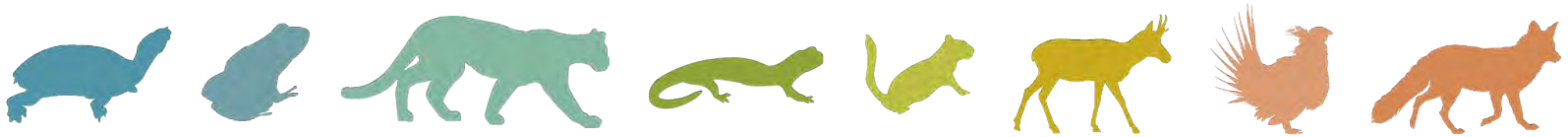
Stakeholder Committee Meeting

Monday, August 1st, 2022



Welcome!

Agenda

- Project workflow review
- Habitat permeability modeling updates
- Validation updates
- Connectivity modeling updates
- Practitioner’s Survey results
- Prioritization
- Next steps

Project Workflow

Project workflow

Surrogate species selection

- Feedback sessions for final selections
- Expert opinion solicitation through scoring
- Development of goals and criteria for selection

Habitat permeability modeling

- Second draft of permeability models
- Species expert review of criteria and draft map
- First draft of permeability models
- Application of scores for parameters
- Literature reviews and info gathering

Habitat permeability validation

- Run validation and provide feedback
- Setting up R templates to run cross-validation
- Design cross validation strategy
- Validation metrics development
- Methodological development

Habitat connectivity modeling

- Omniscape modeling applied to each surrogate species
- Development and finalization of resistance layers for each surrogate species
- Exploration of test areas

Habitat connectivity validation

- Run validation process
- Assess overall model performance in test areas where data is available
- Validation metric and methodological development
- Determine telemetry data availability

Compositing maps & prioritization

- Produce composite map of statewide habitat connectivity
- Explore and test methods for combining map outputs
- Develop criteria for prioritization of individual surrogate species maps

Final connectivity map

- Final Connectivity Map
- Identification of best methods to access final connectivity products
- Practitioners outreach group meetings to identify needs

Habitat Permeability Models

Habitat Permeability Models

COMPLETE

Habitat Permeability Models

- All 2nd draft Habitat Permeability (HPM) models sent to validation!
- Sent out final Morrison's/Western Bumblebee review
- Workflow for packaging HPM and input Data for Omniscape-complete species

Validation

Validation

Validation Progress: July 28th

Species Group	Ready For Validation	Initial Data Processing	Summary Docs Generated	Initial Recategorization	Validation Finalized
1 (4 Species)					
2 (4 Species)					
3 (5 Species)					
4 (4 Species)					
5 (7 Species)					
6 (5 Species)				60%	60%
7 (4 Species)				75%	75%
8 (4 Species)					
9 (4 Species)				75%	75%
10 (5 Species)				60%	60%
11 (6 Species)				83%	83%
12 (3 Species)				66%	66%

Connectivity Modeling

Connectivity Modeling

Progress: Today

Group 11
- Black-tailed Jackrabbit
- Burrowing Owl
- Ferruginous Hawk
- Morrison's Bumblebee
- Ord's Kangaroo Rat
- Pygmy Rabbit

Group 12
- Bushy-tailed Woodrat
- Townsend's Chipmunk
- Western Purple Martin

Group 8
- Coastal Tailed Frog
- Long-nosed Leopard Lizard
- N. American Porcupine
- Red-naped Sapsucker

Group 9
- Bighorn Sheep
- Mountain Goat
- Sierra NV Red Fox
- American Pika

Group 10
- Foothill Yellow-legged Frog
- Hermit Thrush
- Little Brown Myotis
- Pileated Woodpecker
- Western Bumble Bee

Group 6
- Fender's Blue Butterfly
- Great Gray Owl
- N. Alligator Lizard
- Vesper Sparrow
- Western Meadowlark

Group 7
- Hoary Bat
- Fisher
- Northern Flying Squirrel
- OR Slender Salamander

Group 4
- Lewis's Woodpecker
- W. Gray Squirrel
- White-breasted Nuthatch
- Wrentit

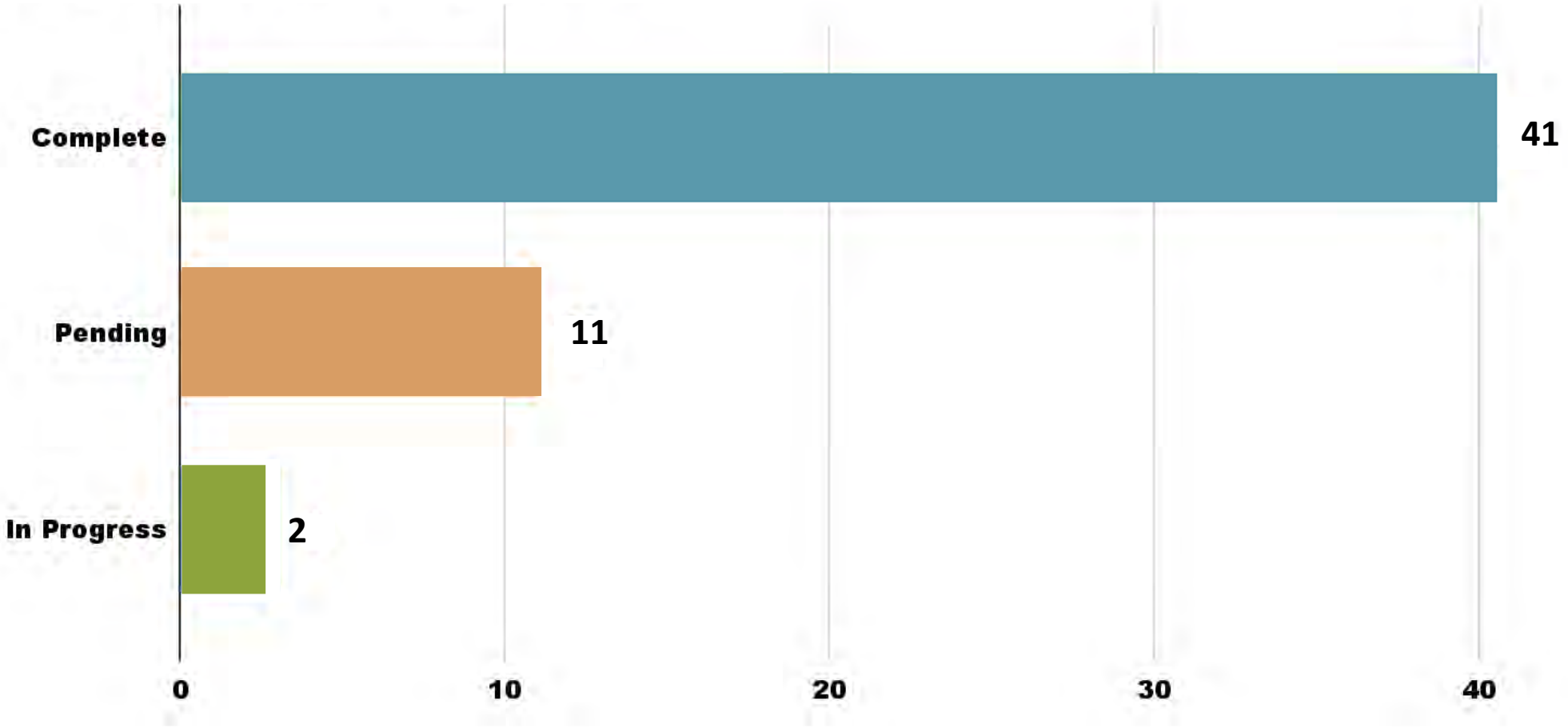
Group 5
- American Beaver
- Cascades Frog
- Lazuli Bunting
- Long-toed Salamander
- Snowy Plover
- Western Toad
- NW Pond Turtle

