

UTILIZE THE WATER TABLE TO SAVE THE WORLD! JONATHAN DAVIS

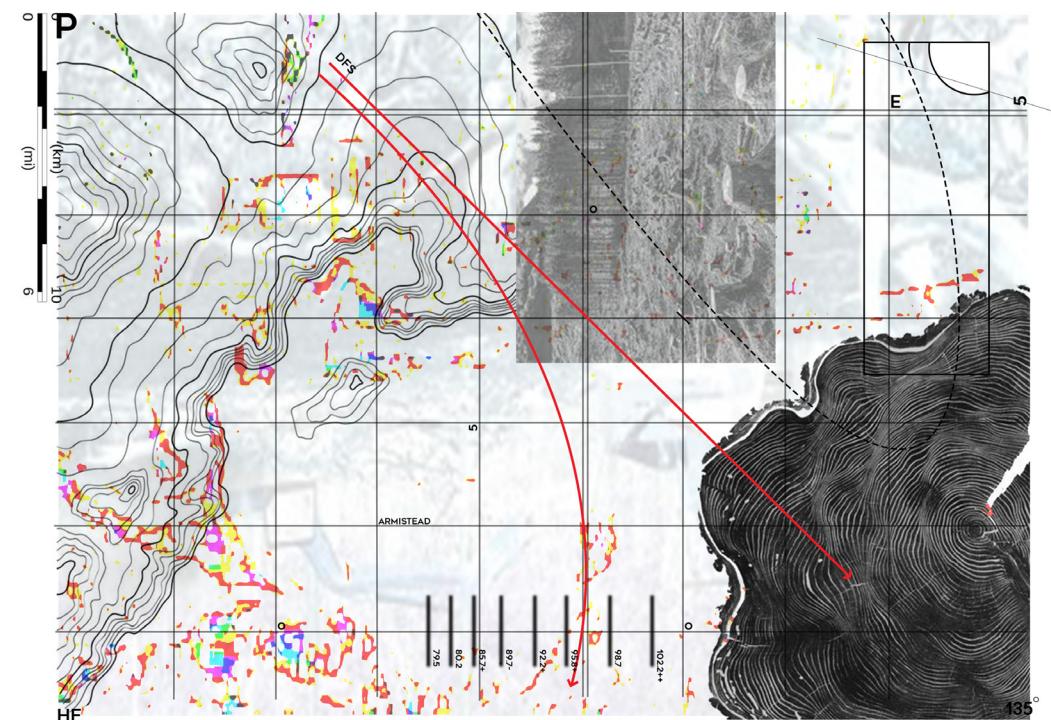


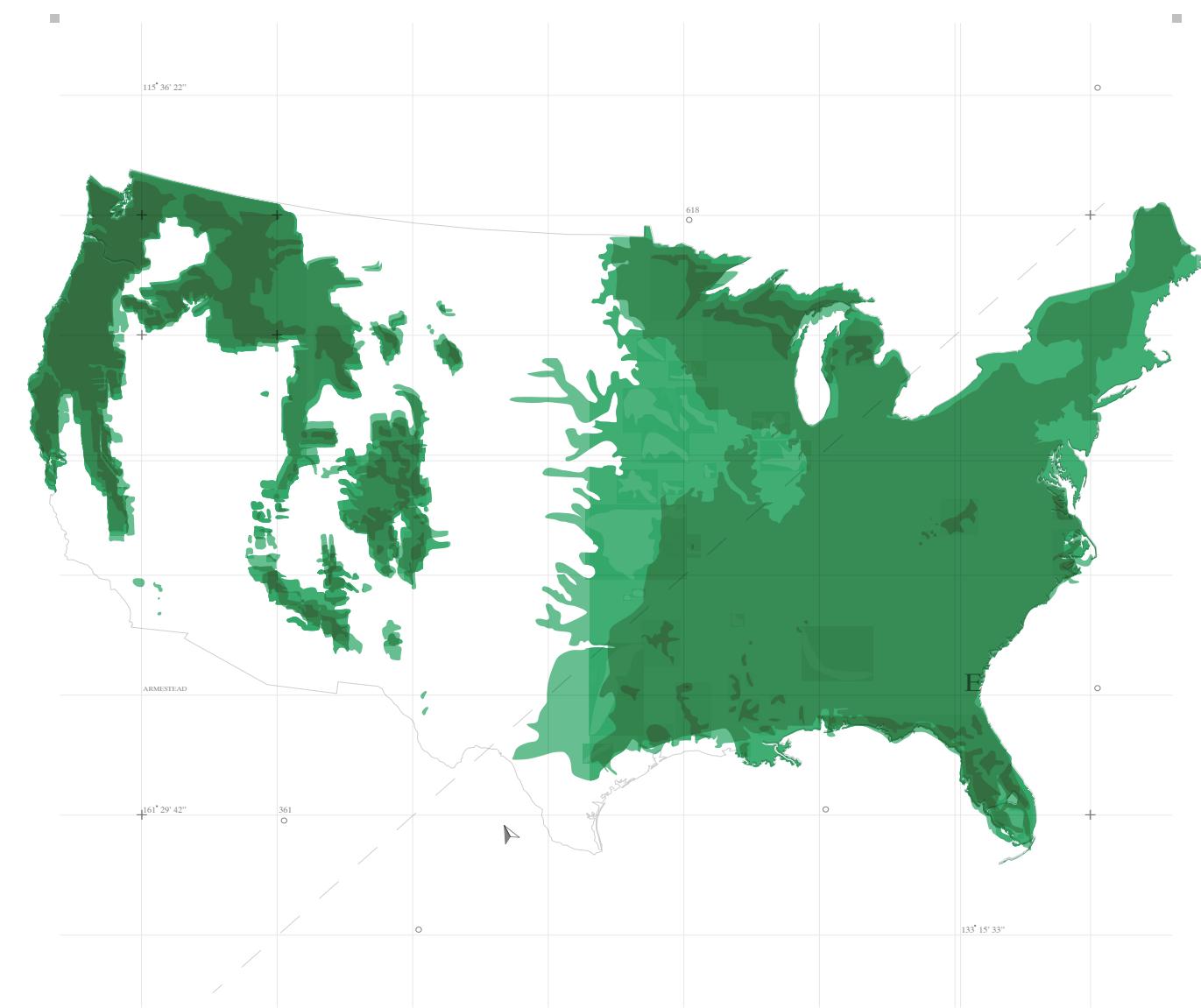
fig. 1
Jonathan Davis, *Cost of Deforestation*. 2020

Old Growth Forests

Also termed primary forest or virgin forest, is a forest that has attained great age without significant disturbance. Old growth features include, diverse tree related structures that provide diverse wildlife habitat that increases the bio diversity. Old growth forest store enormous amounts of carbon in their trunks and allow even more to be stored in forest soil carbon in the atmosphere is one of the main causes of climate

Today's old-growth forests developed along multiple pathways with many low-severity and some high severity disturbances along the way. And, scientists are learning, the journey matters, old-growth ecosystems contribute to ecological diversity through every stage of forest development. Heterogeneity in the pathways to oldgrowth forests accounts for many of the differences among old-growth forests.

In this map we see the progression of the virgin forests over time, the lighter green representing the original forests in full, while the darker green shows us where the forests are as of 1920, since then deforestation hasn't ceased, forest declination still poses a serious threat to the health of the enviroment. This atlas will investigate the faults of human interaction that have caused massive destruction to this vital part of our ecosystems, in an attempt to invent useful ways of solving this problem.





Deforestation refers to the long-term or permanent loss of tree canopy cover and the conversion of this land for other purposes. A 10 percent loss of canopy qualifies for this term. United States deforestation has caused the destruction of virgin forests by 75% percent since 1600.

