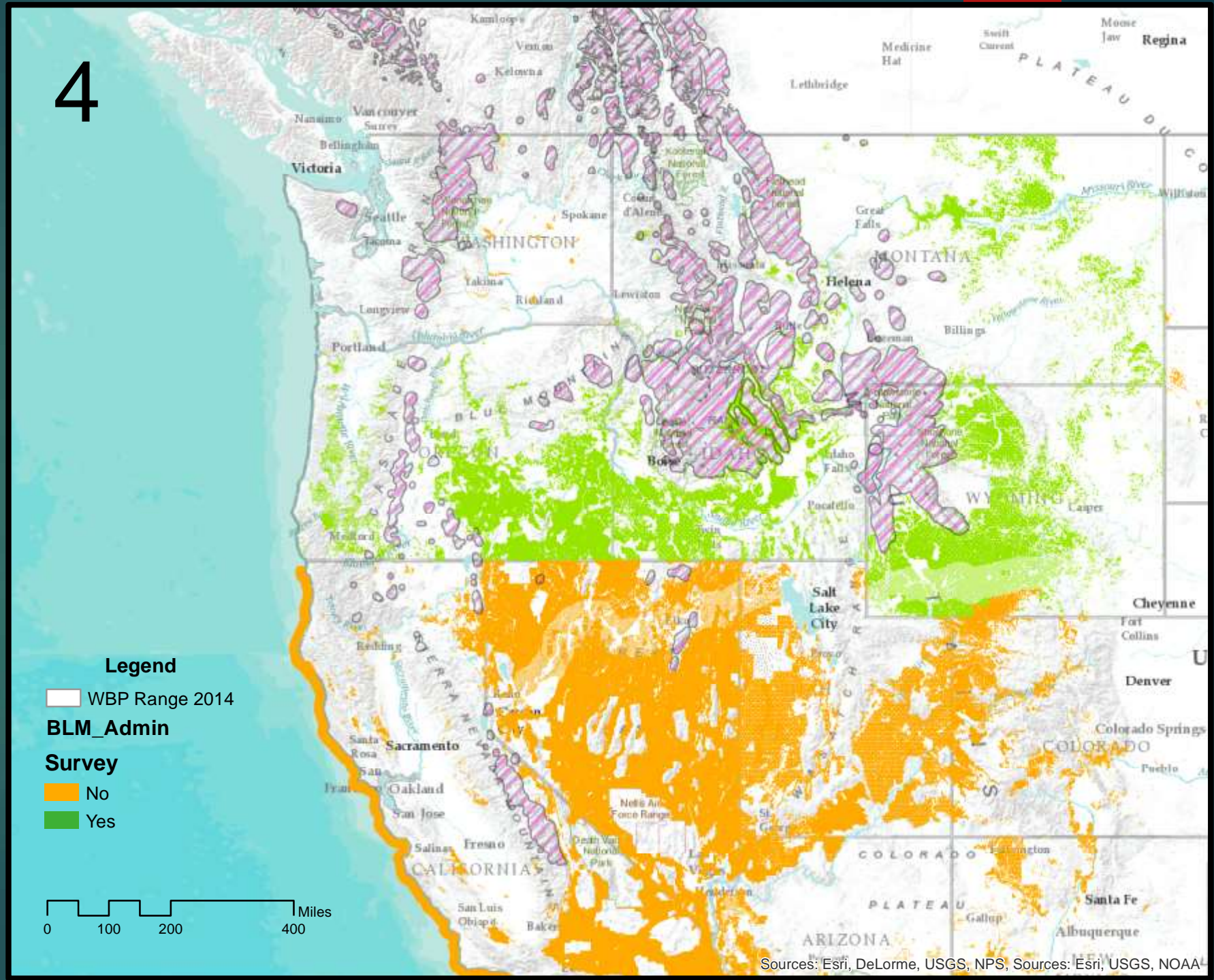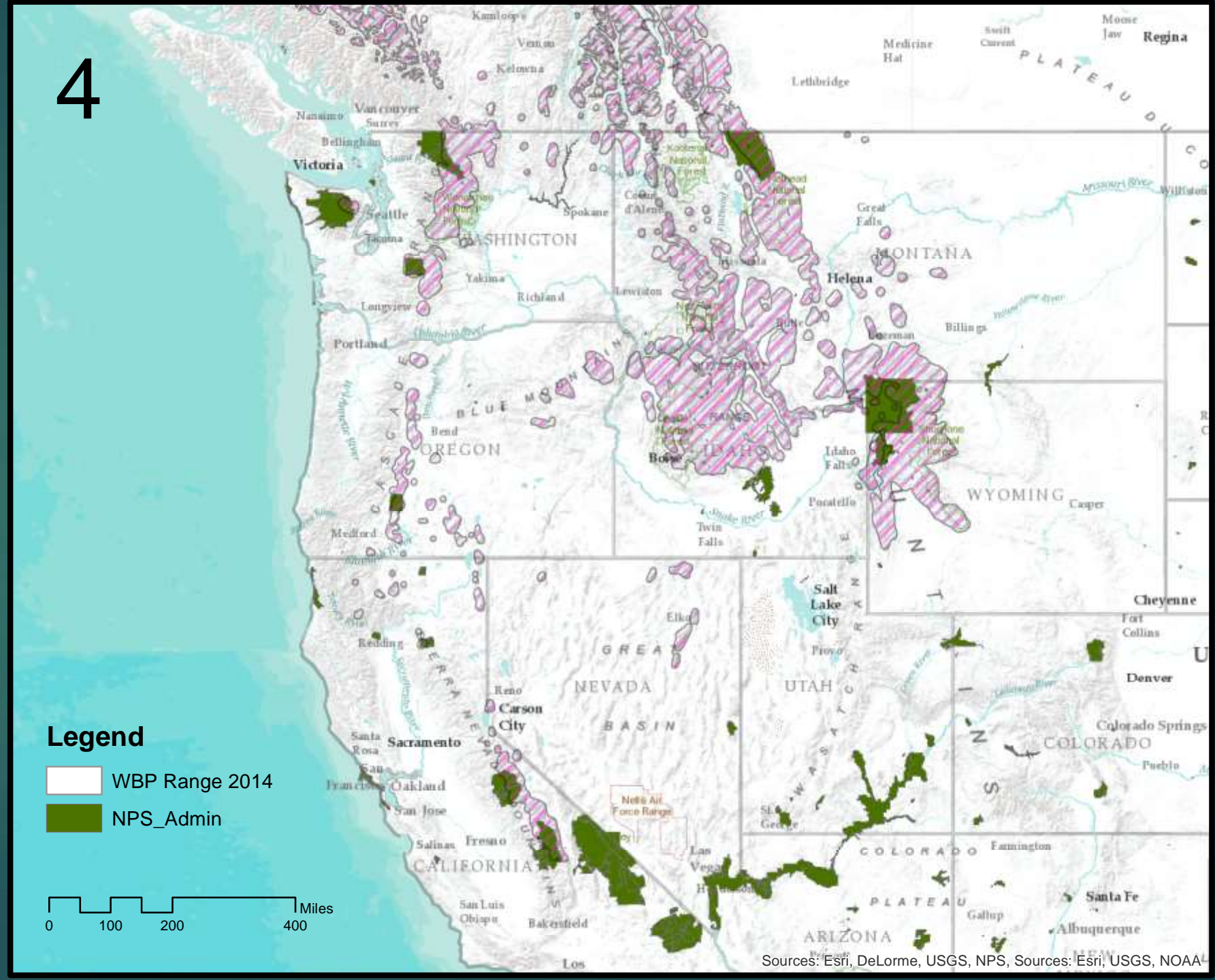
Geographic Coverage