Group 1
- Northern Red-legged Frog
- Pacific Marten
- Pacific-slope Flycatcher

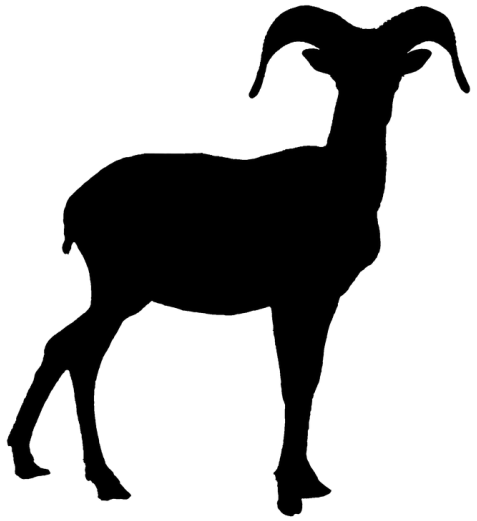
Group 2
- Columbia Spotted Frog
- Western Rattlesnake
- Pronghorn
- Greater Sage-grouse

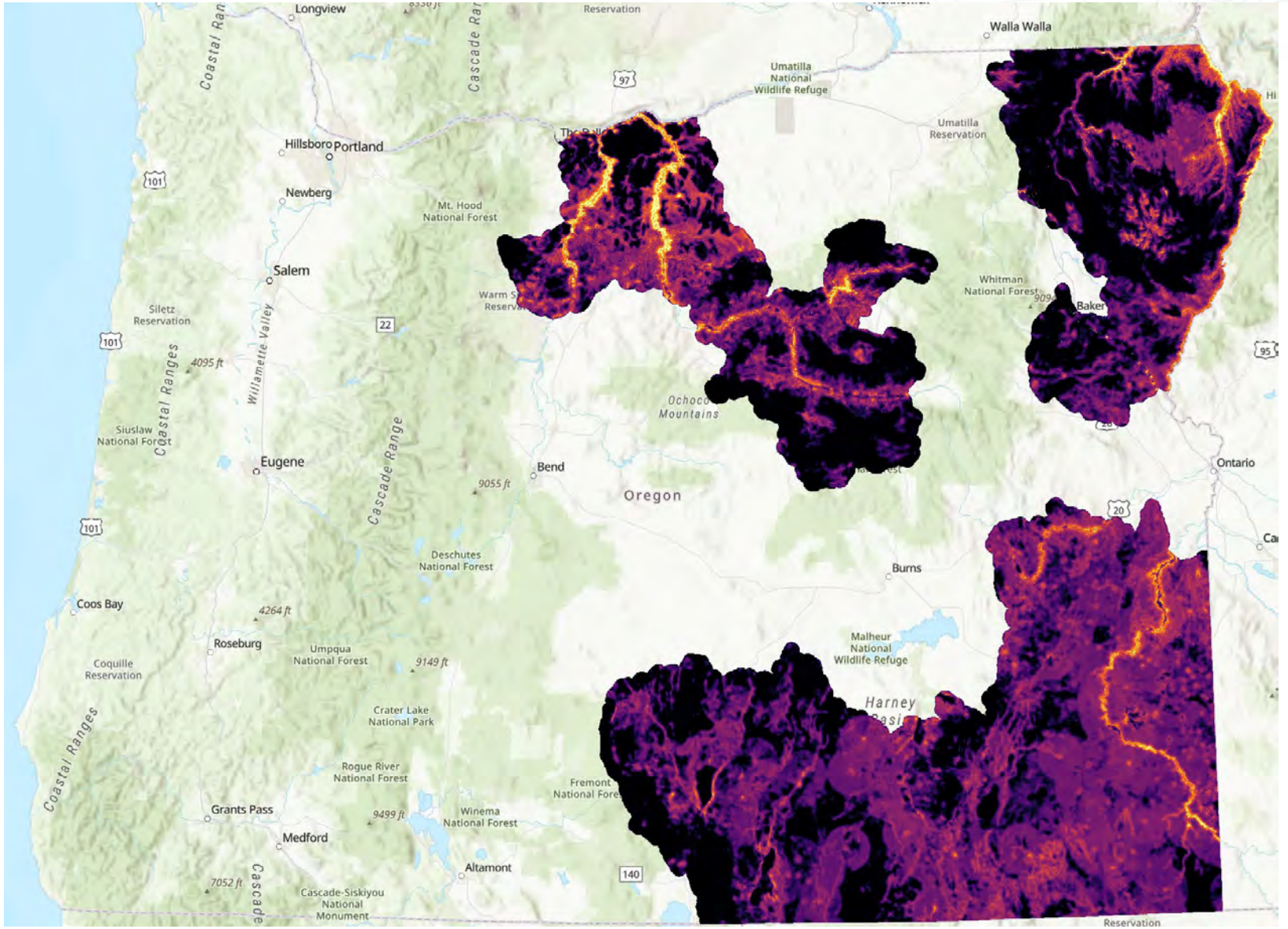
Group 3
- Mule Deer
- Black-tailed Deer
- Rocky Mt Elk
- Roosevelt Elk
- Cougar