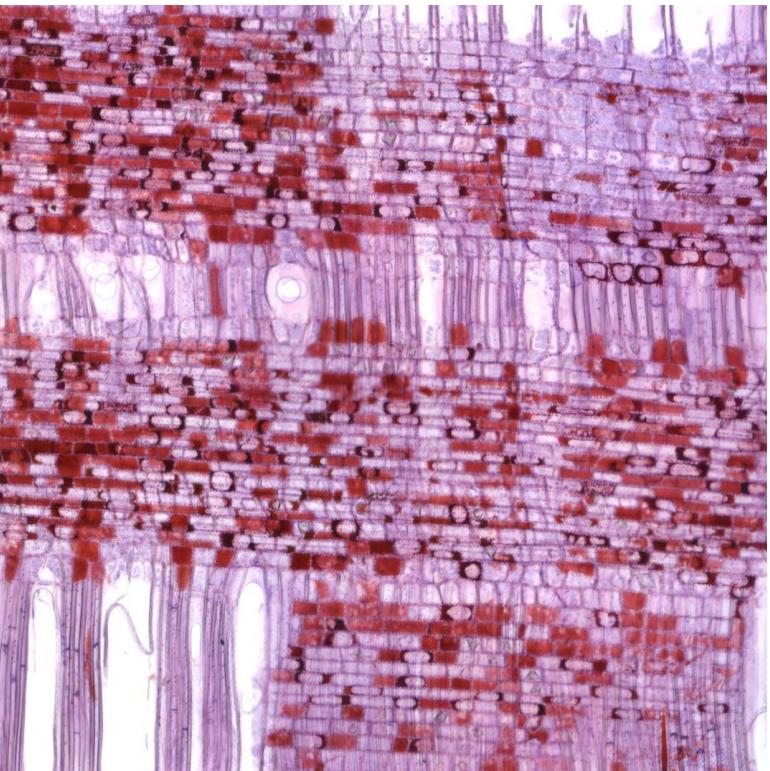


Early populations likely used a land-clearing method that involved burning forests, then planting crop seed among the dead stumps in the enriched soil. They would use a large plot until the yield began to decline, and then would burn off another area of forest for planting.

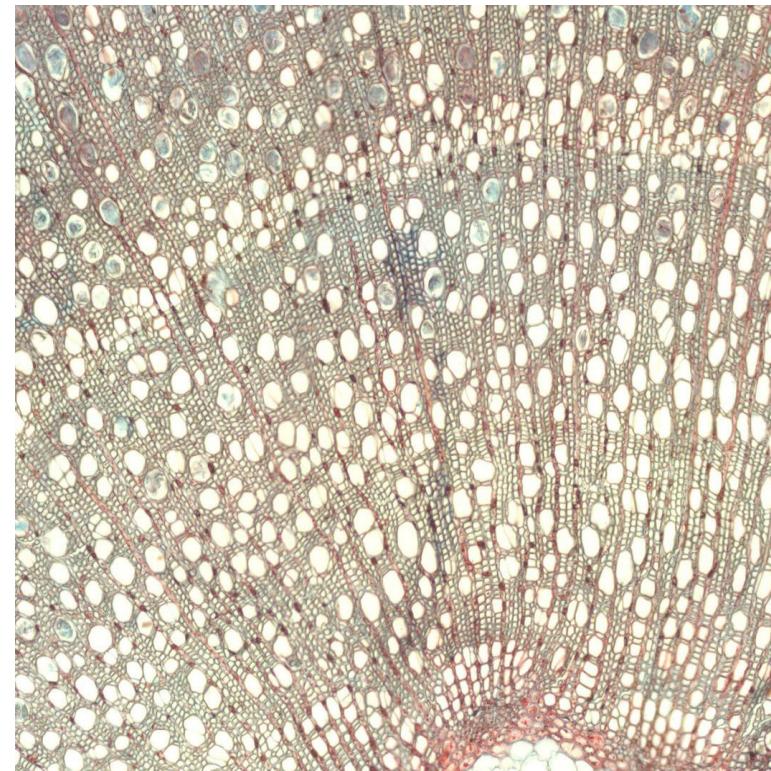
Chemical Fingerprints

Scientists are now using collections of wood samples in efforts to combat illegal logging. Thousands of samples of countless amounts of different trees are on hand at the Smithsonian's National Museum of Natural History, readily available to aid in fighting against the illegal wood trade. These wood samples are collected in an attempt to provide a complete database of woods chemical fingerprints. Some of the wood being tested include endangered species. This research will provide a powerful tool for anyone fighting with the environmental, and economic strain caused by illegal logging. It is stated that this illegal trading costs the global economy \$152b a year, more than the annual value of trafficked ivory, rhino horns, birds, reptiles and corals combined. In the end this tool will aid in the economic aspect of this devastating problem and it will also help suppress the threat of deforestation.

