

Virtual Mapping Activity: Breakout Tasks

Task #1: Things to Consider

Consider and discuss the following with your group:

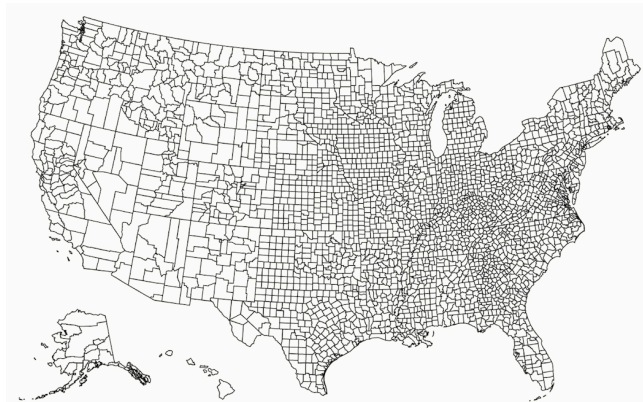
- How do humans use land and water now?
- What are our needs as a species?
- How do humans impact the environment?
- Where do things live?
- How is biodiversity distributed on our planet? in our country?

The following discussion prompts and maps are modifications for conducting the mapping design challenge in a virtual setting with your students. We recommend teams and break-out groups to encourage collaboration but this version could also be used on discussion boards or as a form of homework.

Task #2: Which Map?

As a group, decide which challenge below you think is a better idea. Choose a team member to take notes on your conservation conversation. List at least one advantage and one con of your decision and be prepared to defend your choice.

1. Put half of the US states into protection for biodiversity.
2. Put half of US counties into protection for biodiversity.



Task #3: Protecting States

Pick 2 states to put in protection and 2 states to leave unprotected. What evidence and reasoning are you using to make these conservation decisions? Be prepared to defend your choices.



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Task #4: Virtual Mapping Design Challenge

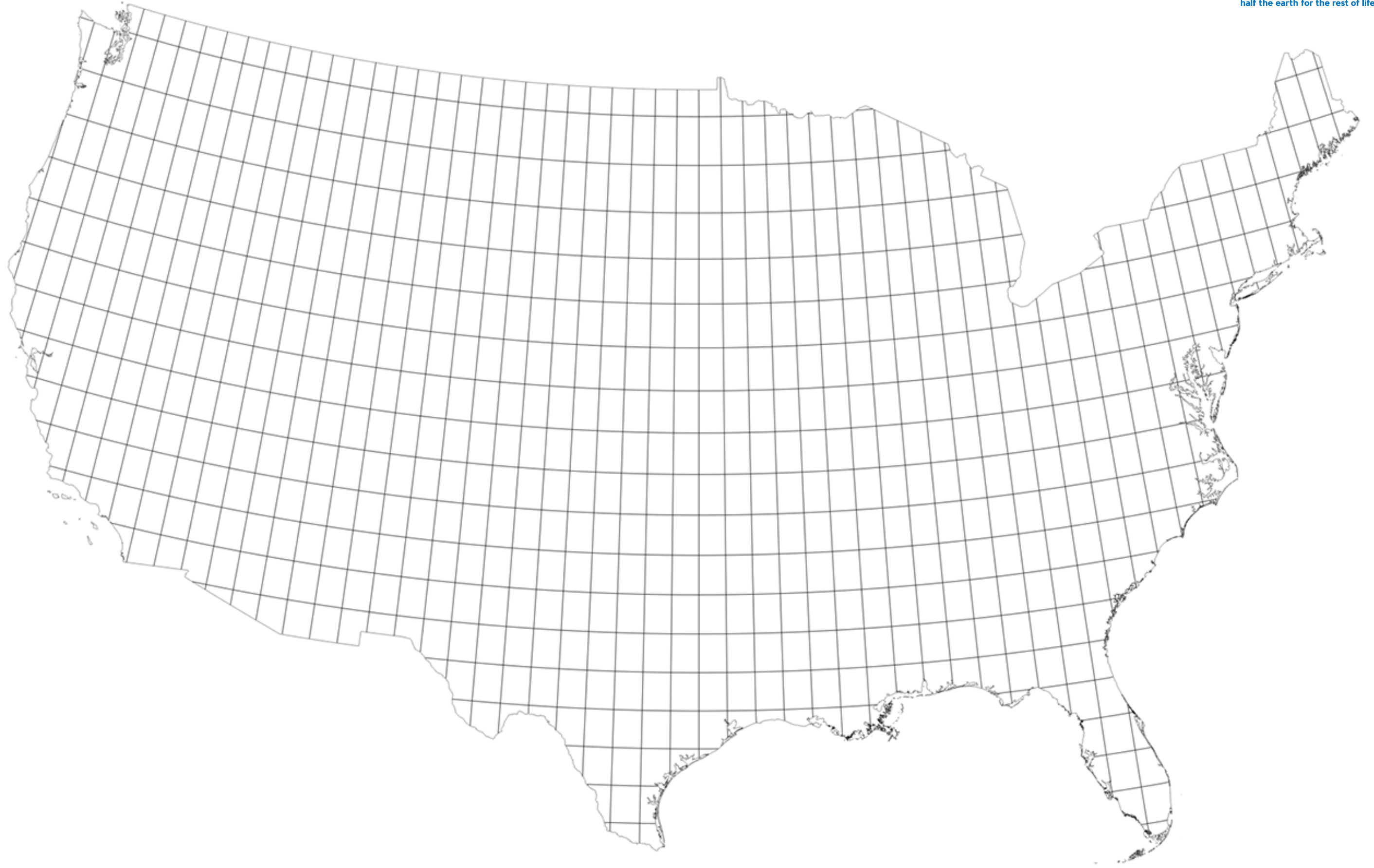
- Design Challenge: Using all of the maps at your disposal, place half of the contiguous US lands into protected status.
- Design Constraints: Maximize biodiversity and human sustainability.
- Logistics: As your group weighs different conservation decisions using information from the maps, highlight the cells on the blank US grid map that you decide you want to put in protection. If you change your mind, feel free to change the color of your highlighter.
- Metacognition: What else do you want/need to know? What issues are coming up? What trends do you notice? What is being prioritized and compromised?