Connectivity Modeling



Connectivity Modeling





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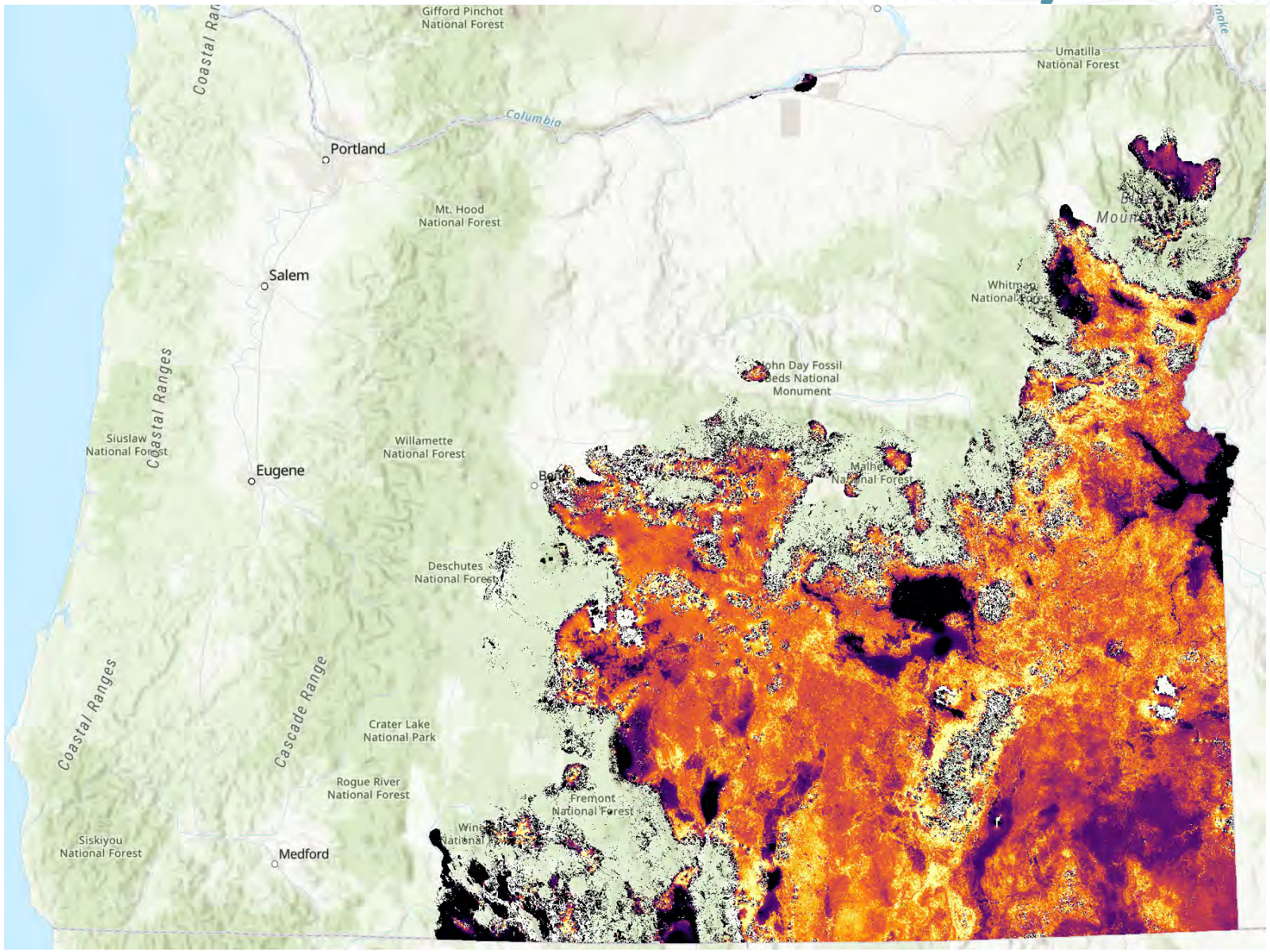