- Bureau of Land Management

- National Park Service

Legend

☐ WBP Range 2014

Survey

■ No

■ Yes

Sources: Esri, DeLorme, USGS, NPS, Sources: Esri, USGS, NOAA

Geographic Coverage

- Bureau of Land Management

- National Park Service

- US Forest Service

Legend

WBP Range 2014

FS_Admin

Sources: Esri, DeLorme, USGS, NPS, Sources: Esri, USGS, NOAA

Geographic Coverage

- Bureau of Land Management
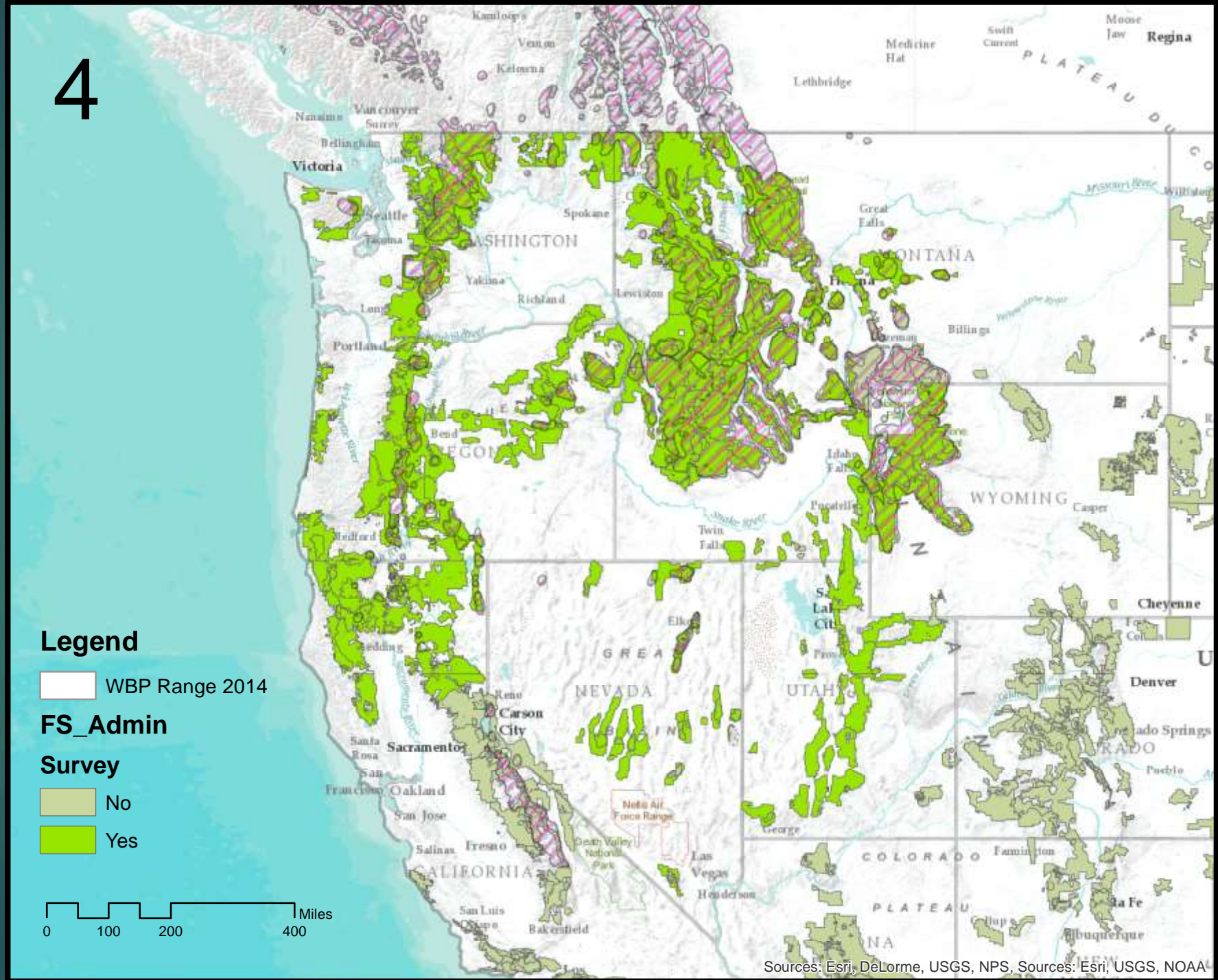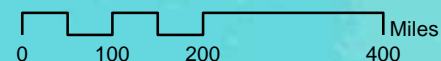
- National Park Service

- US Forest Service

4

Legend

☐ WBP Range 2014
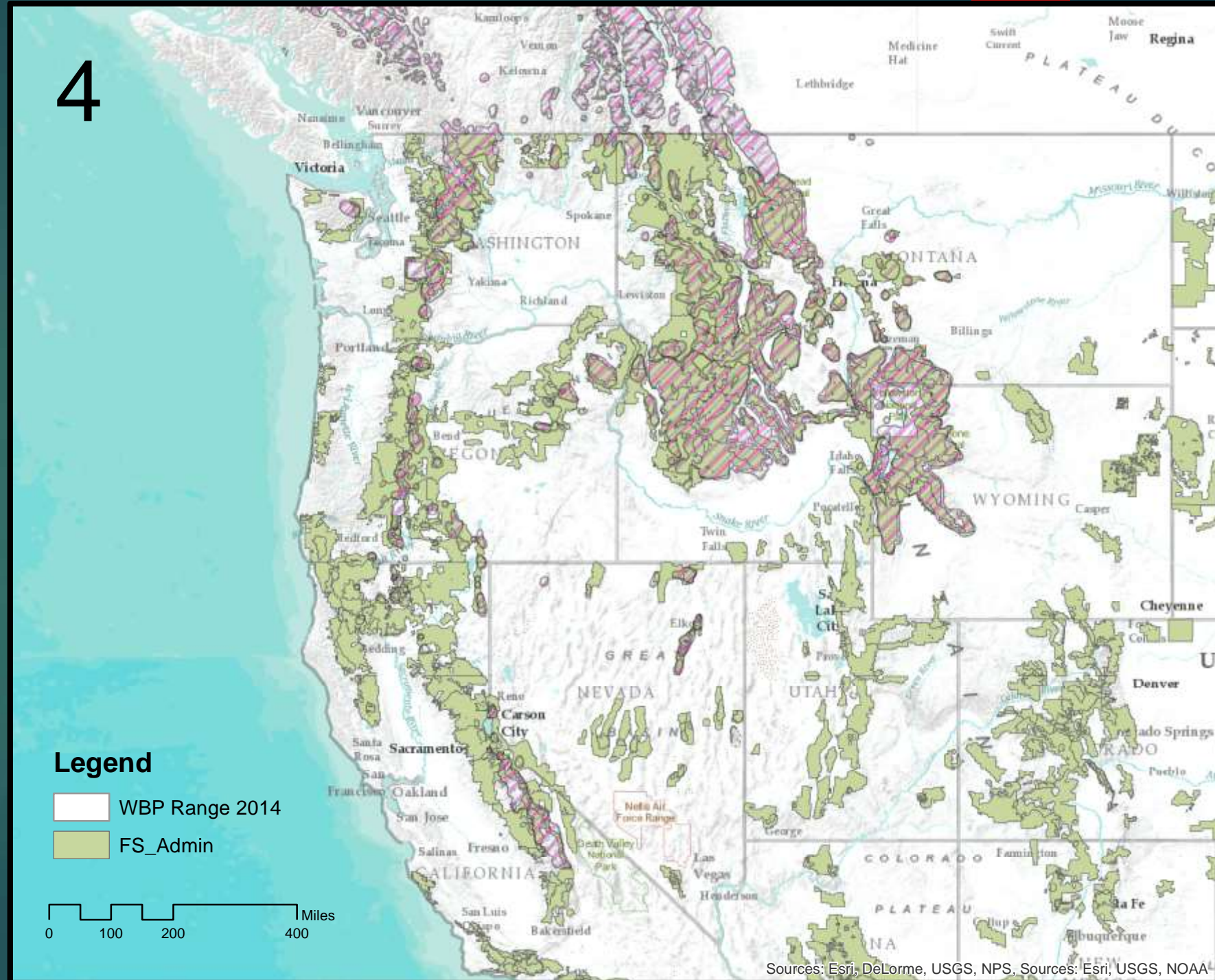
FS_Admin

Survey

☐ No

☐ Yes

0   100   200   400 Miles

Sources: Esri, DeLorme, USGS, NPS, Sources: Esri, USGS, NOAA

Limitations

- Voluntary response survey Likely skewed toward people who are interested in subject

- Low representation from some agencies

- Data coverage variable within responses- may be some overlap in areas

- Quantitative data misses important details in some questions

Management Guidelines

▶ Does your administrative unit have a restoration or management guide or set of guidelines for whitebark pine?