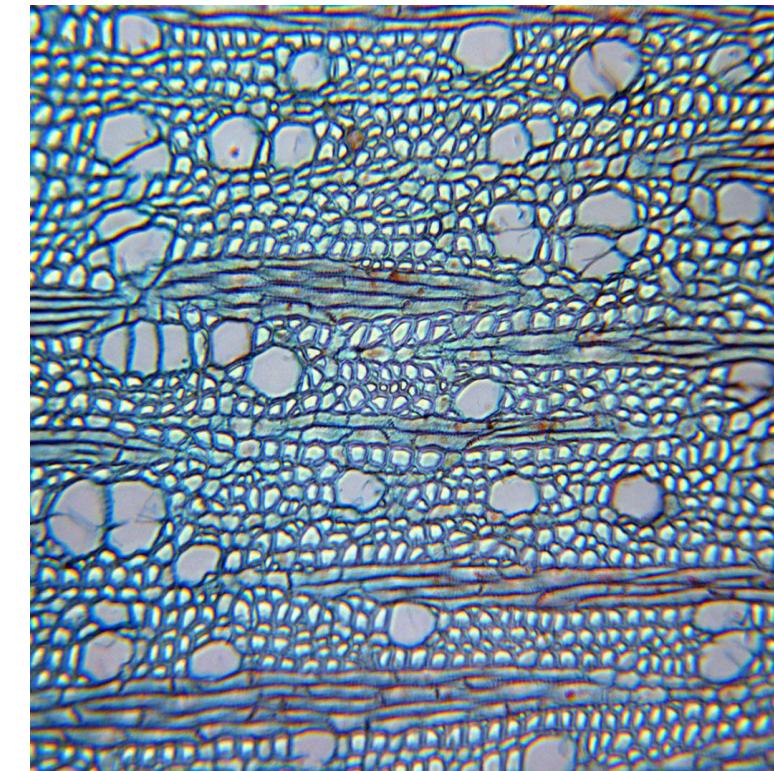




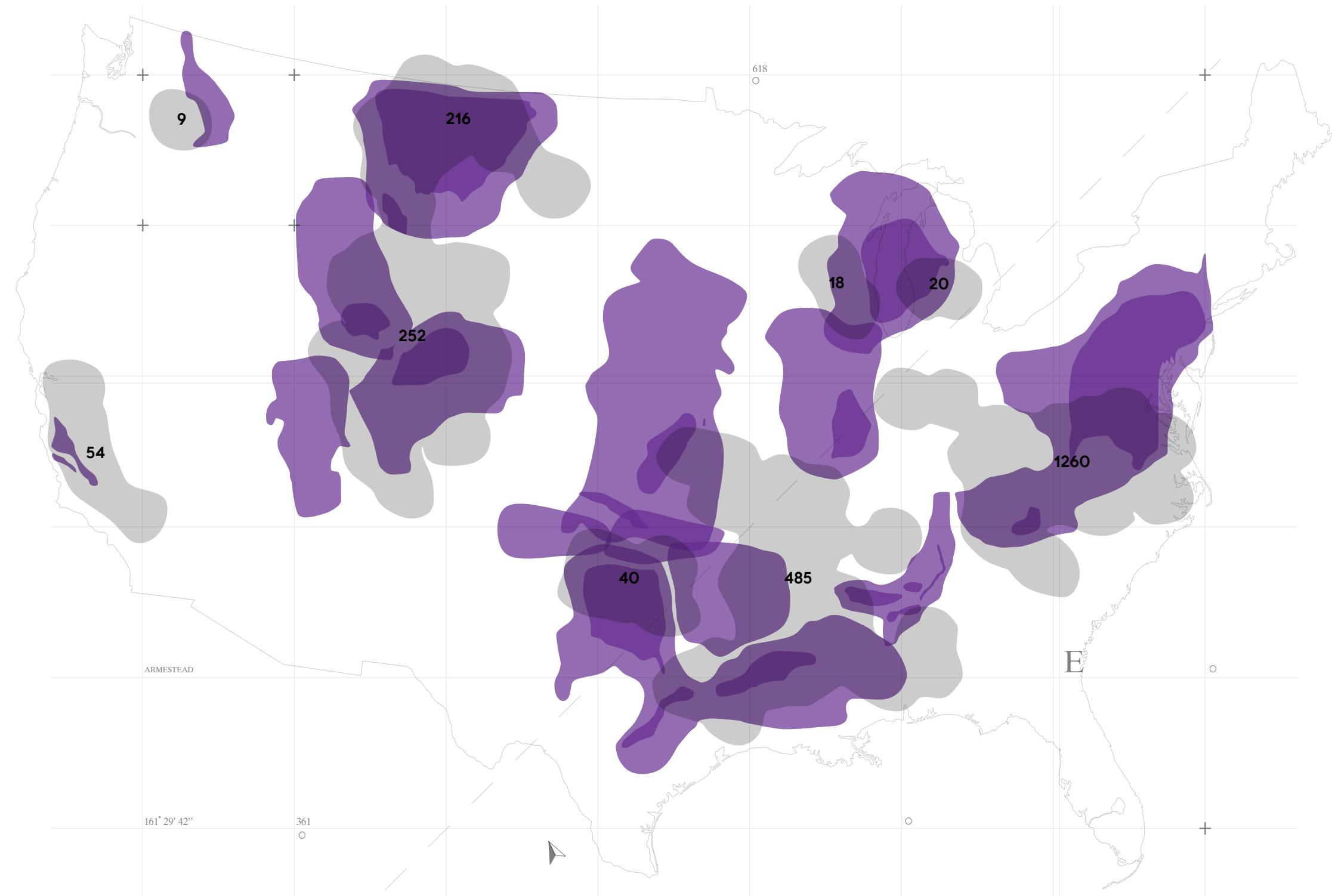
Ailanthus integrifolia, rainforest tree found throughout East Asia.



Cornus stolonifera, or red-osier dogwood, a large shrub, widely distributed throughout the U.S.

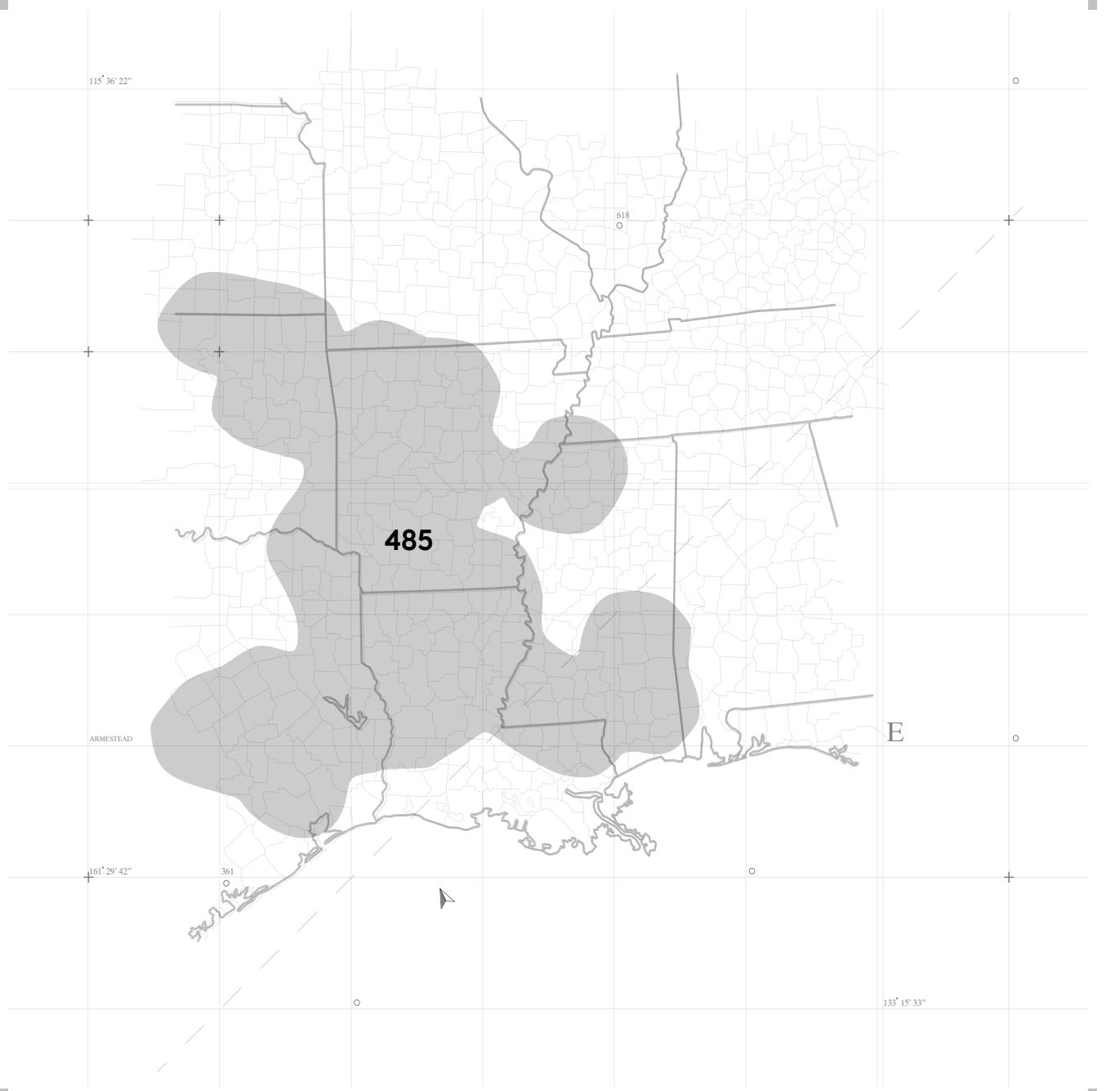


Cornus controversa, or a giant dogwood, is native to China, the Himalayas and Japan.