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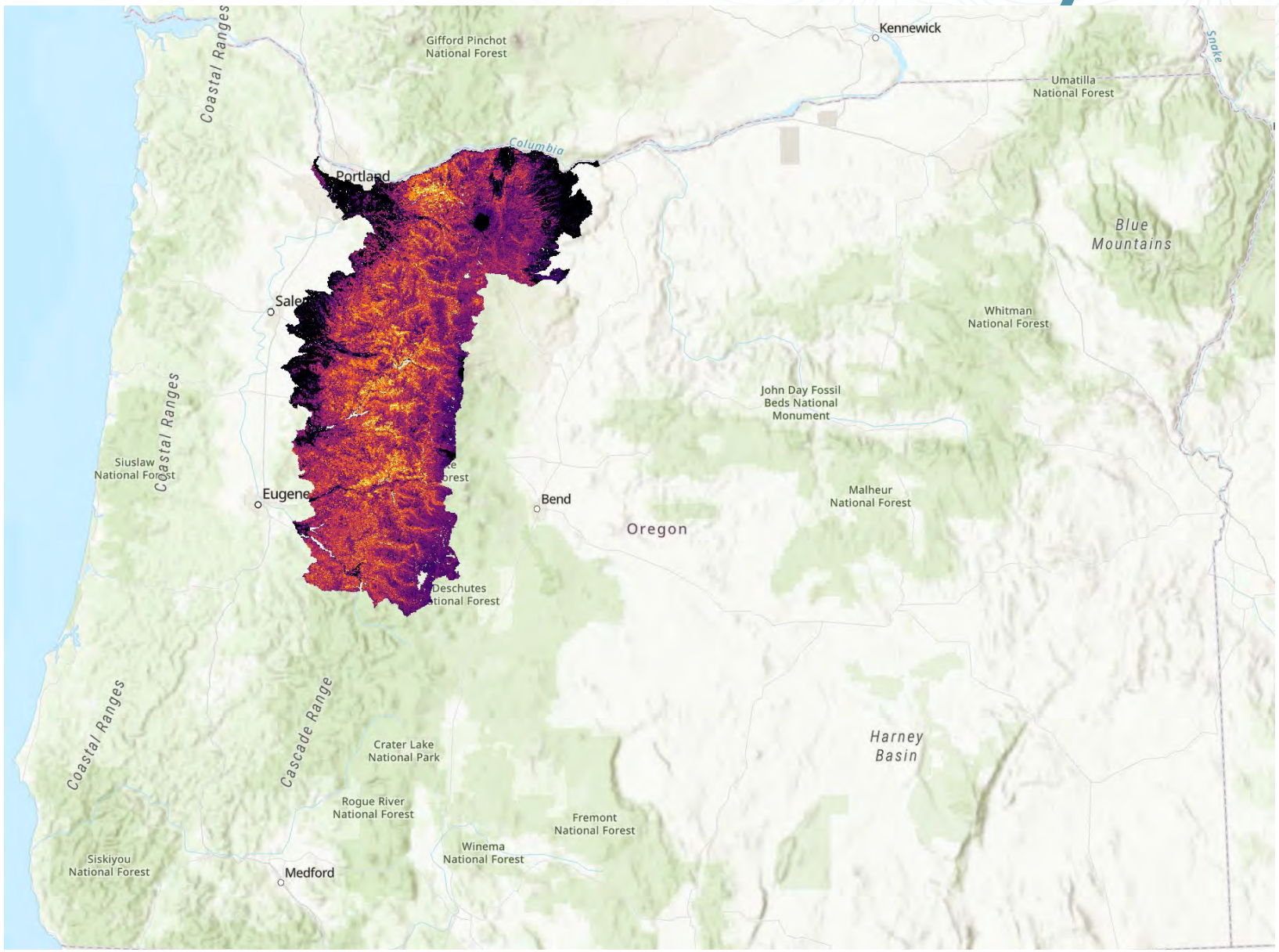
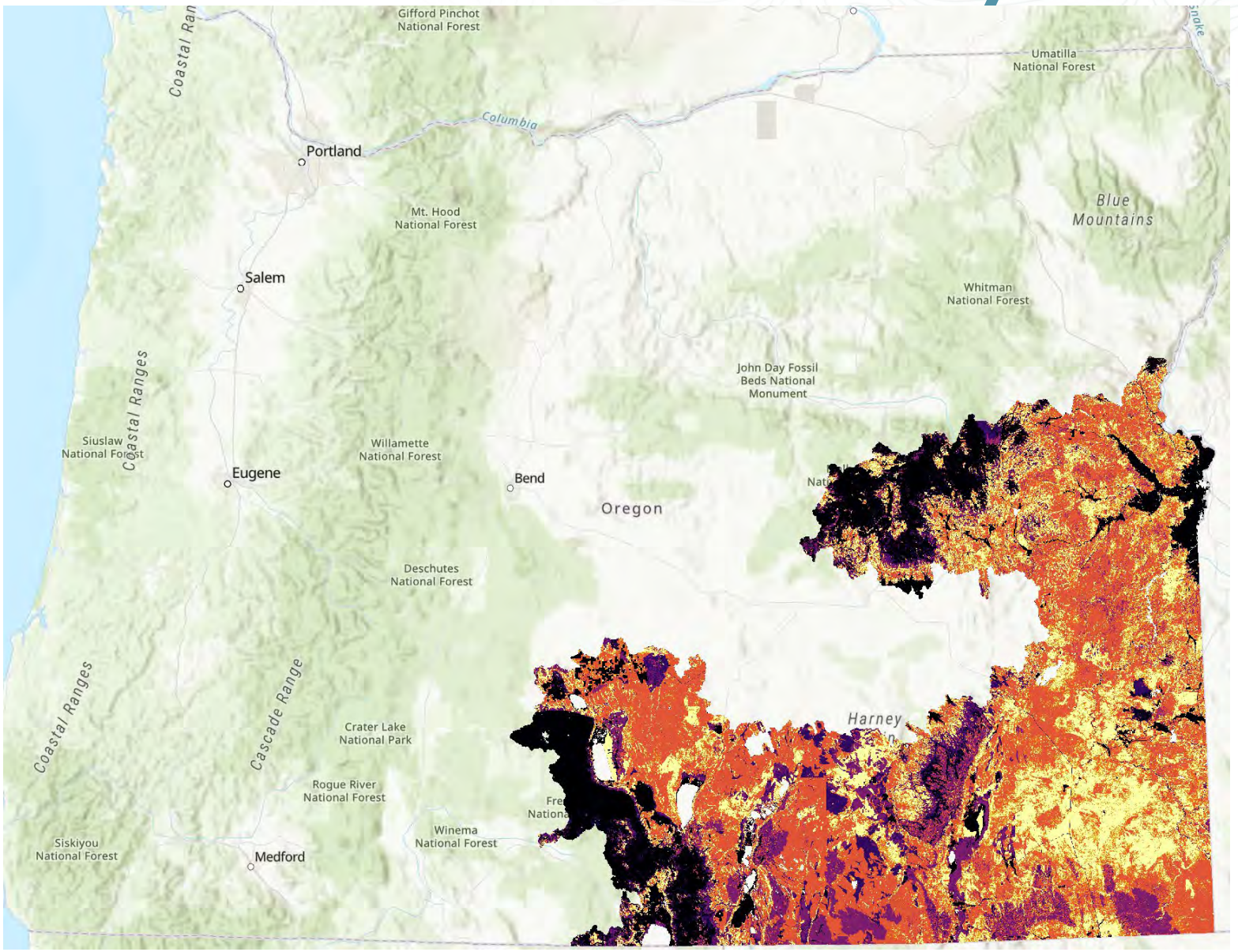