▶ 67% of respondents have guidelines or they are being developed
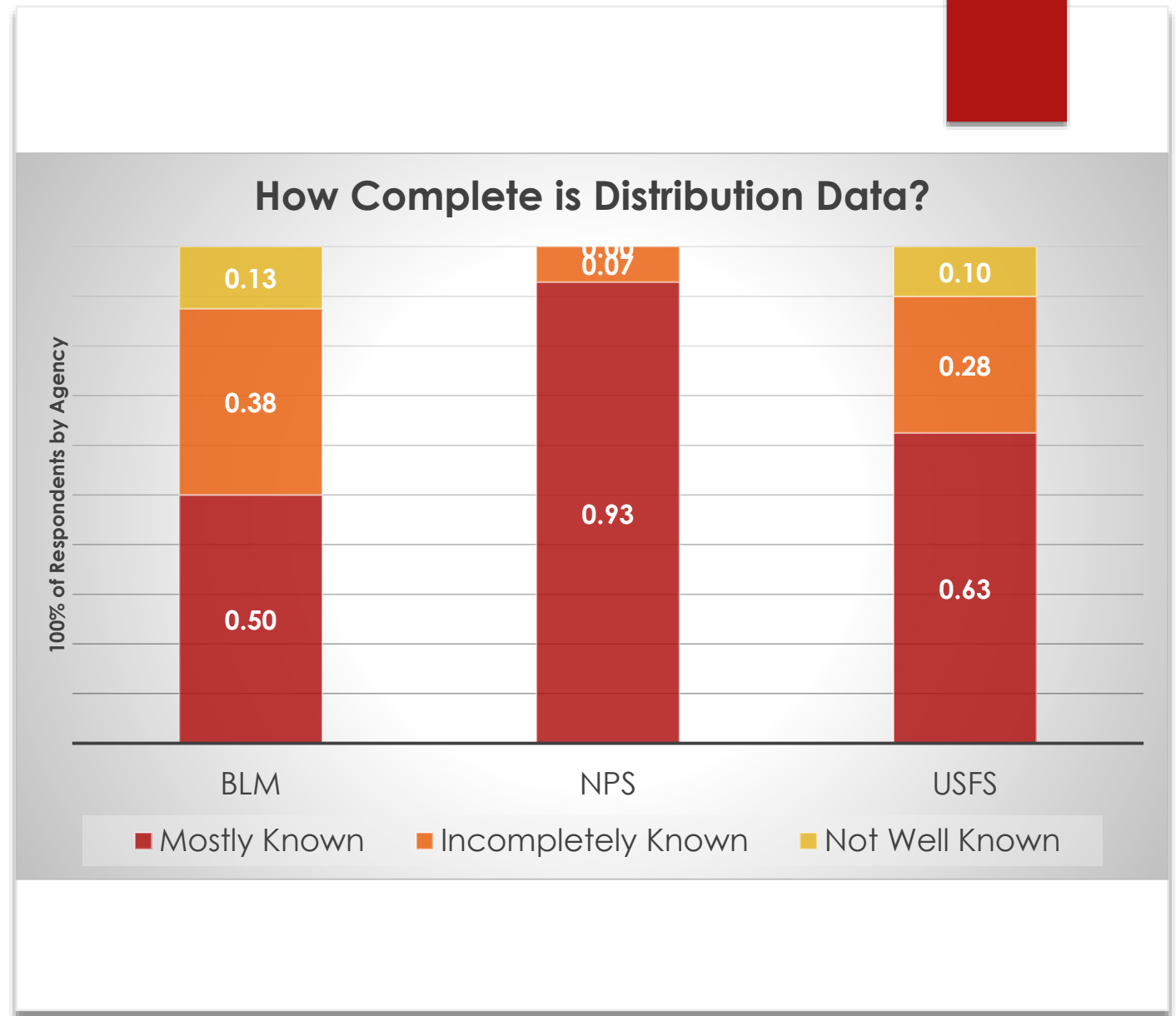
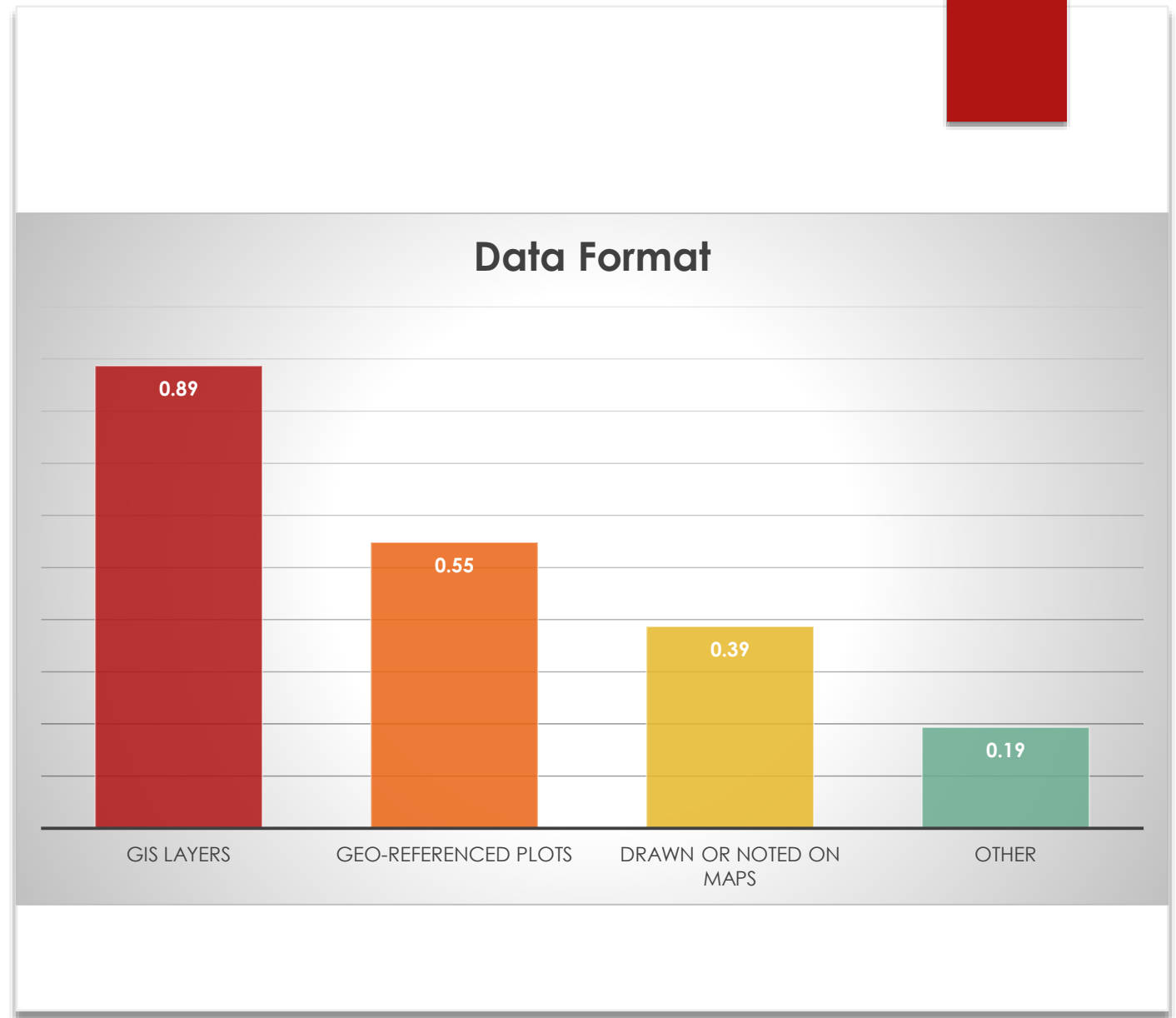**31** Yes

22 No

13 Guidelines/Guide Being Developed

Habitat Data

- 95% of Respondents Have Data Showing Where Whitebark Pine is Present
- 67% of that data is 'Mostly Known'
- Another 25% is "Incompletely known"
- Only 8% "Not well known"

How Complete is Distribution Data?

