

# Food, Water, Shelter: Crowdsourcing a Diverse Atlas Trilogy on Global Human Needs

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## Abstract:

Guerrilla Cartography is a nonprofit cartographic arts organization that has published five crowdsourced atlases, three of which make up a trilogy based on the necessities for human life: food, water, and shelter. As we seek to expand our global network of cartographers, researchers, designers, and map enthusiasts, we present this trilogy as an example of a successfully crowdsourced project incorporating numerous diverse ideas and perspectives on these themes through cartography and data visualizations.

Founded on the idea that a new paradigm for cooperative and collaborative knowledge-caching and -sharing could have a transformative effect on the awareness and dissemination of spatial information, Guerrilla Cartography formed in 2012 and incorporated as a California 501(c)(3) nonprofit organization in 2014. All of our projects begin with an open call for maps based on a one-word theme intended to spark deep thinking and imagination while providing as little direction as possible. We want to know and see what the guerrilla cartography community imagines, allowing a diversity of experiences and perspectives to be represented in our atlases.

Furthermore, our unique process gives our community an opportunity to collaborate with one another and a platform in which to publish creative ideas. For instance, researchers and non-cartographers can work together with experienced mapmakers to develop novel visualizations, global peer reviews can elicit feedback from the community on each map prior to publication, while both novice and professional cartographers alike have a venue to publish and disseminate their work. As an all-volunteer run organization, we have no paid staff and do not pay for content, allowing us to focus on our mission to promote the cartographic arts. We allow free downloads of all our content on our website at <https://www.guerrillacartography.org/> and sell our print atlases to support Guerrilla Cartography projects. The free downloads provide access to our projects to anyone with an internet connection and an interest in a variety of perspectives on our atlas themes.

The first atlas in the trilogy, *Food: An Atlas*, brought cartographers together with food researchers, activists, and enthusiasts to produce an atlas with maps spanning from the global almond trade and the global availability of nutritious food to threats to indigenous foodways in North America and a Danish lunchbox foodshed. An example of a map from this atlas can be seen in Figure 1, “Undersea Migration: Where Tuna Goes When You’re Not Eating It,” the only map which is featured in two of our atlases. The second atlas, *Water: An Atlas*, followed on the same concept of the basic necessities for life. This atlas includes maps on water availability in African cities, flooding and drought in North Korea, global fog collection, and locating Atlantis, to name a few. Figure 2 is an example from *Water* of a collaborative project between Bryce Touchstone and Erica Milwain to create a map about energy and water conflicts in Central Asia. Our third and final atlas in this trilogy, *Shelter: An Atlas*, was published in early 2023 and includes maps on a variety of different kinds of shelter, including plant and animal shelters, tax havens, homelessness, and shelter-in-place. Several maps in this atlas consider the challenges of recent global events, such as COVID-19, as seen in Figure 3, “Environmental Disaster and COVID-19: Juxtaposing Displacement and Shelter-in-Place.”

In presenting this project at the International Cartographic Association conference, we hope to bring more awareness to the work of our many atlas contributors and partners, as well as continue to build our international network to further our mission of expanding the art, methods, and thematic scope of cartography through collaborative projects.



Figure 1. Map in *Food: An Atlas and Water: An Atlas*: “Undersea Migration: Where Tuna Goes When You’re Not Eating It” by H.R. Smith and Audrey Nieh.

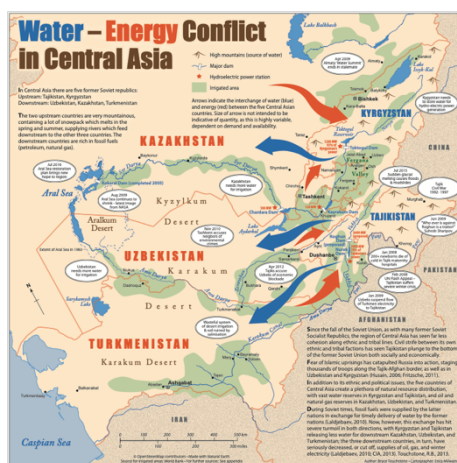


Figure 2. Map in *Water: An Atlas*: “Water-Energy Conflict in Central Asia” by Bryce Touchstone and Erica Milwain.

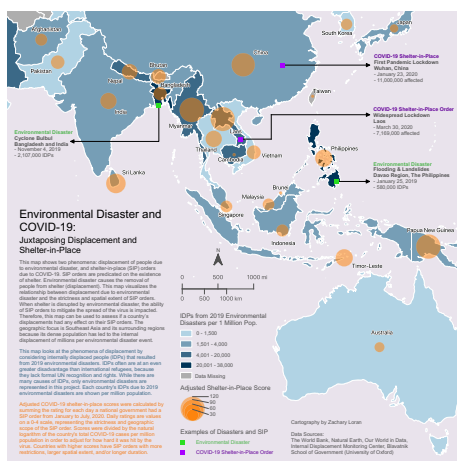


Figure 3. Map in *Shelter: An Atlas*: “Environmental Disaster and COVID-19: Juxtaposing Displacement and Shelter-in-Place” by Zachary Loran.