Task #5: Creative Solutions for Biodiversity

Cordoning off land is not the only way to protect nature and conserve biodiversity. Throughout the years, many creative solutions have been implemented to save species. Discuss with your group:

- What are things we can do besides acquiring new land, setting up boundaries for protection, and removing humans from nature?
- Can you think of actions we can take to help promote biodiversity in our own areas (including yards, parks, etc.)?

EDUCATOR AMBASSADORS





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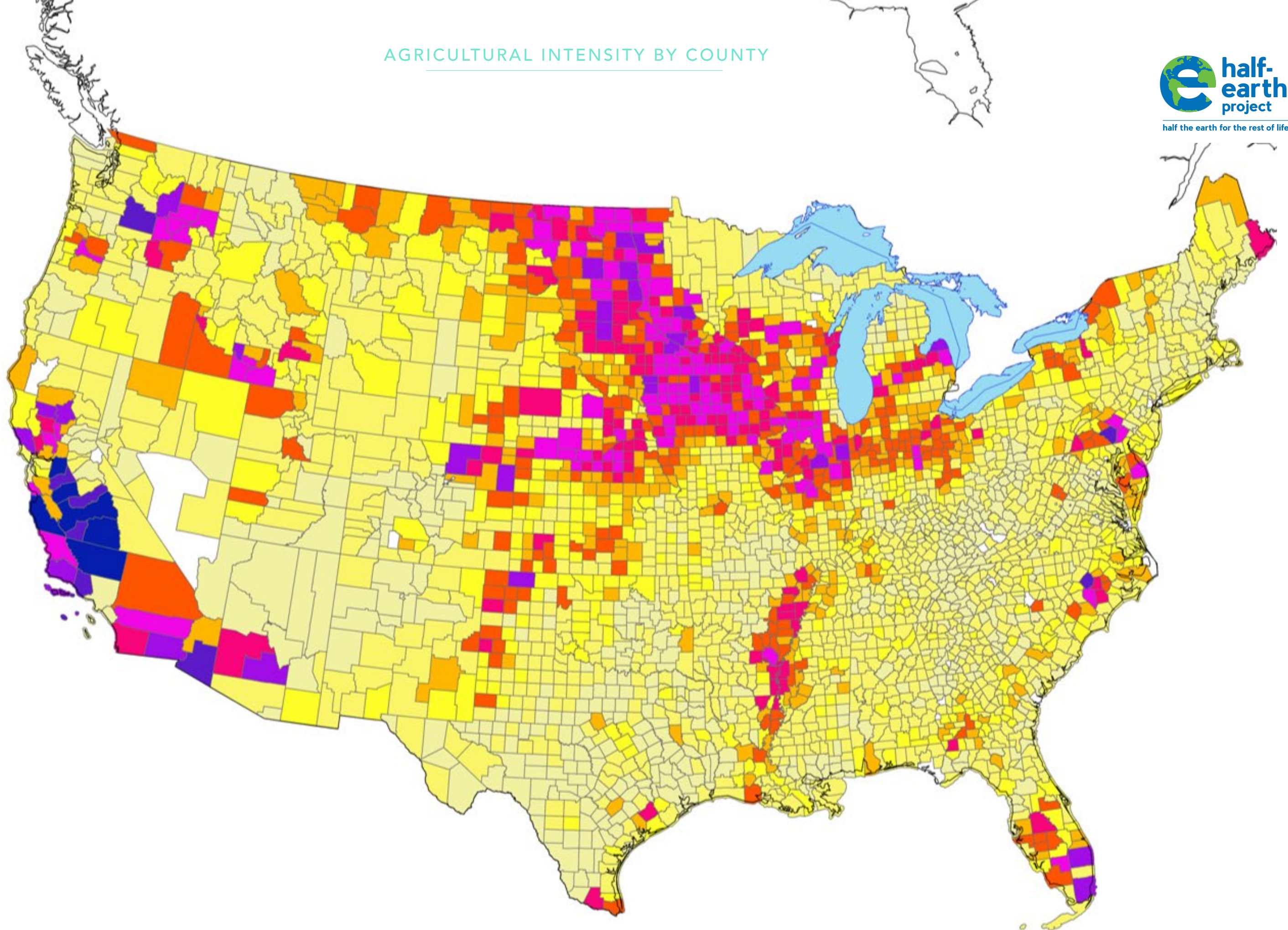
half the earth for the rest of life