100% of Respondents by Agency

	BLM	NPS	USFS
Not Well Known	0.13		0.10
Incompletely Known	0.38	0.07	0.28
Mostly Known	0.50	0.93	0.63

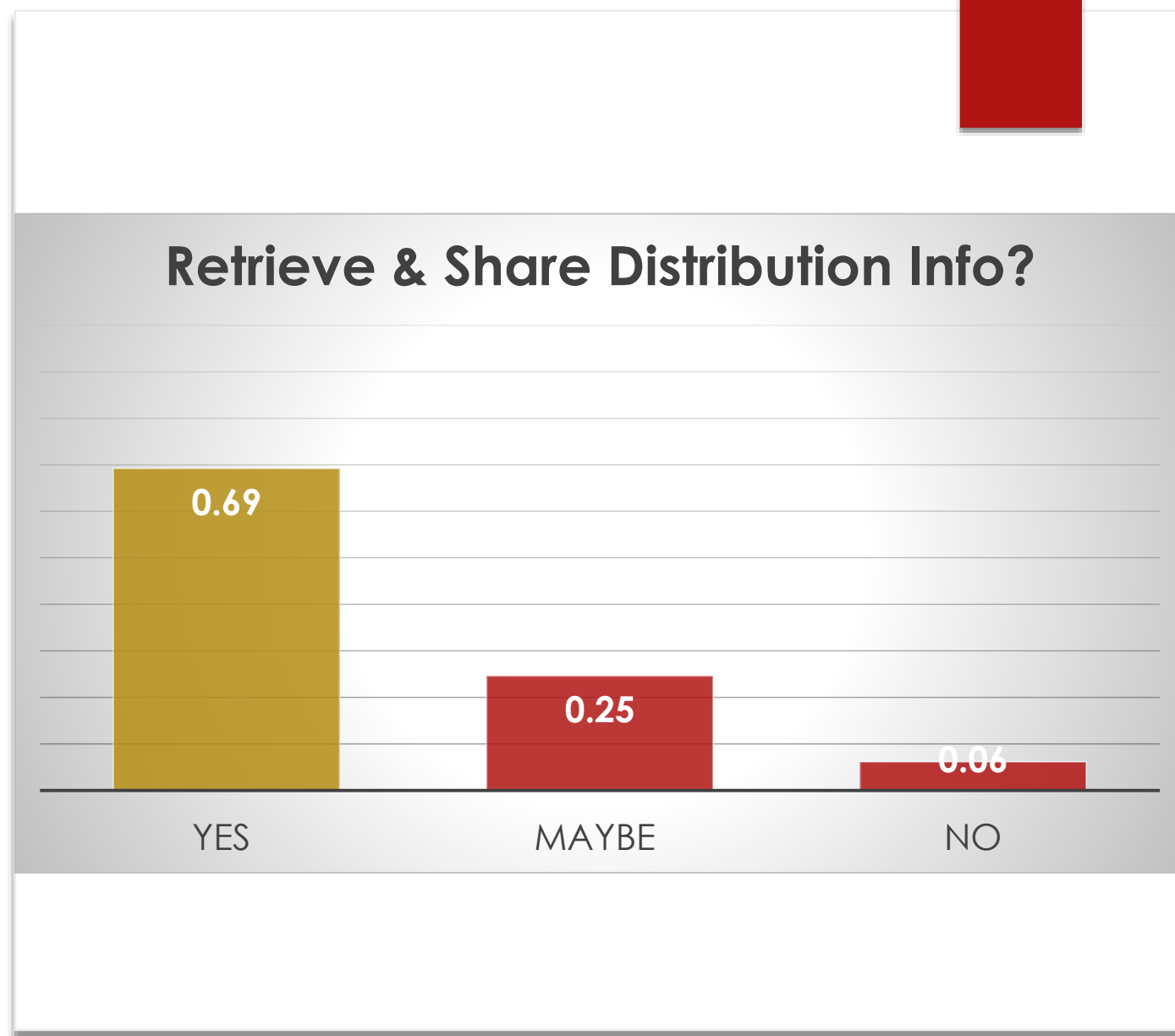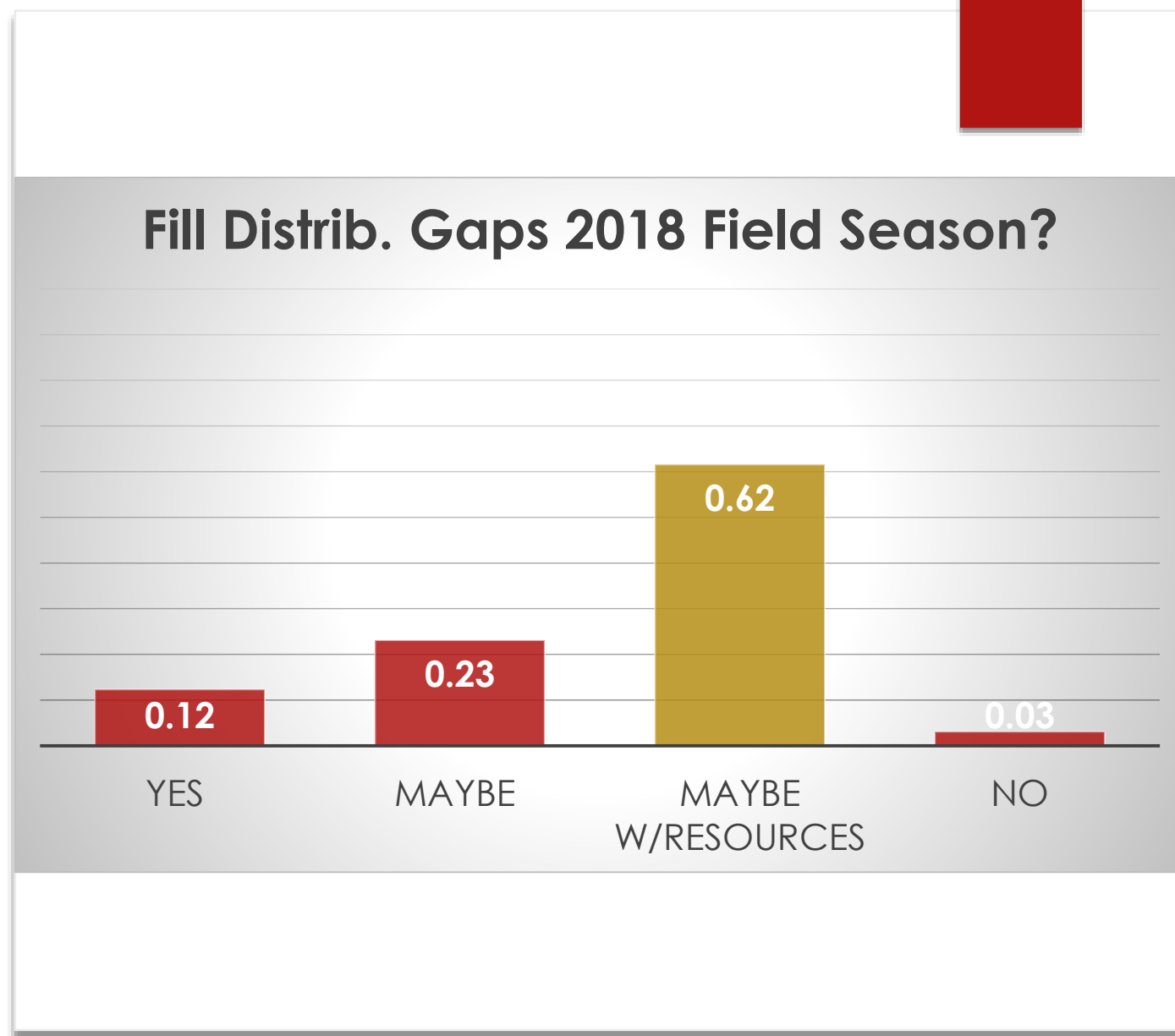Legend: Mostly Known, Incompletely Known, Not Well Known

