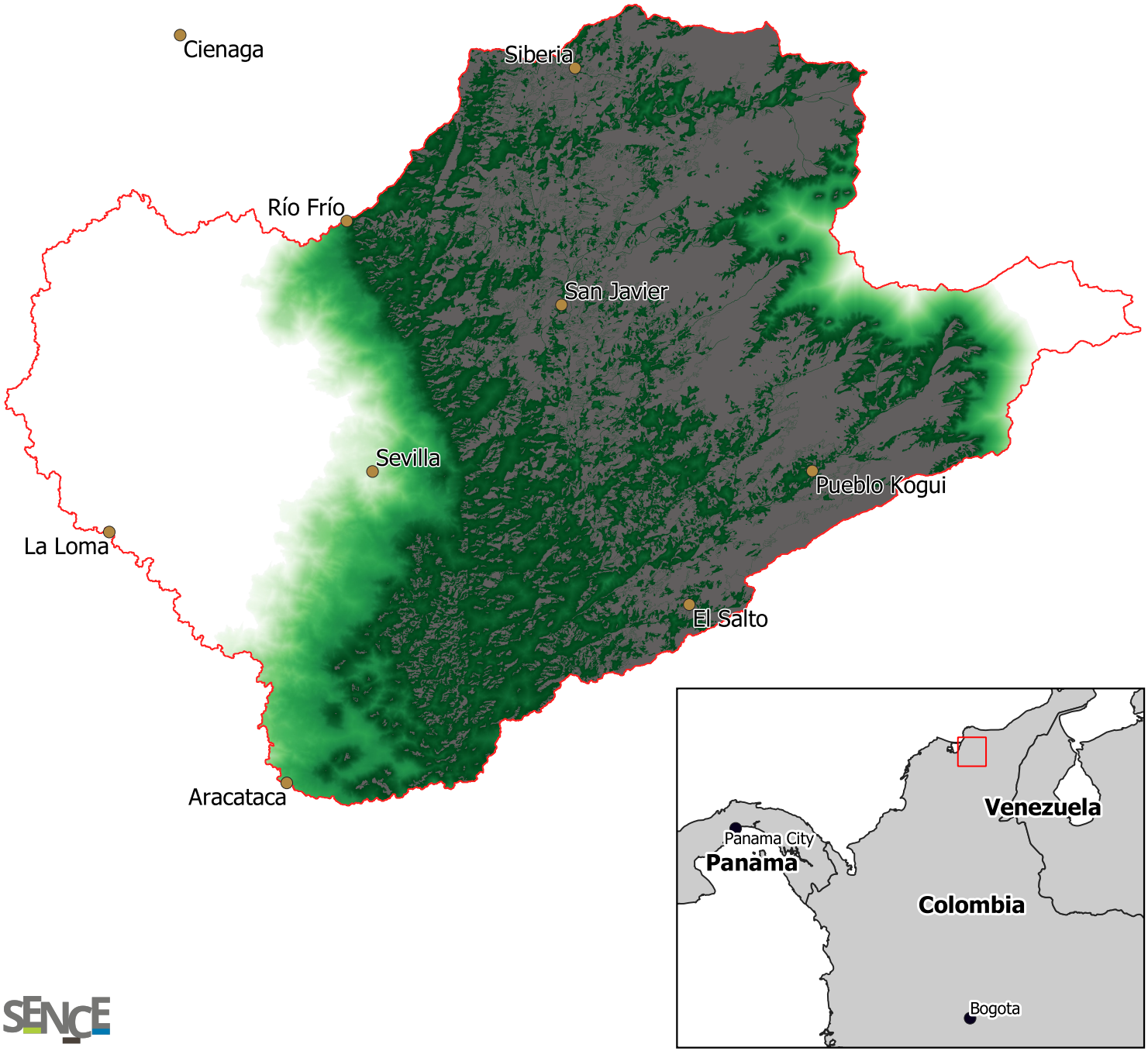
8. Ecological Network Connectivity - Woodland Ecosystem

Ecosystem service: Population maintenance & genetic diversity



How to interpret the map:
Dark green areas are more highly connected to the ecological network. Grey areas are existing source woodlands (excludes disturbed woodlands).

What the service is:
The map shows the existing woodland network within which plant and animal species can move to maintain genetic diversity and sustain viable populations of woodland species. Existing woodlands act as 'source habitat', where the main population of woodland species is based. Land adjoining and close to the source habitats can be used for foraging and as dispersal routes (permeable habitats). Some habitats and land uses are more permeable than others; for example scrub could be expected to provide greater levels of food and shelter for woodland species, whereas bare ground would provide less.

Why it is important:
Areas of native natural and semi-natural woodlands that are connected in a landscape, forming a network, are more resilient to changing climate or land management. Inside the network, woodlands generally provide higher levels of ecosystem services, such as the ability to clean water or regulate runoff, provide timber products and support nature tourism (e.g. bird watching). Within the network, restoration of structurally-diverse and species-rich woodlands will be far more effective as propagules, pollinators and important species will be available for colonisation.

How the map was created:
The habitat classes were generated using Sentinel 1 and Sentinel 2 satellite imagery. Each habitat and land use was evaluated for its importance and role played in supporting the woodland network.

Legend

Source woodland

Woodland ecological network
- Highly connected
- Moderately connected
- Poorly connected

0 5 10 15 20 km

N

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