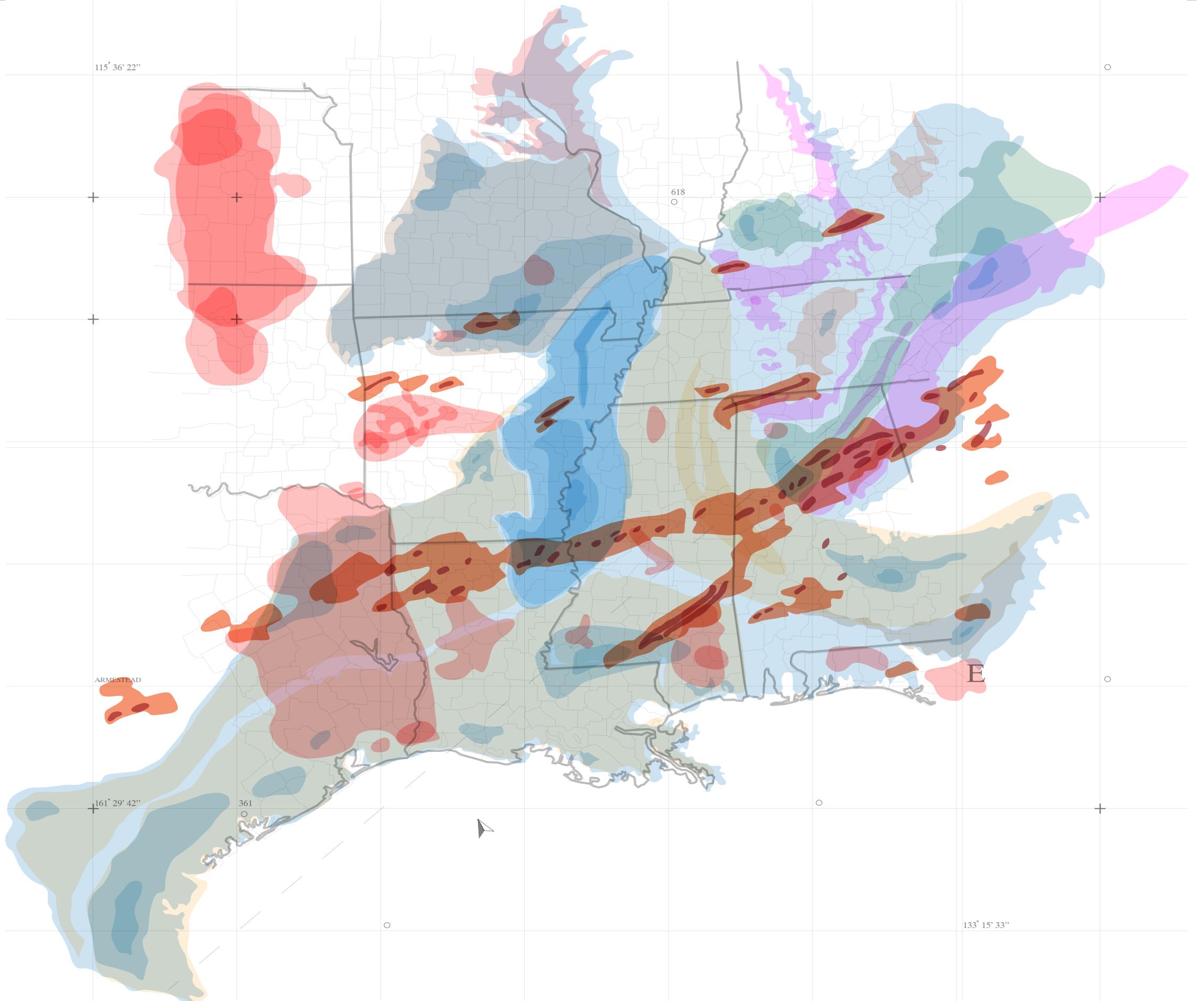
In this map we see the amount of land area populated by hydraulic fracturing in purple, and in grey we see the number of fracking accidents resulting in human death.

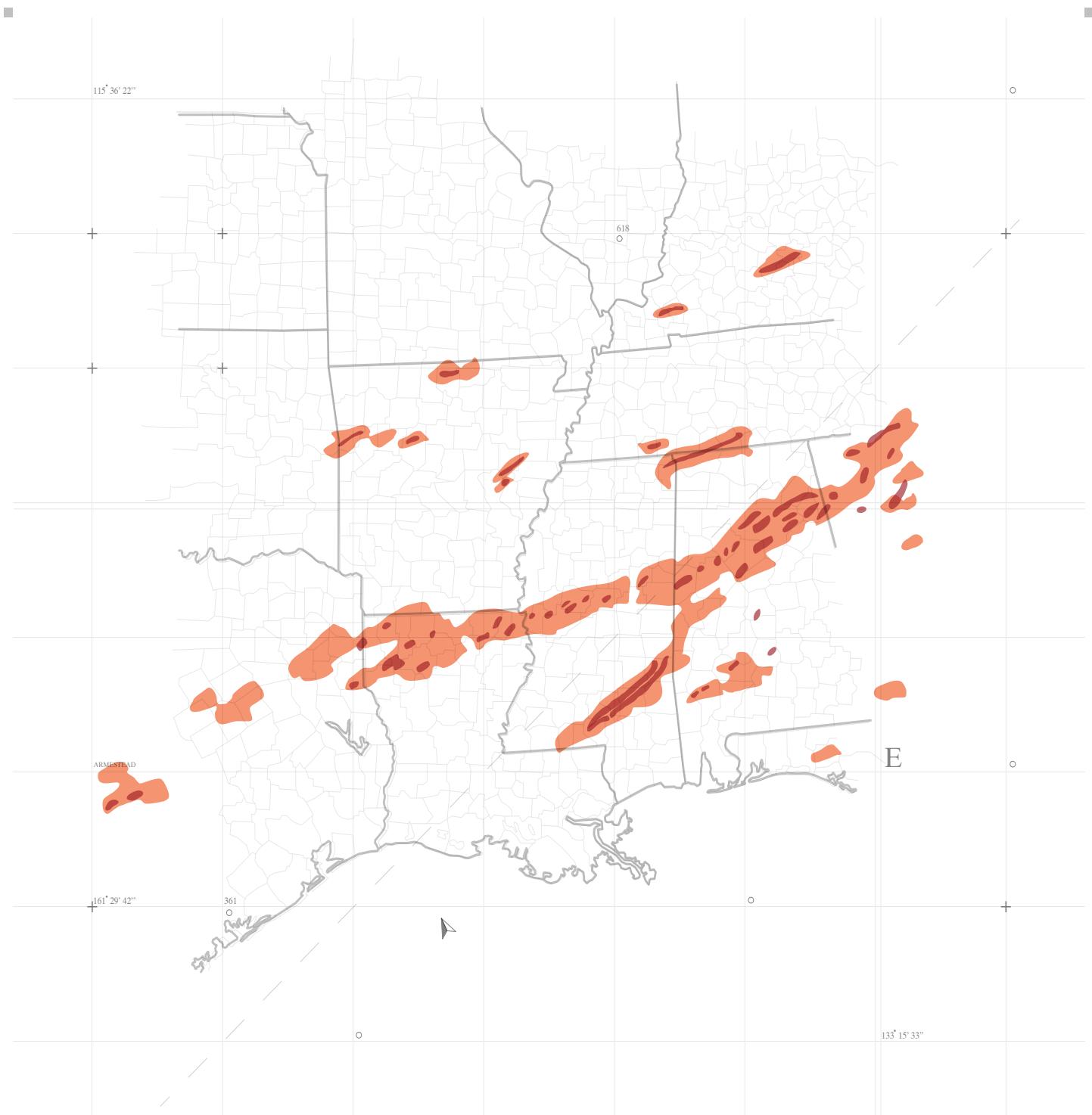
The U.S. Geological Survey considers the Southeast region to be Alabama, Florida, Georgia, Arkansas, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee, plus Puerto Rico and the U.S. Virgin Islands. Primarily focusing in on the Southeast region of the states, we see the devastating toll of hydraulic fracturing on human lives. This dangerous line of work comes with greater consequences than reward in more than one direction, not only is fracking dangerous to human lives, but it also puts the surrounding ecosystems in jeopardy, referring to general health. Thousands of counts of habitat destruction and deforestation are a direct product of land clearing and drilling. The land molested by these sites are not replenished, instead usually left deserted with the eerie presence of rusted machines left to decay.