Habitat Data

▶ 95% of Respondents Have Data Showing Where Whitebark Pine is Present

Habitat Data

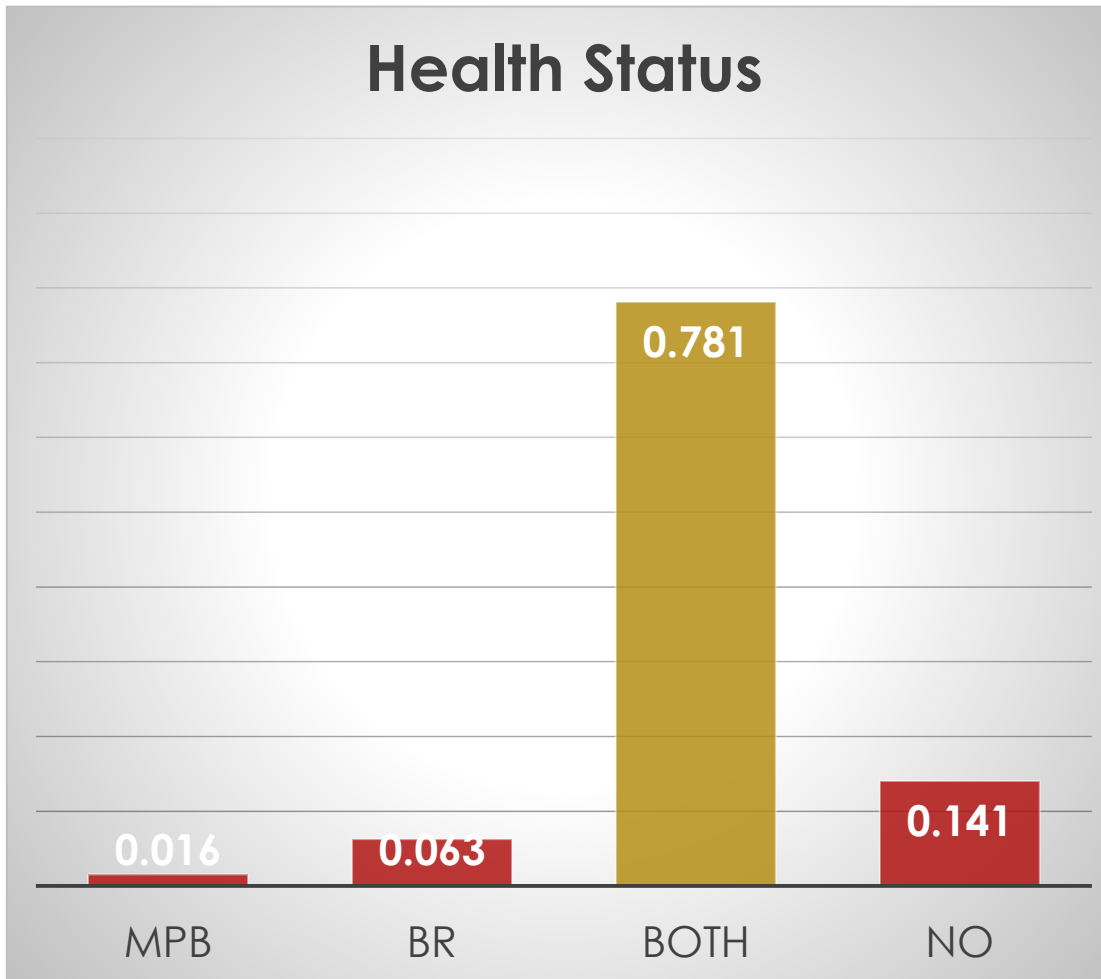▶ 95% of Respondents Have Data Showing Where Whitebark Pine is Present

Retrieve & Share Distribution Info?

0.69	0.25	0.06
YES	MAYBE	NO

Habitat Data

▶ 95% of Respondents Have Data Showing Where Whitebark Pine is Present

Fill Distrib. Gaps 2018 Field Season?

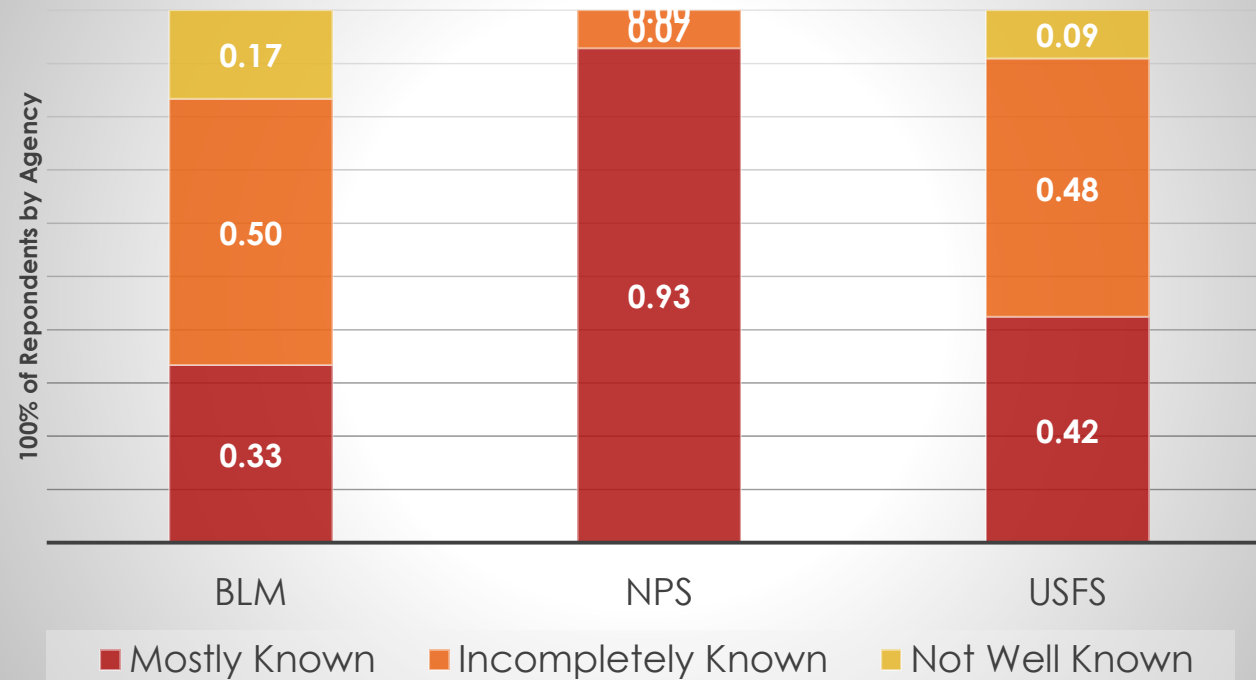| YES	MAYBE	MAYBE W/RESOURCES	NO
0.12	0.23	0.62	0.03