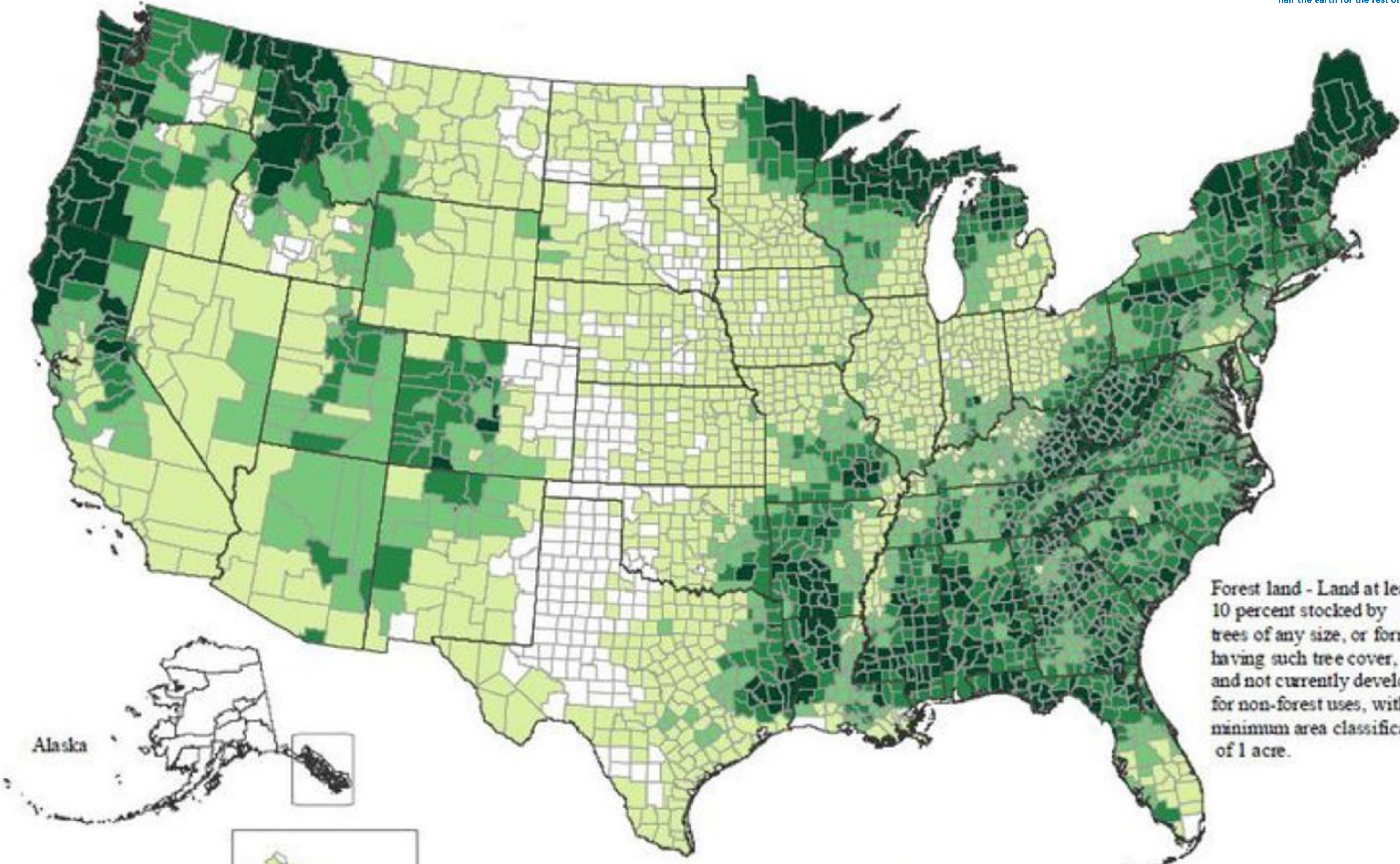
PROTECTED AREAS



AGRICULTURAL INTENSITY BY COUNTY



PROPORTION OF LAND THAT IS FORESTED



Forest land - Land at least 10 percent stocked by trees of any size, or forest having such tree cover, and not currently developed for non-forest uses, with minimum area classified of 1 acre.

Percent forest land

POPULATION DENSITY BY COUNTY

