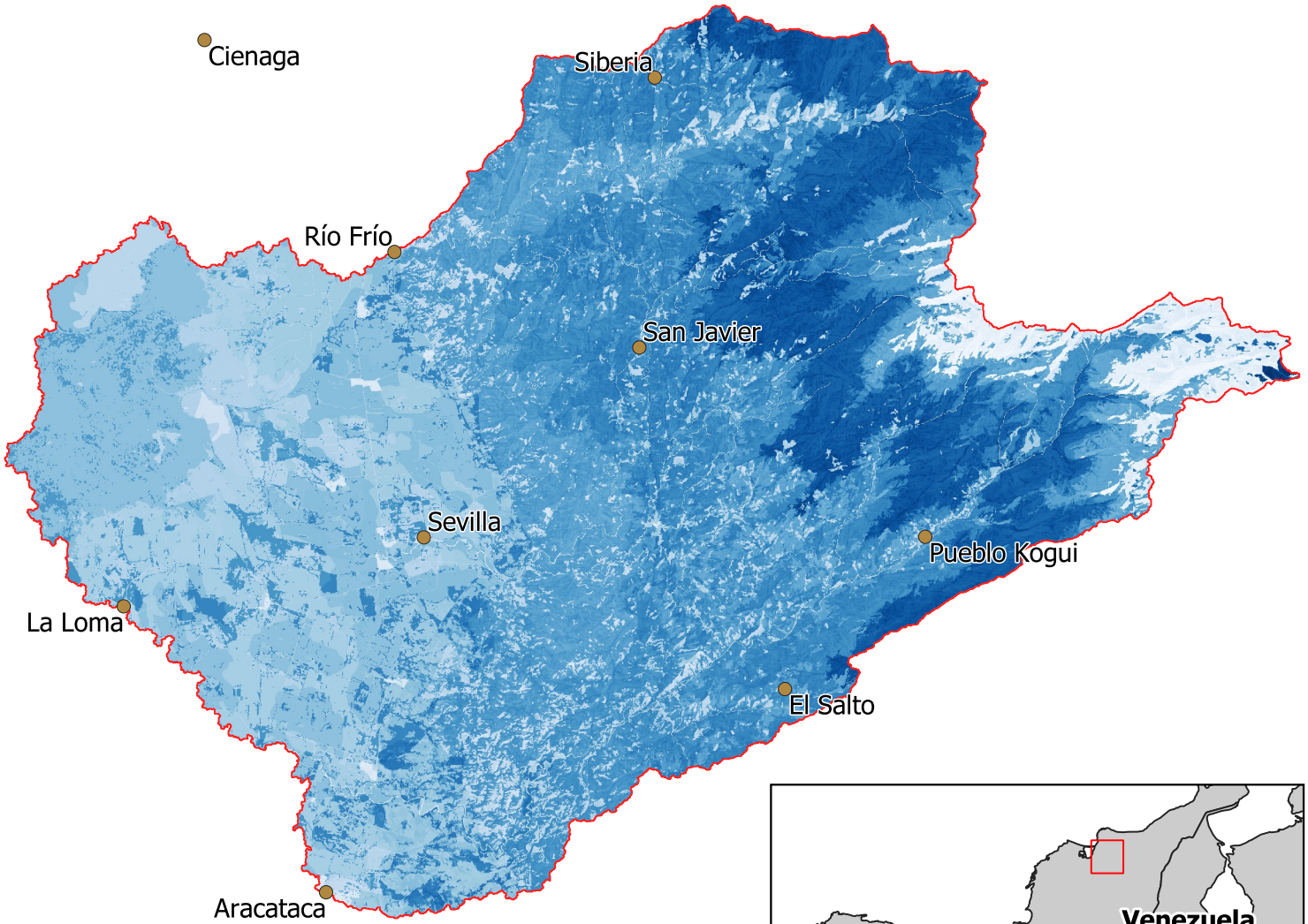
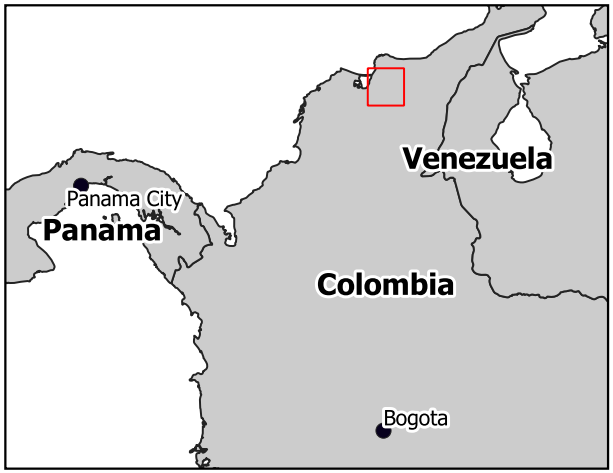
1. Ability of the land to moderate surface water runoff

Ecosystem service: Regulation of overland flow.





How to interpret the map:
The darkest colours represent where the land makes the greatest contribution to slowing over-land water flow after heavy rainfall events. This helps prevent flooding.

What the service is:
Vegetation can help water soak into the ground and can also form a barrier to water moving rapidly over the land surface. This helps reduce the amount of surface water that can cause flooding. Flat land holds water whilst steep slopes shed water. Some types of soil can hold a lot of water, particularly in wetlands, whilst others hold very little, so soil and geology are important influencing factors.

Why it is important:
Surface water regulation is a form of natural flood management where hydrological and morphological processes together with the habitat features work together to manage the sources and pathways for flood waters.

How the map was created:
This map was generated by assessing key factors at each location: geology, soil, slope, habitat and management. Datasets representing each key factor were scored based on their functional contribution to mechanisms for natural regulation of overland flow: infiltration; interception; storage and sediment load control. Once scored, the datasets were combined. The current map has been created at the strategic scale and is indicative at a field level. Field visits should be made before any site-specific management decisions are taken. Additional data could be sourced to refine the maps at the local scale; methods for doing this are discussed in the project report.

Legend

- Low potential of land to slow runoff
- High potential of land to slow runoff

0 5 10 15 20 km

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Data and maps created by Environment Systems Ltd (2019)
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Soil data: Geographic Institute Agustín Codazzi