Health Data
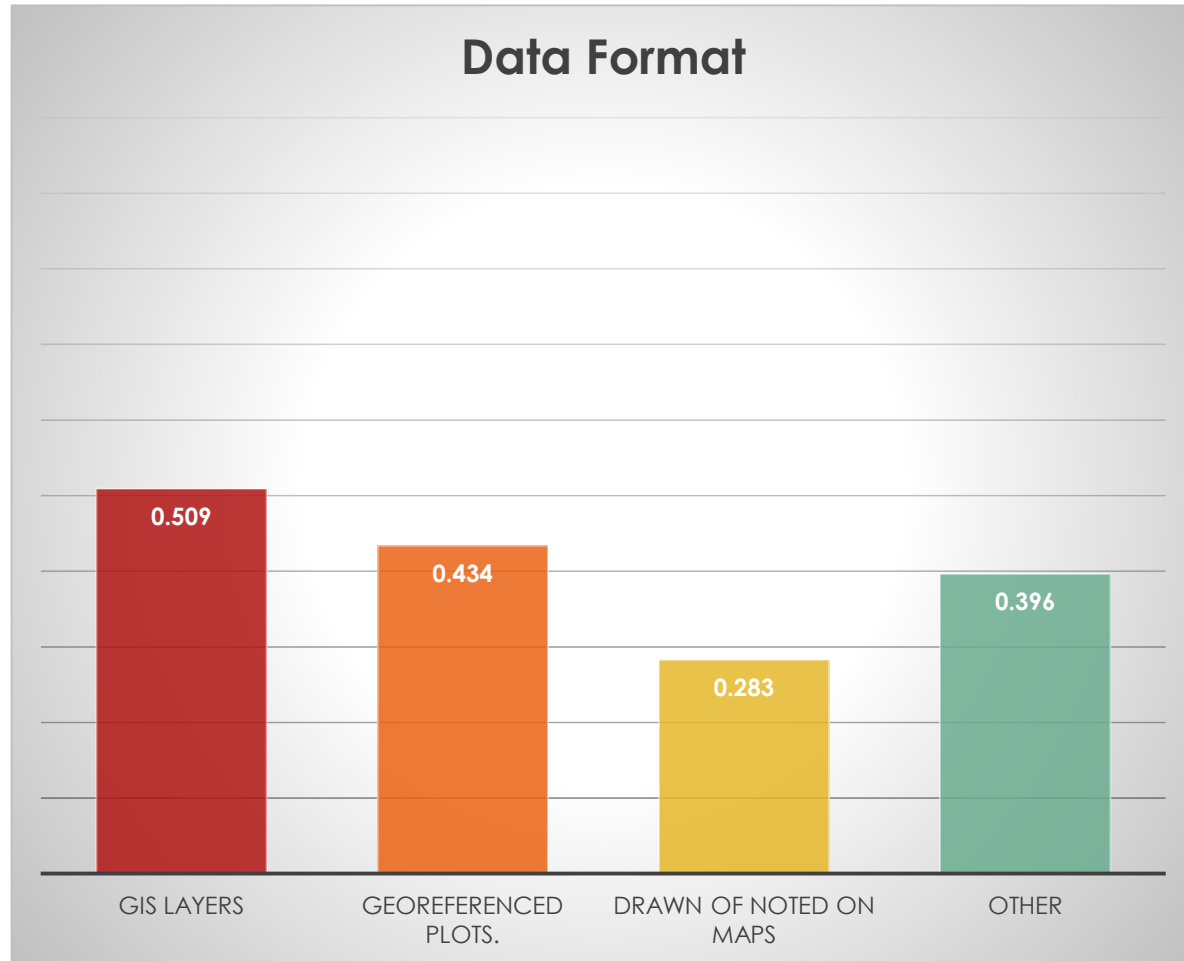
- 86% OF RESPONDENTS HAVE DATA ON WHITEBARK PINE HEALTH.

- 78% HAVE DATA ON BOTH WHITE PINE BLISTER RUST AND MOUNTAIN PINE BEETLE

- 34% OF RESPONDENTS DID NOT KNOW WHERE WHITEBARK PINE WAS HEALTHIEST OR MOST UNHEALTHY IN THEIR AREA OF OVERSIGHT

Health Data

- 54% OF HEALTH DATA IS DESCRIBED AS "MOSTLY KNOWN"

- ANOTHER 39% OF HEALTH DATA IS "INCOMPLETELY KNOWN"

- ONLY 7% OF HEALTH DATA IS "NOT WELL KNOWN"

Health Data

- 86% OF RESPONDENTS HAVE DATA ON WHITEBARK PINE HEALTH.

Retrieve & Share Health Info?

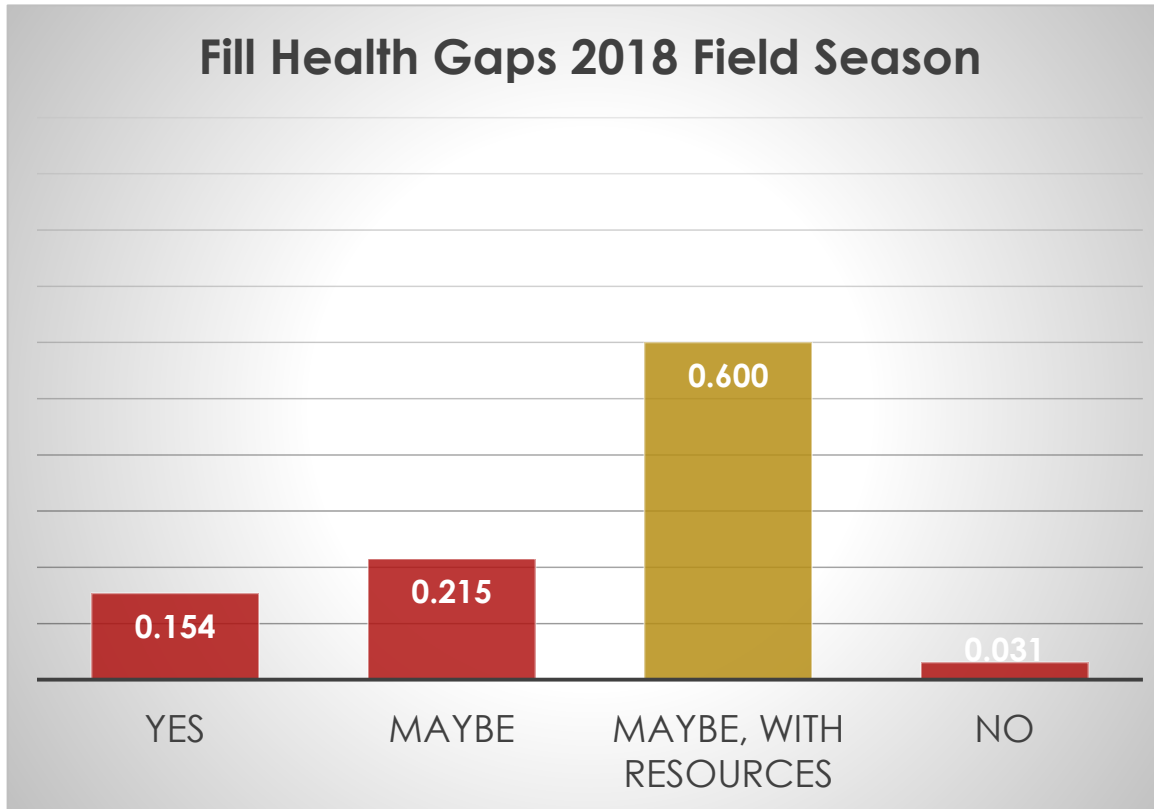|		
0.492	0.413	0.095
YES	MAYBE	NO
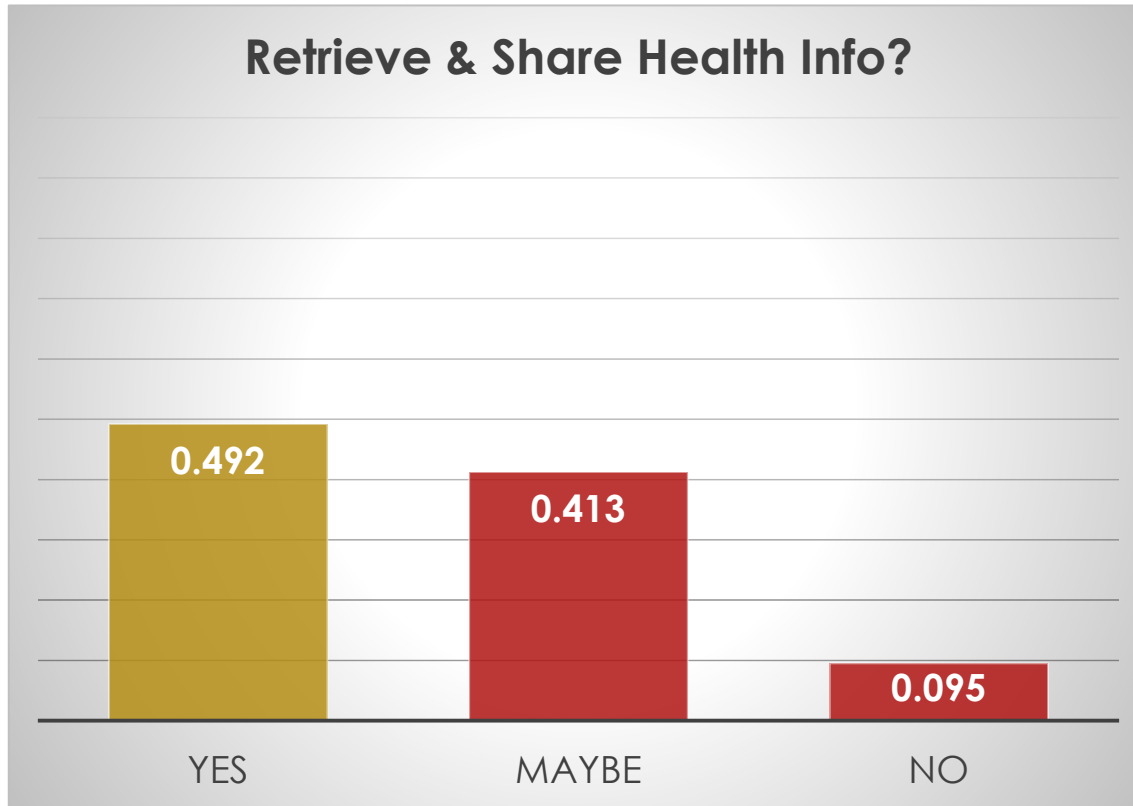
Health Data