Connectivity Modeling



Practitioners Survey

Practitioners Survey

Survey Purpose

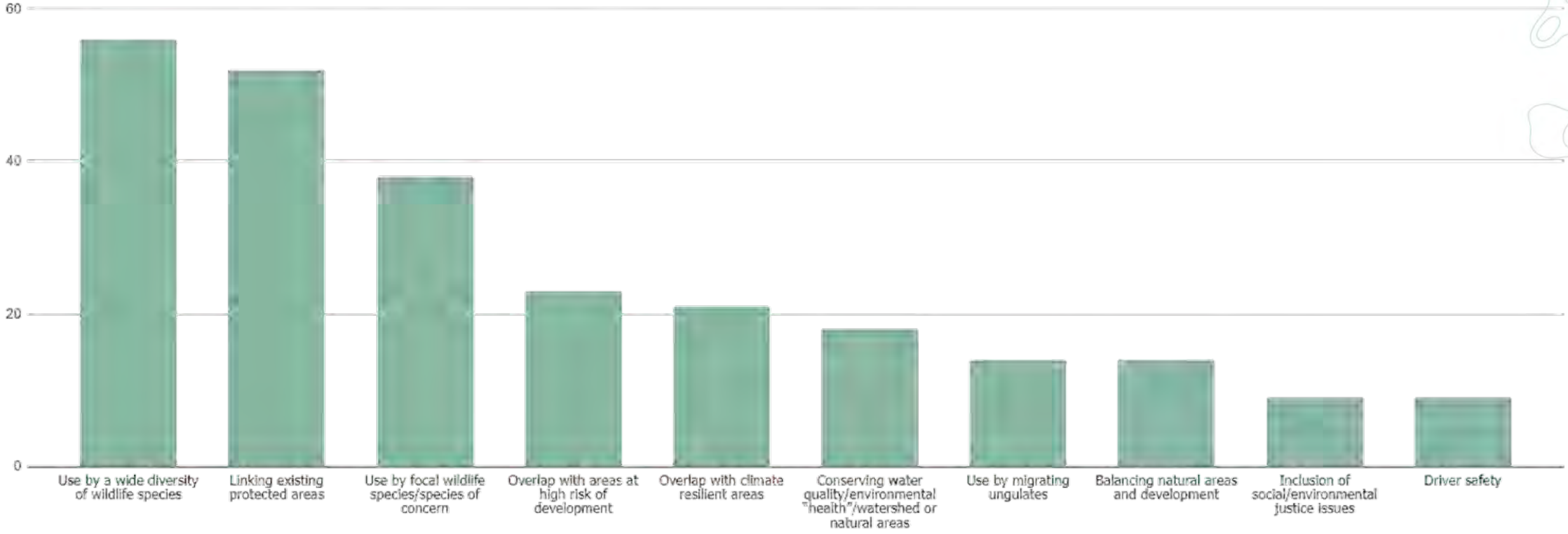
- To help inform the prioritization of connectivity pathways
- To help shape end products to best suit user needs
- To help inform dissemination of the final Priority Connectivity Areas Map
- To learn more about how participants envision using and interacting with the final priority connectivity areas map

Practitioners Survey

- Initial meeting held May 24th
- 10-question survey
- Distributed broadly to OCAMP Network
- 86 respondents
- Follow-up meeting held late June to discuss results