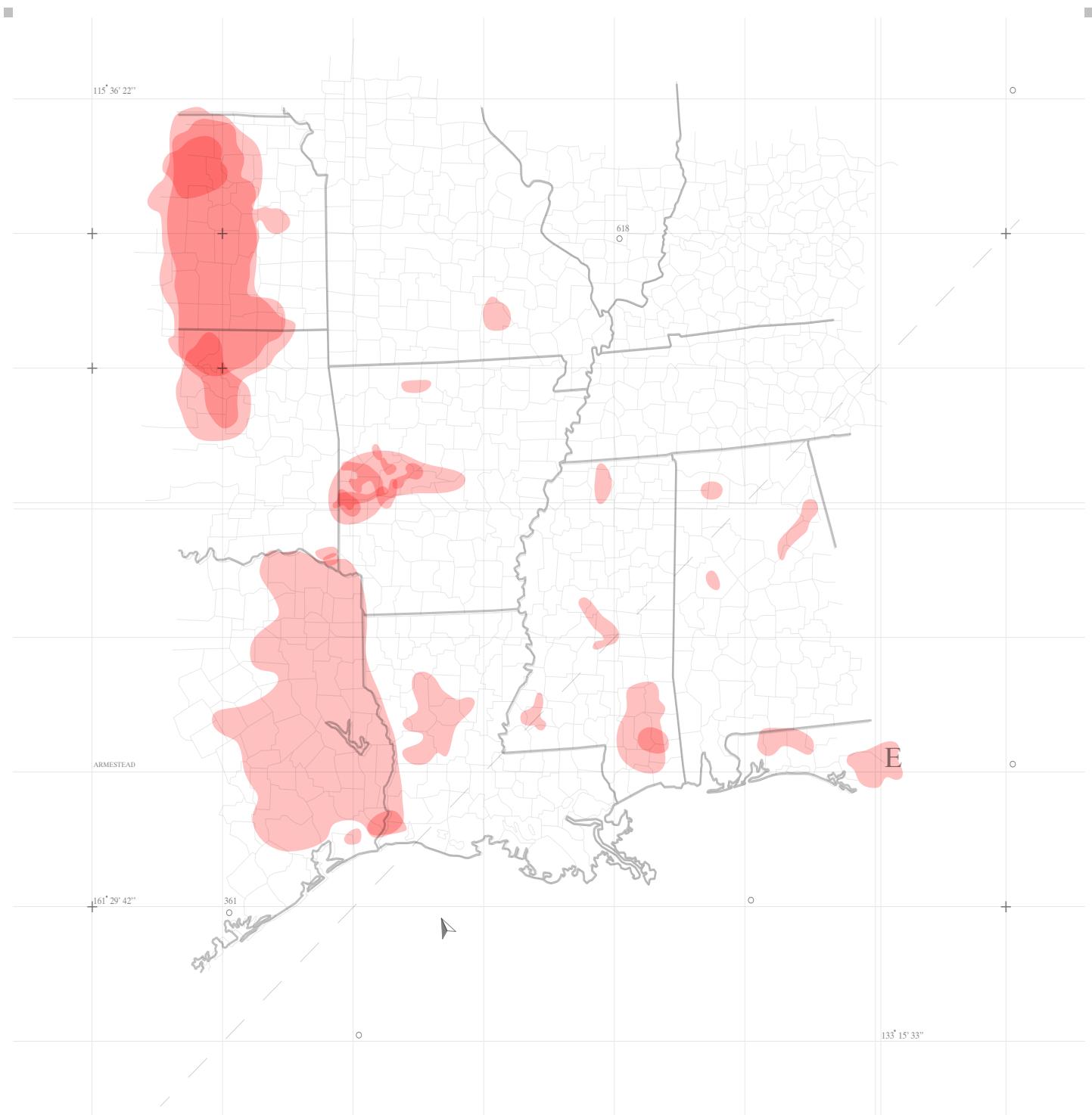
Utilizing The Watertable

The theme of this atlas is mainly deforestation, it explores the topics of pollution, natural disasters, old growth declination, fracking and replenishing through the aid of the groundwater. This atlas also specifically seeks insight on wildfires, fracking, pollution, aquifers, habitat destruction, land clearing, global warming, water pollution, natural disasters, mining and logging. The specific target region is the south east region of the US. The future this atlas leads us to is among the enlightened basis, understanding the severity of our presence, influencing changes, inefforts to suppress our inevitable fate. This atlas will benefit those seeking the information that will inform them on what lies ahead if we continue to molest the land, and what could happen if we made changes. The everyday human is the immediate beneficiary of the expected performed tasks, propositions if changes are made, "everydays" will enjoy the benefits of an improved environment. Within the focus of decarbonization this atlas will seek to invent possibilities for the health of our ecosystems and the regeneration of dense biomes, habitats and natural environments. Focusing on different scales of affected areas of the us in an attempt to explain the severity of our actions. We take a look into the potential critical health of our world and seek to provide serious speculation and critique to this serious problem at hand, driven by the economy minded and "progressive" US. This atlas will take a strong stance beside decarbonization, again in attempt to subdue some of the damages we continue to blindly promote.



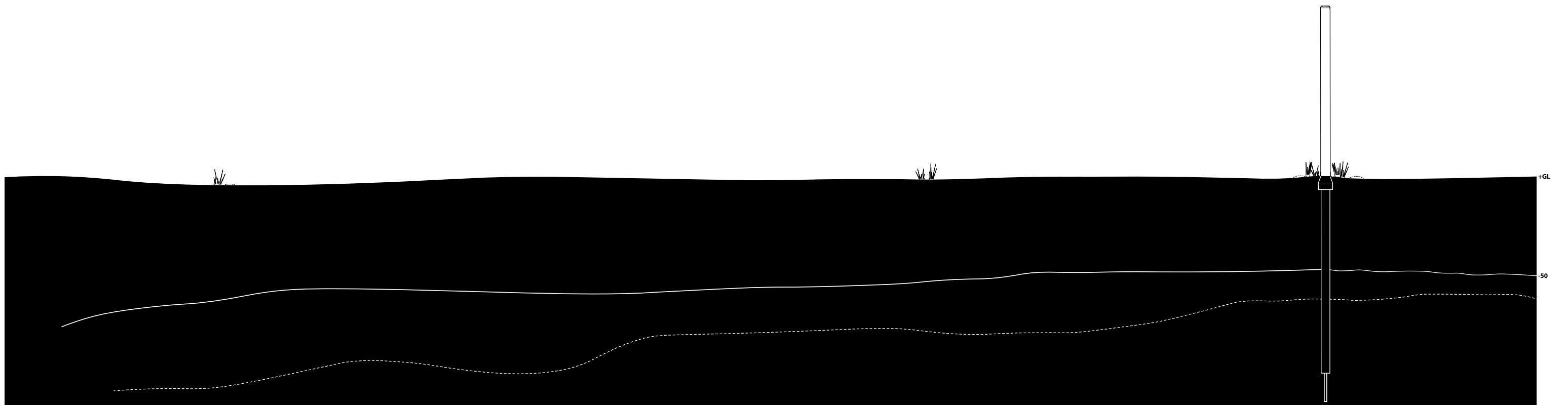


This map shows the areas affected by tornadoes in a five year span, in orange, and in red the actual path of the tornado.