- 86% OF RESPONDENTS HAVE DATA ON WHITEBARK PINE HEALTH.

Fill Health Gaps 2018 Field Season

Health Data

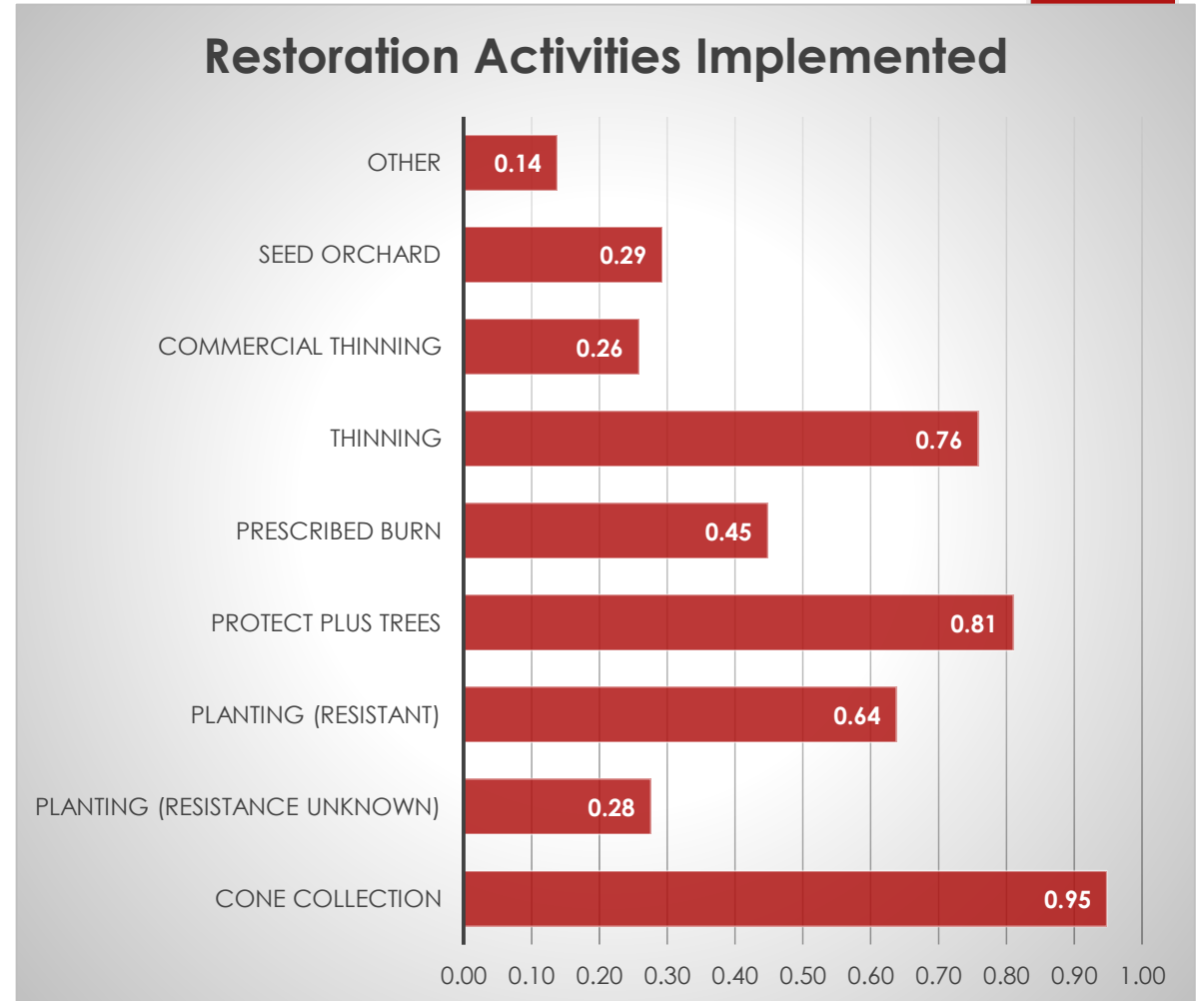▸ 86% OF RESPONDENTS HAVE DATA ON WHITEBARK PINE HEALTH.

Restoration

- 88% of Respondents have implemented or considered whitebark pine restoration activities in their area of oversight

- 84% would be able to show on a map where they had implemented or considered implementing restoration activities

- Only 25% of respondents have included mitigation for climate change in restoration activities

Restoration

Restoration Activities Implemented

Activity	Value
OTHER	0.14
SEED ORCHARD	0.29
COMMERCIAL THINNING	0.26
THINNING	0.76
PRESCRIBED BURN	0.45
PROTECT PLUS TREES	0.81
PLANTING (RESISTANT)	0.64
PLANTING (RESISTANCE UNKNOWN)	0.28
CONE COLLECTION	0.95

Restoration

More likely to implement restoration projects if following were available

Category	Value
OTHER	0.15
RESOURCES	0.90
TECHNICAL SUPPORT	0.48
INFO ON WBP HEALTH	0.34
INFO ON WBP DISTRIBUTION	0.28

Wilderness

- 82% of respondents think we should restore unhealthy whitebark pine communities in wilderness areas