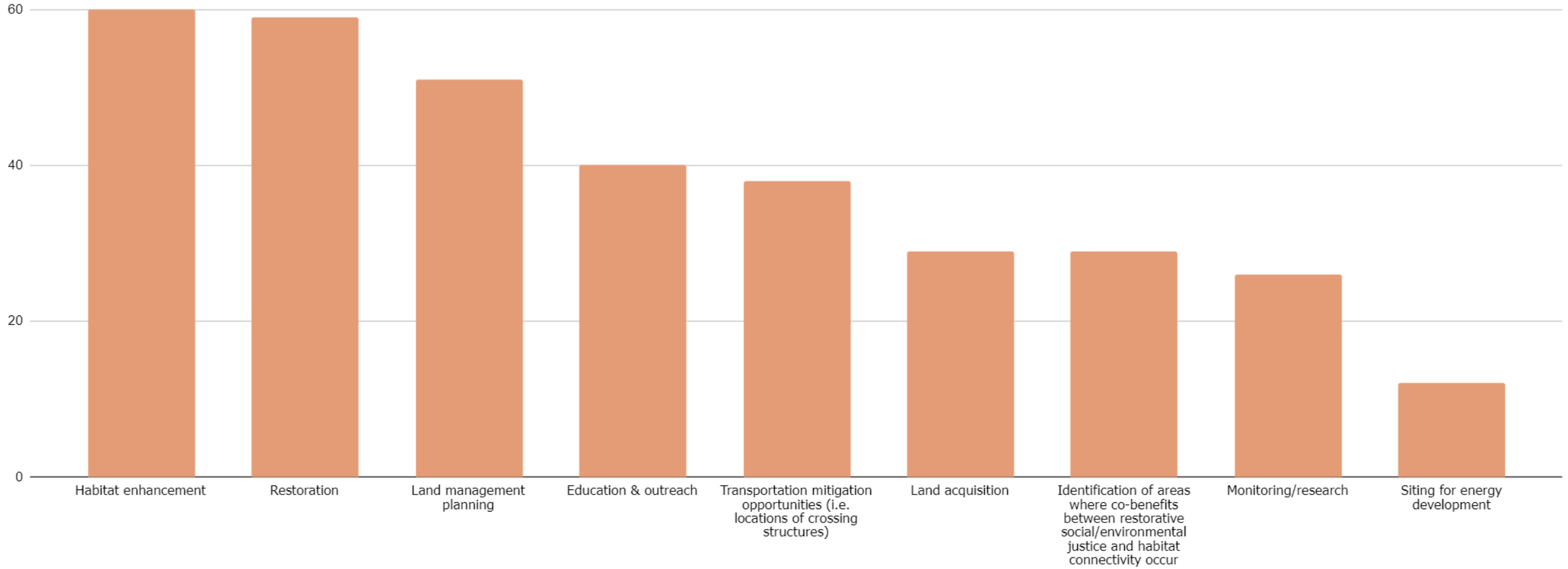
Question 1

1. What do you think are the <u>three</u> most important factors in prioritizing connectivity areas?



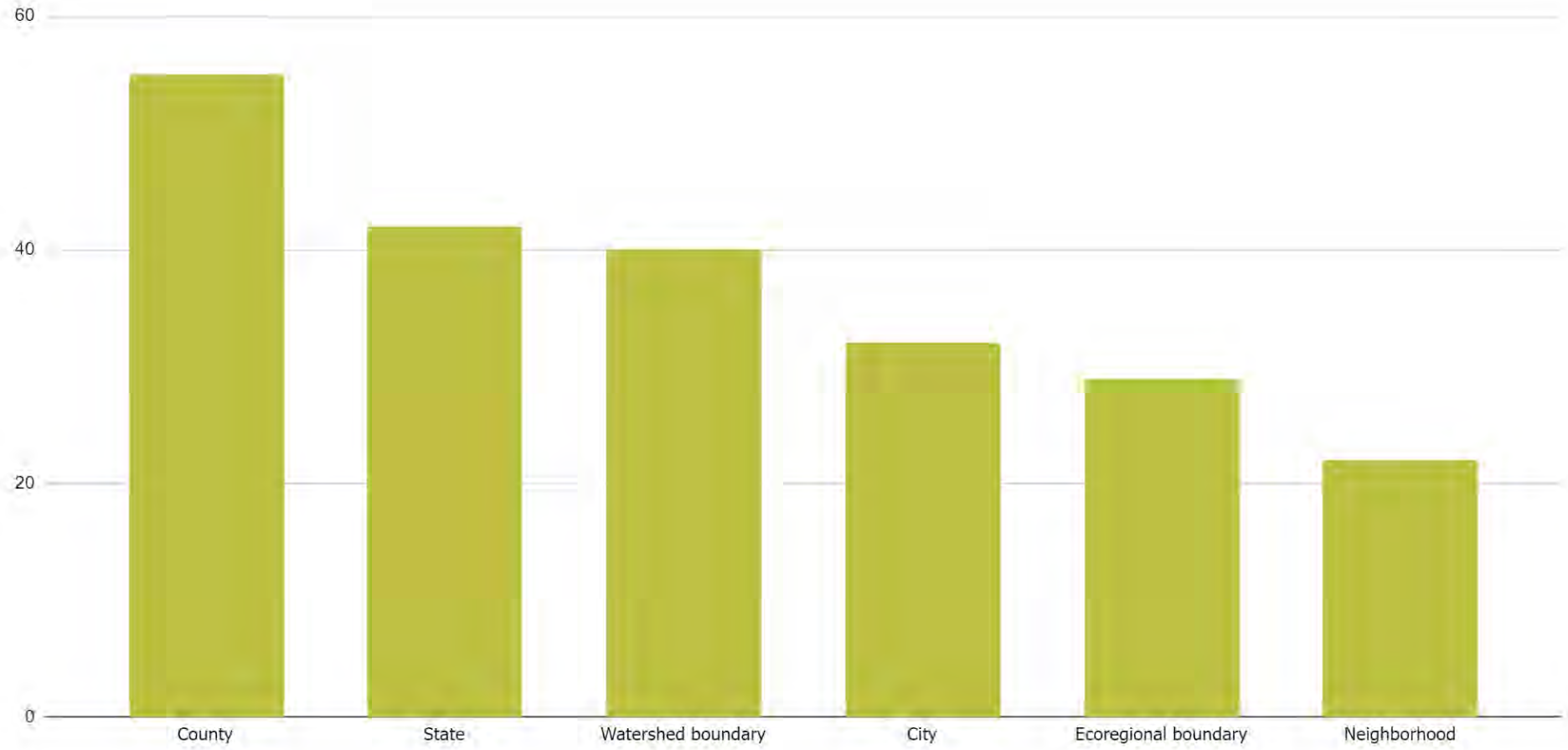
Question 2

2. The final Priority Connectivity Areas Map can be used to inform a variety of on-the-ground actions. Which of the following actions would your organization be implementing with guidance from the final connectivity map?



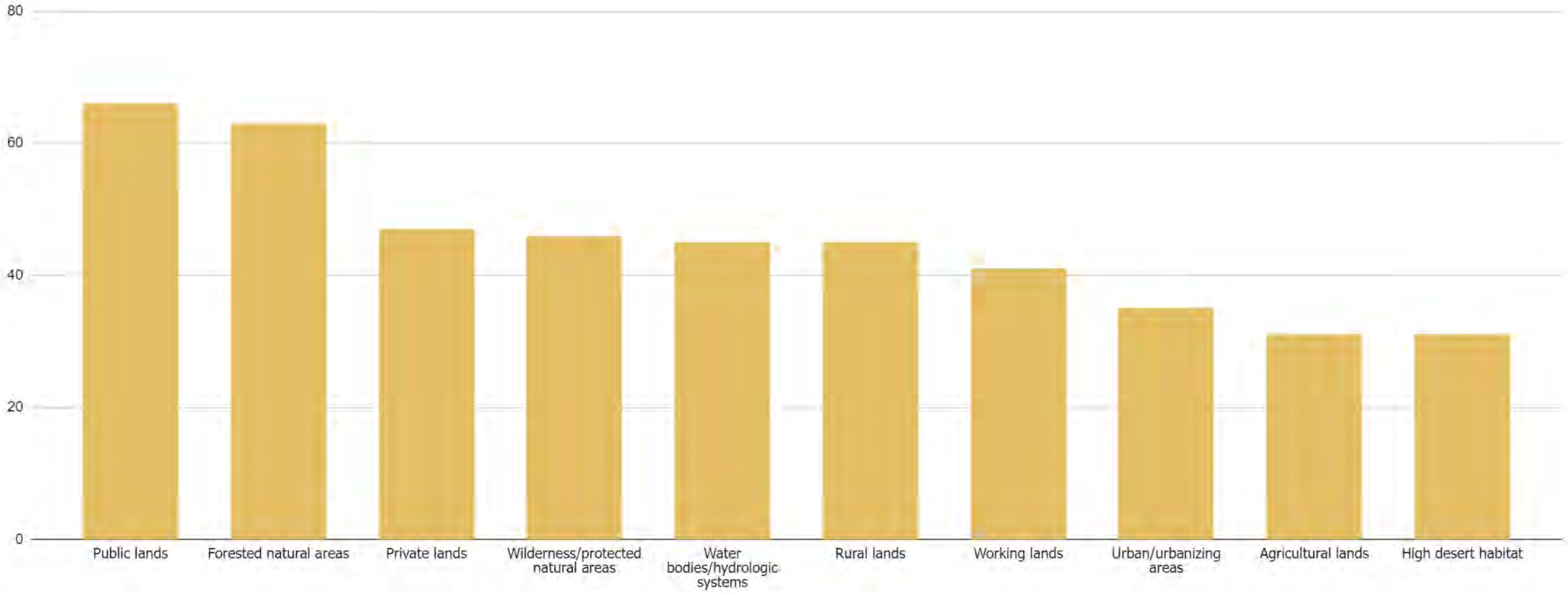
Question 3

3. What scale of interaction with the final Priority Connectivity Areas Map do you anticipate using?



Question 4

4. What land use or land types are of greatest interest for you/your organization?



Question 5

5. Do you have any other suggestions for ways to make the final Priority Connectivity Areas Map useful to you and your organization?