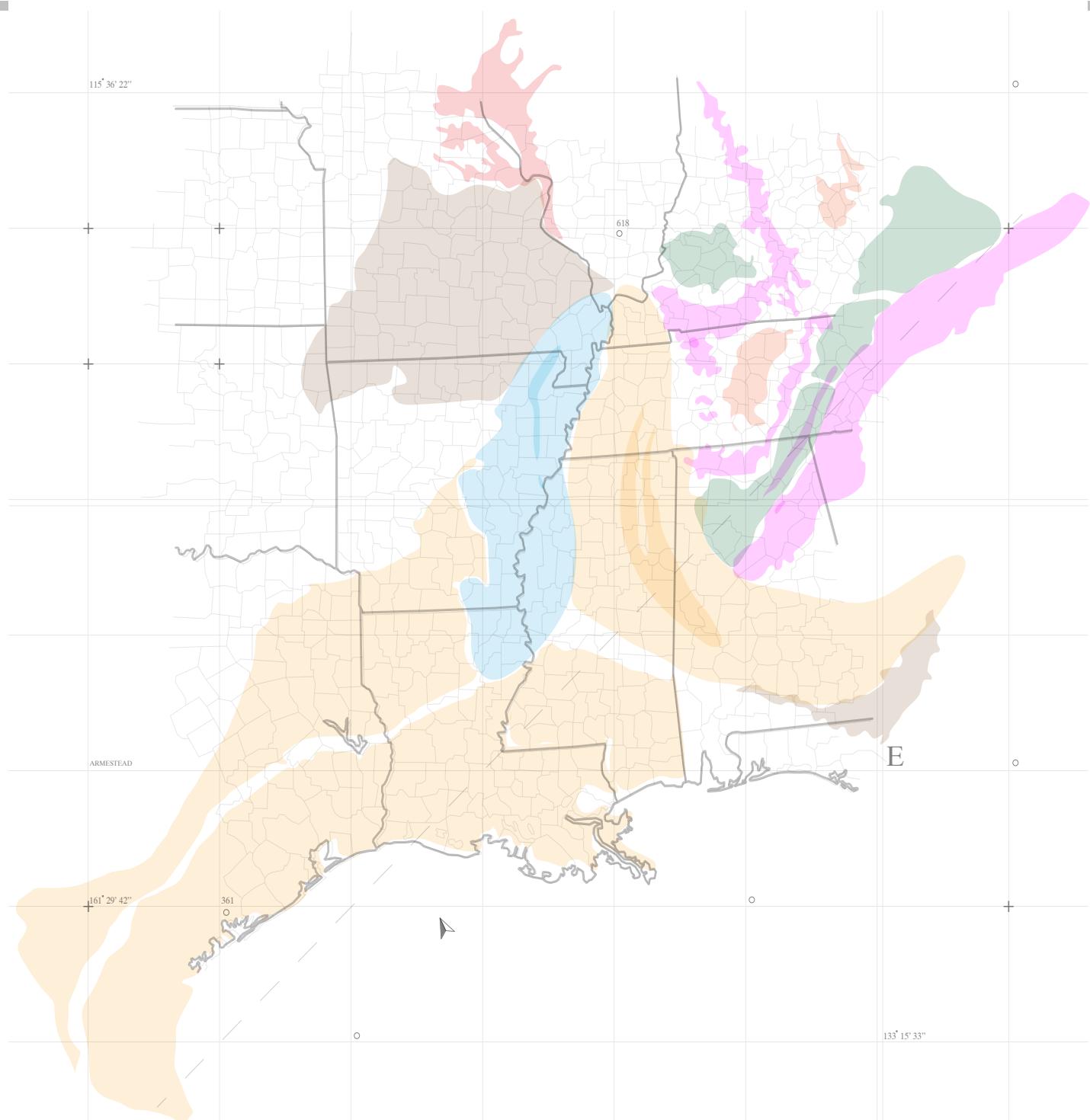
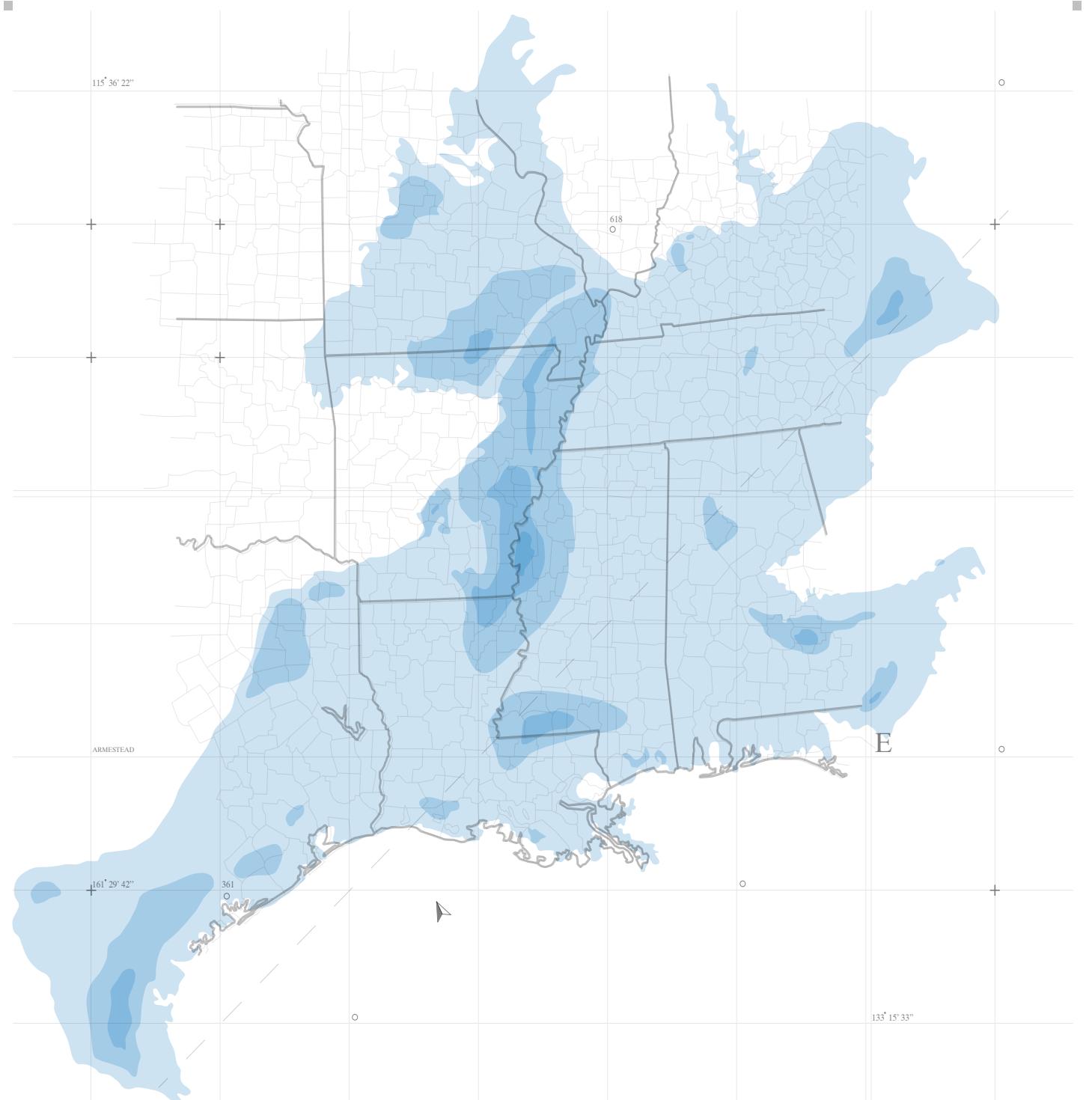