4

Legend

☐ WBP Range 2014

🟨 NationalWildernessAreas

Miles
0   100   200   400

Sources: Esri, DeLorme, USGS, NPS, Sources: Esri, USGS, NOAA

Wilderness

Do you think we should restore unhealthy whitebark pine communities in Wilderness Areas?
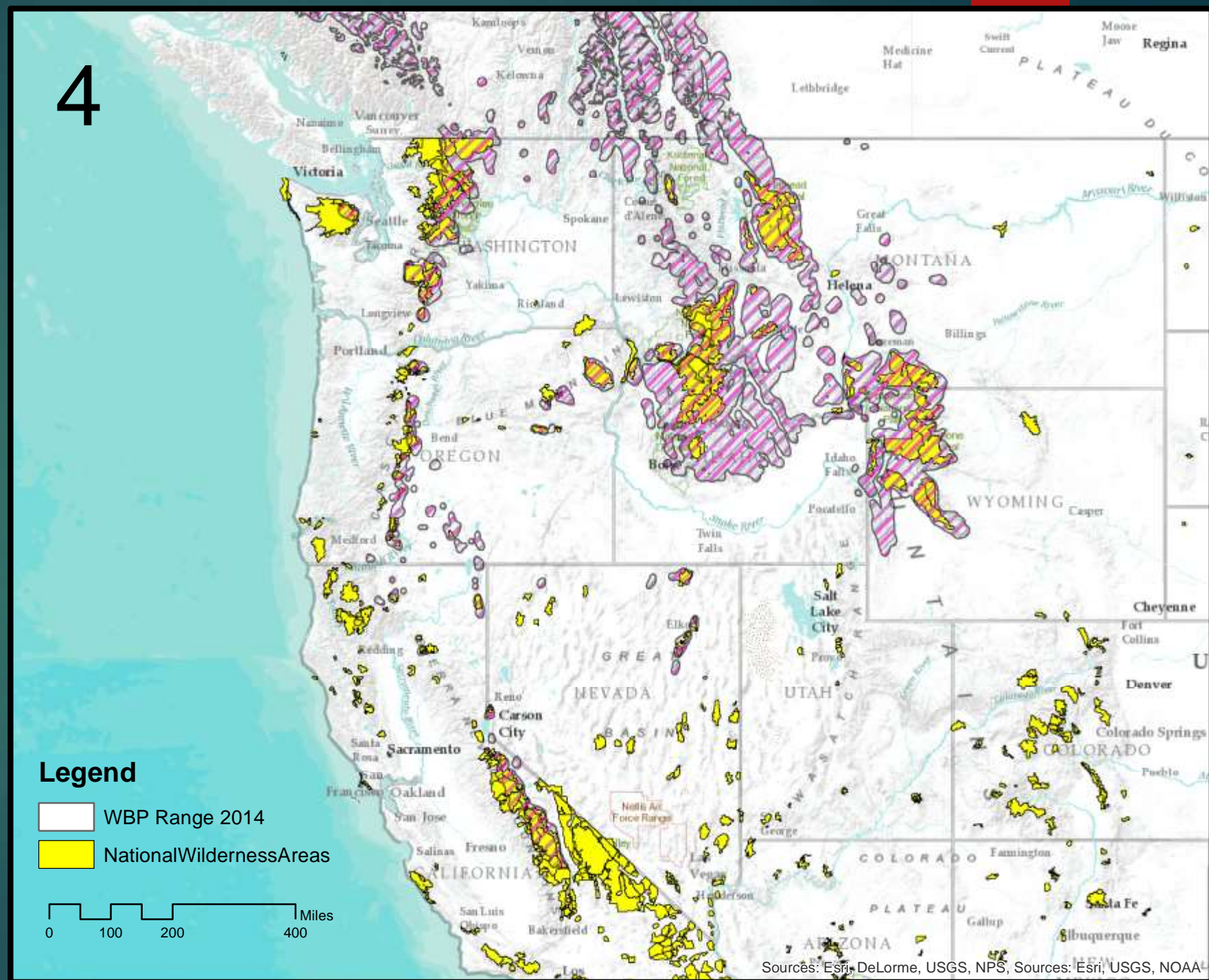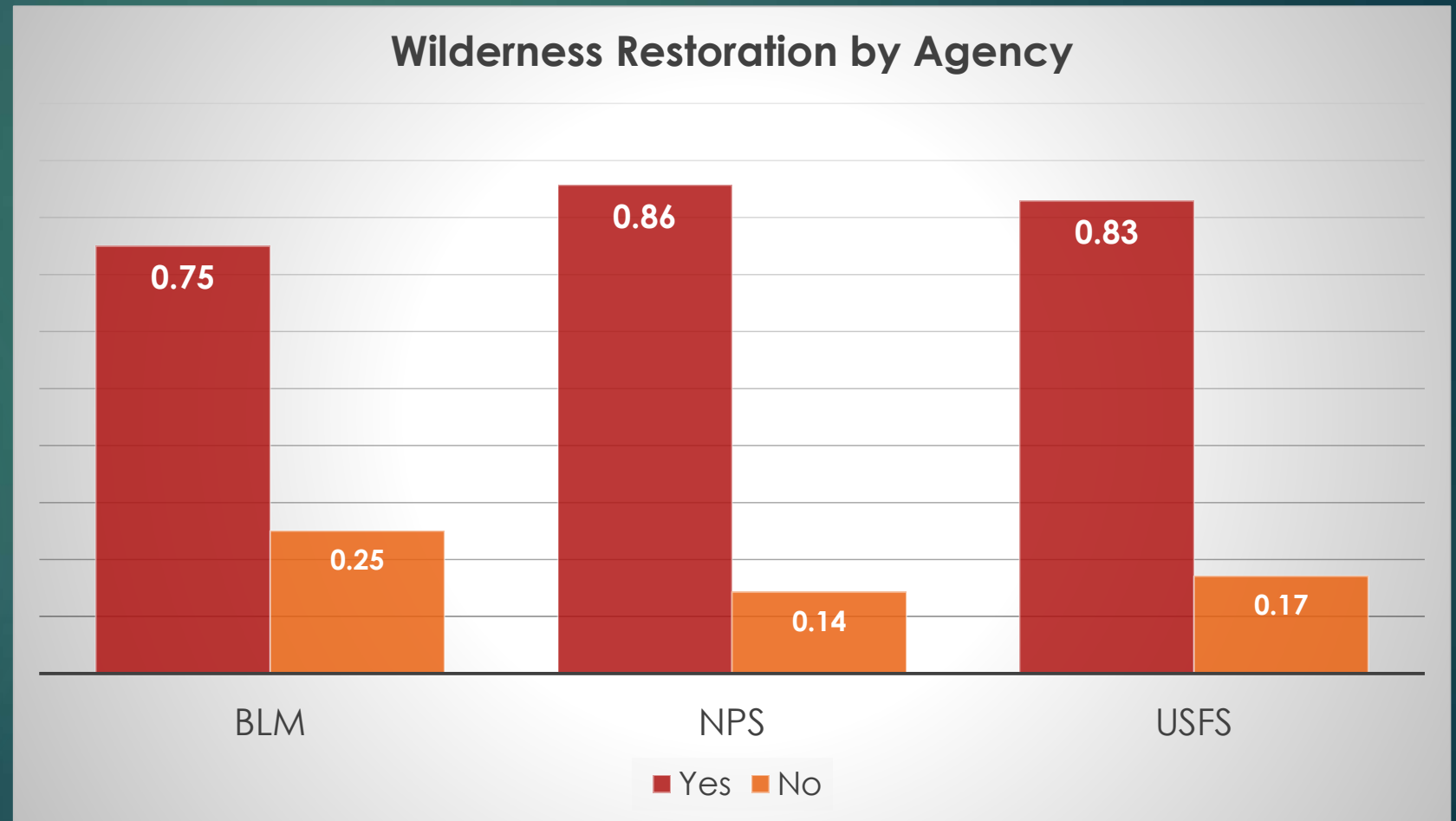
- 82% of respondents think we should restore unhealthy whitebark pine communities in wilderness areas

Wilderness Restoration by Agency

	BLM	NPS	USFS
Yes	0.75	0.86	0.83
No	0.25	0.14	0.17

■ Yes ■ No

Conclusions

- 95% have data on whitebark pine habitat
- With Resources, 62% may be able to fill data gaps in distribution data during the 2018 Field Season (another 34% Yes or Maybe)
- 86% have some whitebark pine health data
- 60% think they could fill gaps in health data with resources during the 2018 field season (another 37% Yes or Maybe)
- 34% of Respondents DID NOT know where whitebark pine was healthiest/unhealthiest in their area of oversight
- 88% have implemented of considered restoration
- Only 25% have included mitigation for climate change
- 82% support restoration in wilderness

Acknowledgements

- US Forest Service Funding
- Diana Tomback
- Bob Keane
- Eric Sprague
- Glenda Scott
- David Gwaze
- All Survey Respondents

If you're interested in taking the survey, email me (julee.shamhart@whitebarkfound.org) for link to survey or visit WPEF web page at whitebarkfound.org/survey