- Importance of clear language and easy to interpret definitions, descriptions, & useability (7)
- Easily and widely accessible (4)
- Recommendations for tools, web maps, and utilities that would be most useful (8)
- Outreach groups and process recommendations (4)
- Specific species suggestions (3)
- Recommendations for future applications of the final prioritized map (5)
- Recommendations for additional elements to the final map (13)

Question 6

6. Do you have any concerns about the identification/designation of priority connectivity areas?

- Concerns over how these maps will be interpreted by private landowners (6)
- Concerns over how these maps could be used by poachers (2)
- Concerns over the long-term permanence and/or applications of these maps (i.e., change in movement/species use over time) (7)
- Additional feedback on the importance of clear language and easy to interpret definitions, descriptions, & useability (14)

Question 7

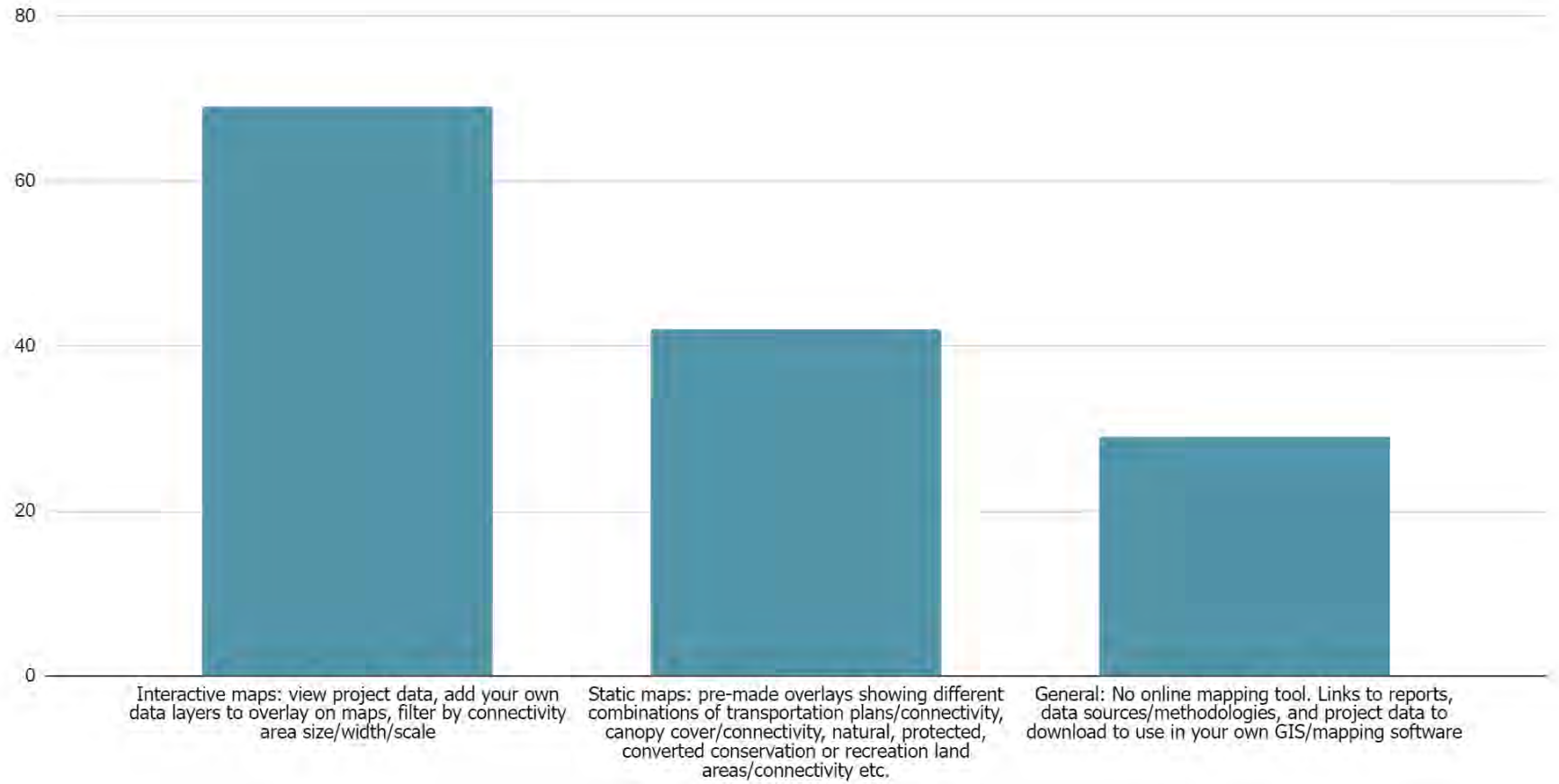
7. Please provide examples of existing tools/webmaps/utilities that you currently use and describe what you like and/or find challenging about each.

Several great examples provided:

Oregon explorer, existing conservation strategy data, NRIS wildlife, LEMMA GNN, Oakquest data, oak prioritization data, regional conservation strategy data, RLIS data, historic GLO maps, COA maps, OnX, CDFW BIOS, PNW-ERC, GAIA GPS, Photo Ephemeris, ODOT TransGIS, Deschutes DIAL, Avenza, TransGIS, Bat Web Map, DSL's Statewide Wetlands Inventory, TNC Resilient Land map

Question 8

8. What tools would you/your organization prefer to use to interact with the final Priority Connectivity Areas Map?



Question 9

9. What are you most excited to be able to do with the final Priority Connectivity Areas Map once completed?

Over 70 individual responses on how you all plan to use the final Priority Connectivity Areas map! A few highlights:

- Use the data to prioritize and add value to our ecological restoration work, including coordinating efforts more effectively with partner organizations and increasing our leverage for funding
- Help prioritize actions to resist climate change effects within the connectivity areas and the areas that they link together.
- Explore how our managed lands fit within these connectivity maps, and consider priority lands for acquisition (not necessarily by us). We may also learn of neighboring lands that are well connected to our sites and reach out to other landowners for more collaborative stewardship.
- Overlay these connectivity layers with other landscape-scale conservation priorities (working lands, ecosystem services, recreation, etc) to drive conservation partnerships and projects.
- Use it to help prioritize our fence removal and retrofit projects with public land manager partners as well as prioritize locations for our riparian and upland restoration work.

Question 10

10. Please provide any additional comments or feedback that have not already been captured in your previous responses:

- Calls for additional work/efforts in generating better underlying data (2)
- General comments or sharing additional projects (6)
- Appreciation for the project and excitement for the outcomes (12)

Prioritization

Prioritization

Combine connectivity models across species, and with consideration of other factors (climate, traffic, development pressure, etc.) to develop priority connectivity areas that are tied to specific conservation action recommendations

"Protect"

- Areas that would most benefit from protection
  - Areas of high current density
  - Bottlenecked areas
  - Places that are primary connectivity areas for species of special concern
  - If not protected, any development would lead to loss of connection

"Maintain"

- Broad, intact areas that currently serve to facilitate movement and should be maintained
  - Would benefit from protection, but some development would not destroy connections
  - Would benefit from minor habitat enhancements (invasive species control, fencing removal, etc.)