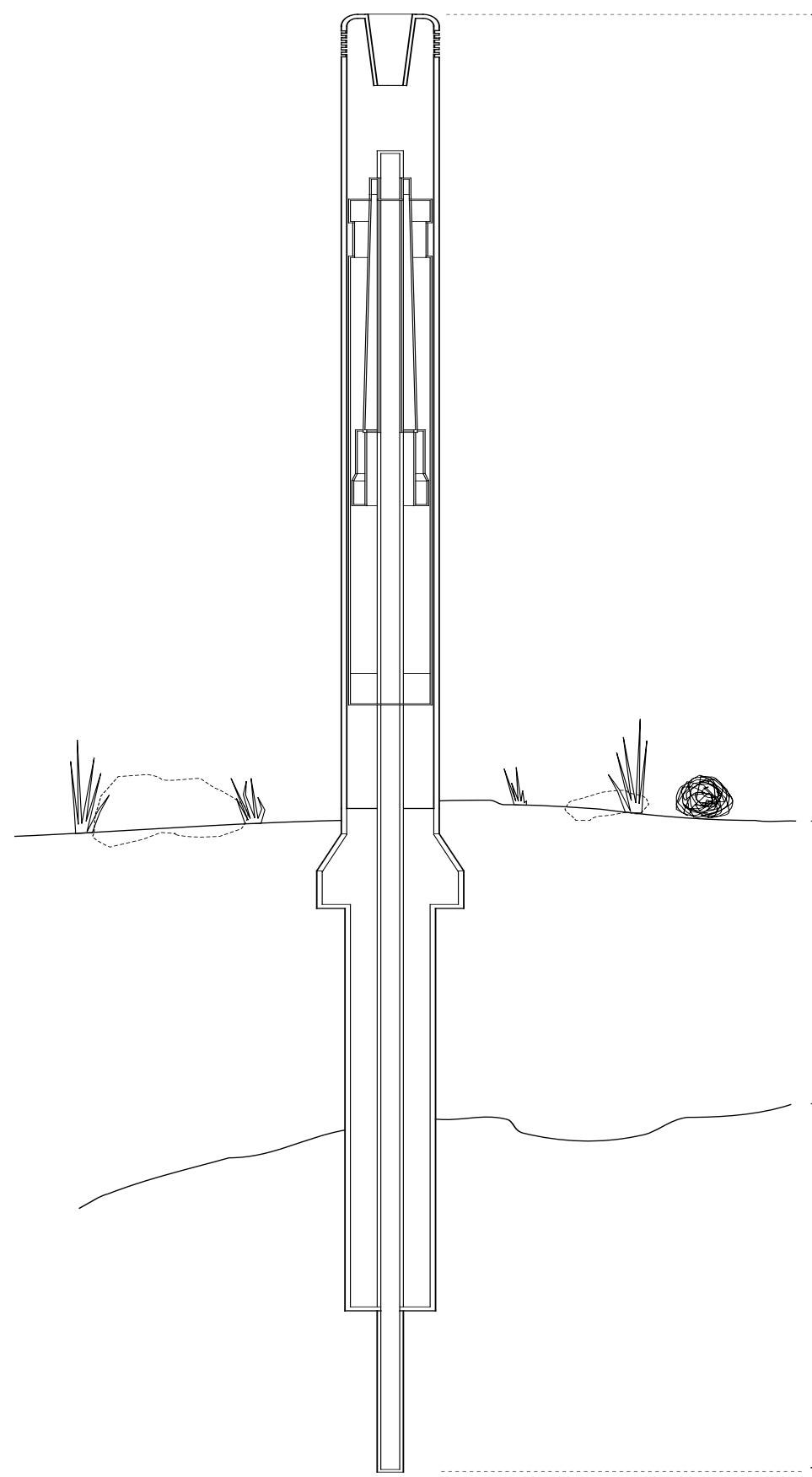
This map collectively shows the areas affected by wildfires over the past decade.

Imagine a mechanism whos sole purpose is to
replenish life, and is capable of such task.

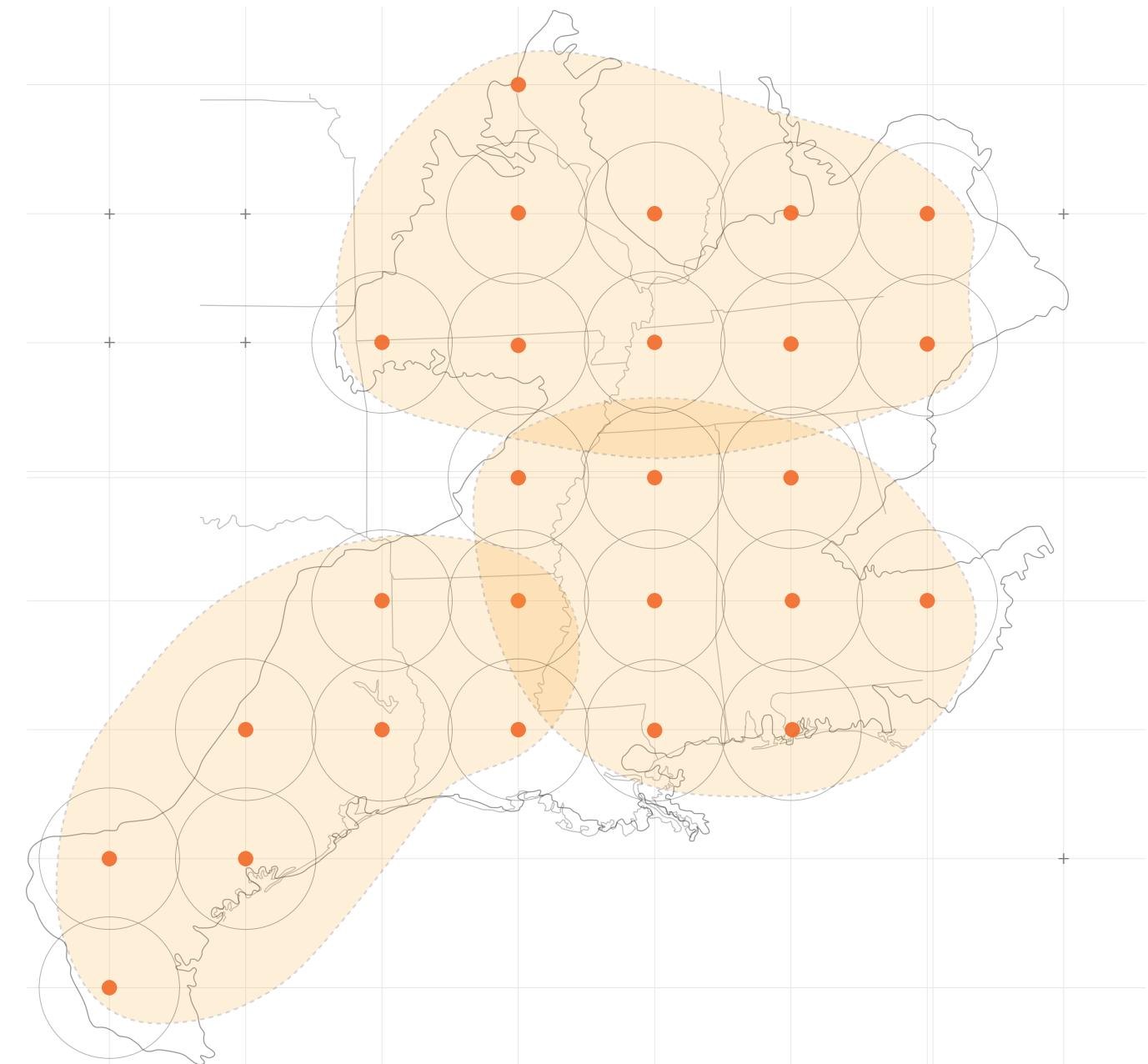


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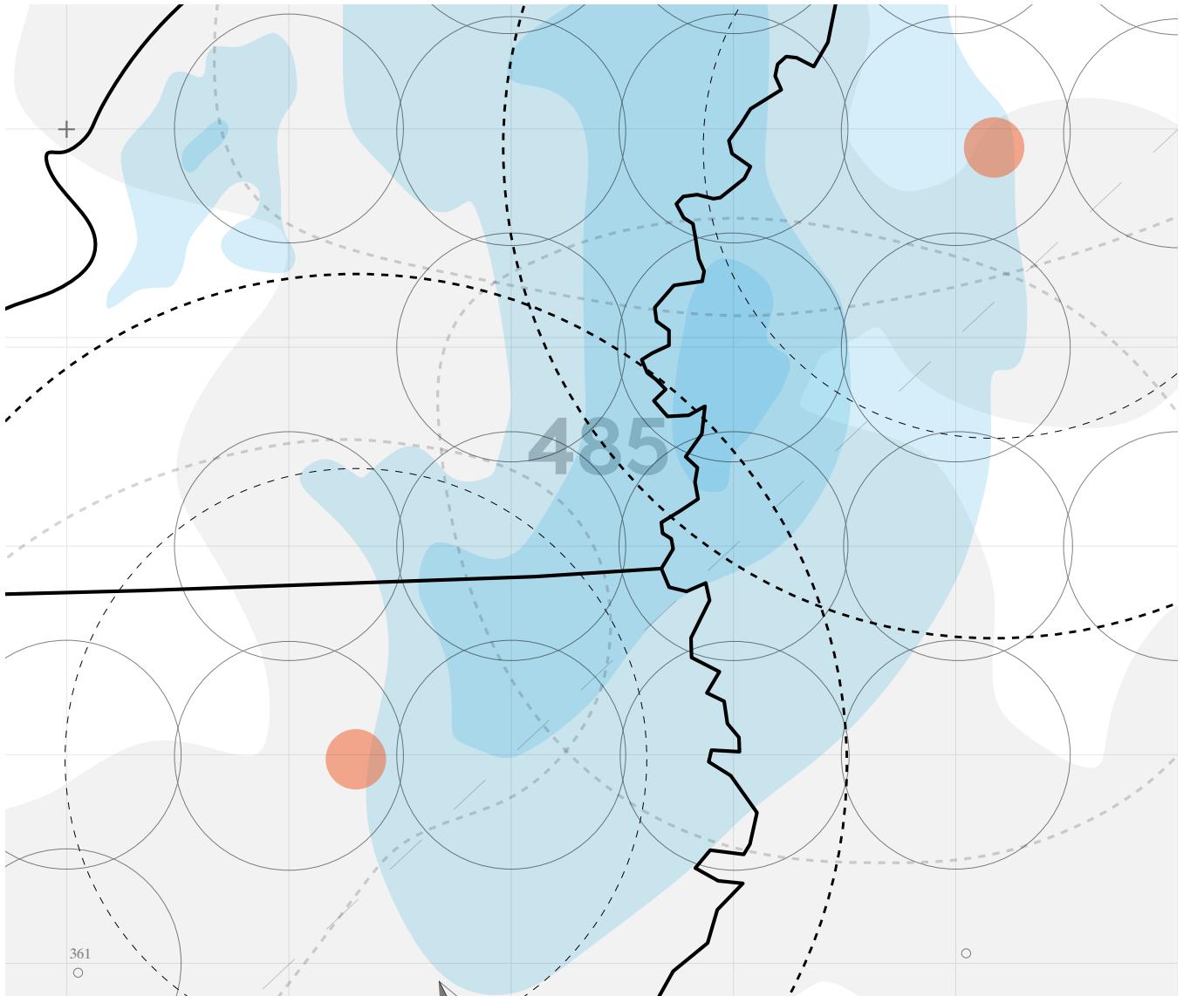




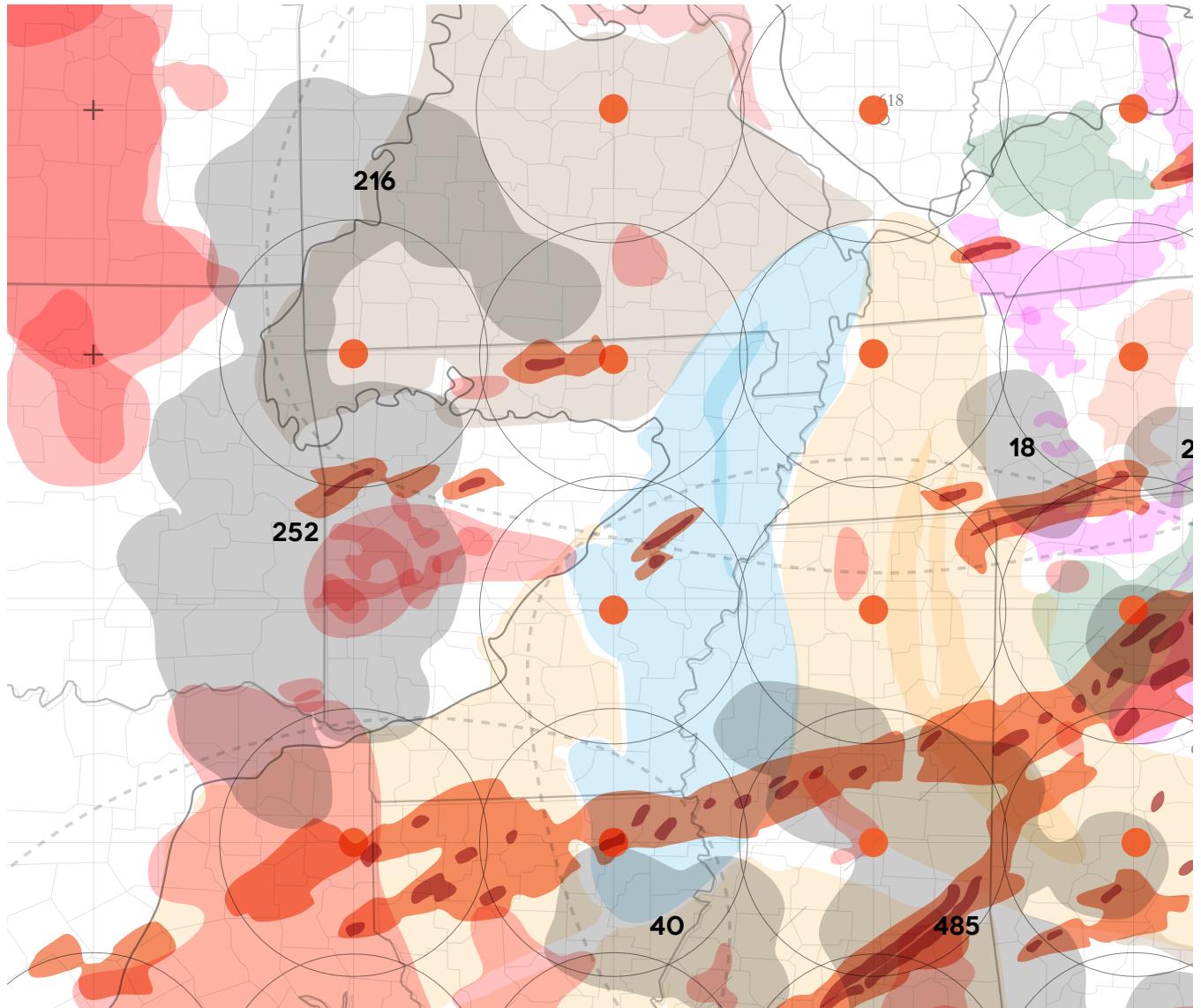
This mechanism will aim to support immediate surroundings of a radial distance, targeting three overlapping sections of the given region.



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The radial impact of this mechanism will be designed to overlap with surrounding radii, thus creating sufficient coverage for the target area.



The design of this machine will seek to solve the collective problems ridding the designated area individually.