"Restore"

- Areas with limited wildlife movement that could serve as functional connections if habitat restoration occurred
  - Would require major habitat improvements/habitat restructuring
  - Ex: reclaimed ag lands, industrial sites

"Mitigate"

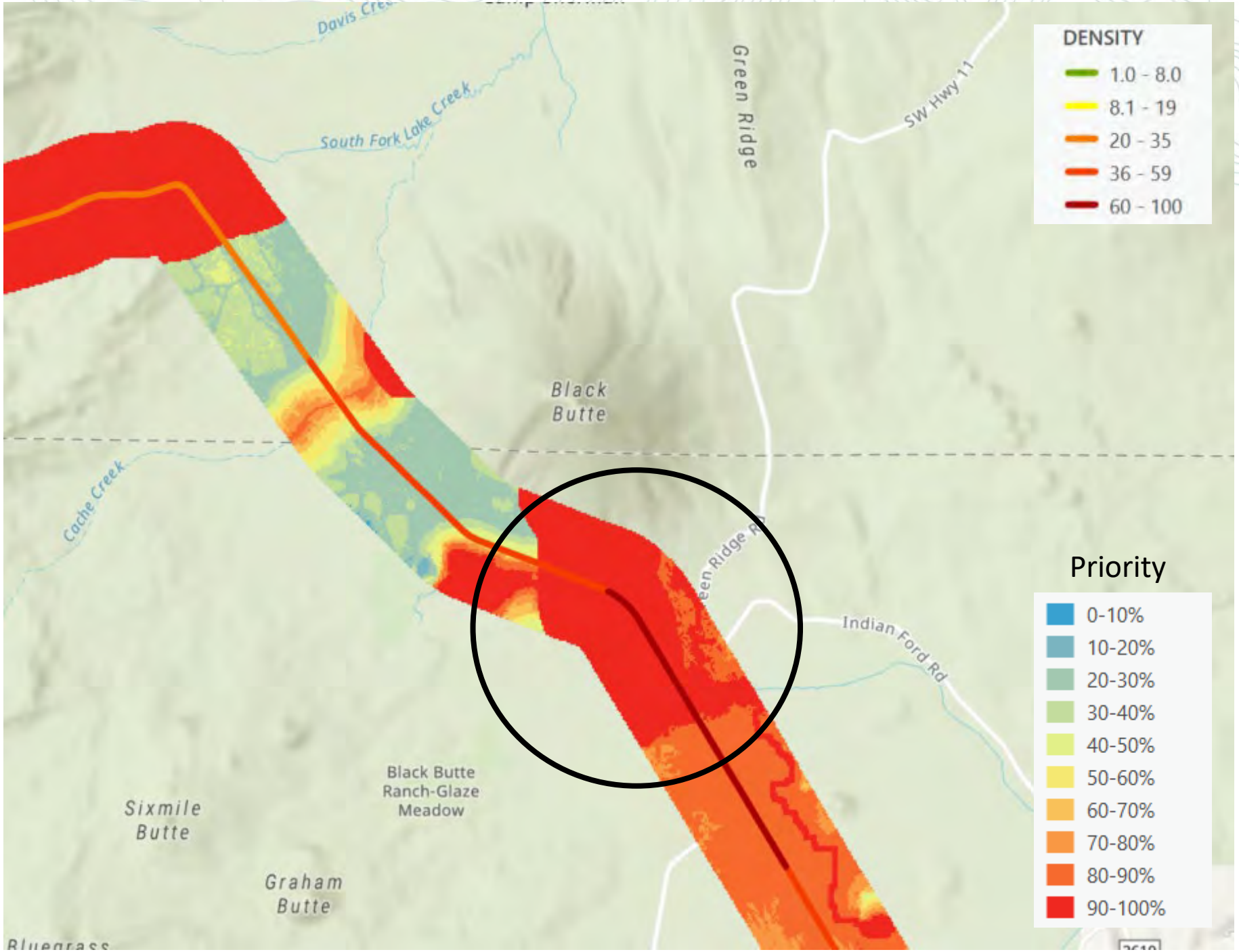
- Specific to areas where transportation infrastructure conflicts with movement
  - Good habitat availability/movement flow, but impeded by roadway
  - Reconnecting habitat with passage structures or other mitigation techniques would restore connection

Example:

Mitigate (21 Species)

Priority

- 0-10%
- 10-20%
- 20-30%
- 30-40%
- 40-50%
- 50-60%
- 60-70%
- 70-80%
- 80-90%
- 90-100%


DENSITY
1.0 - 8.0
8.1 - 19
20 - 35
36 - 59
60 - 100
Priority
0-10%
10-20%
20-30%
30-40%
40-50%
50-60%
60-70%
70-80%
80-90%
90-100%
South Fork Lake Creek
Green Ridge
SW Hwy 11
Black Butte
Cache Creek
Indian Ford Rd
Black Butte Ranch-Glaze Meadow
Sixmile Butte
Graham Butte

Next Steps

Next Steps

- Compile outcomes for reviewers for bumble bees
- Complete HPM validation for final 11 species
- Complete connectivity models for final 13 species
- Metadata and data packaging
- Documentation and parameter table formatting
- Editing/revising/finalizing methods documentation
- Finalize methodology for prioritization, continue tests

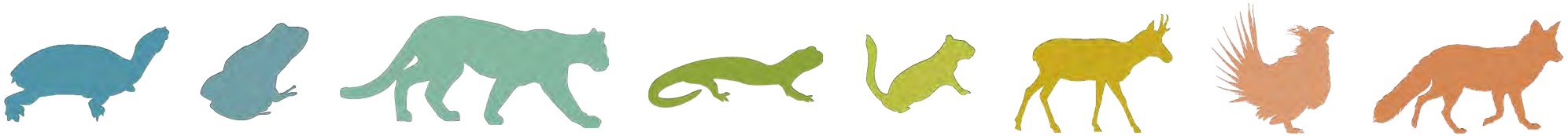
Next Steps

Timeline:

- End of Aug: completion of HPM validation
- Early Sept: completion of connectivity models
- Sept-Nov: prioritization, Phase II validation
- Dec: priority connectivity areas identified
- Dec: completion of Phase II validation, Phase 1b validation
- First half 2023: product development, Wildlife Corridor Action Plan drafting
- Summer 2023: products released to public
- Fall 2023: Finalization of Wildlife Corridor Action Plan

Stakeholder Committee Engagement

- Next Meeting: Monday, November 7th, 2022



Thank you!

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