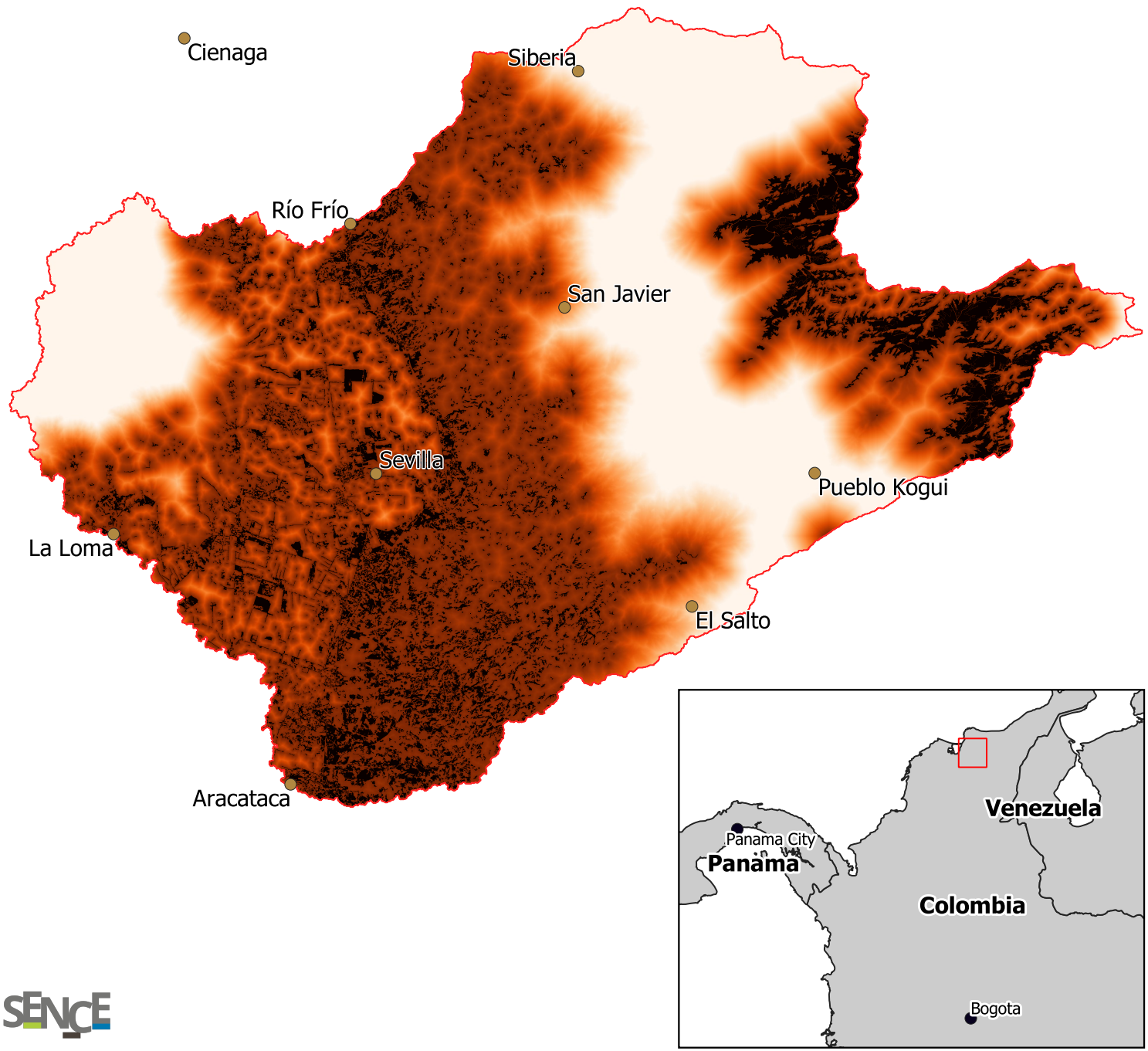
10. Ecological Network Connectivity - Grassland Ecosystem

Ecosystem services: Population maintenance & genetic diversity.



How to interpret the map:
Darker orange areas are more highly connected to the ecological network. Black areas are existing source grasslands.

What the service is:
The map shows the existing grassland network within which plant and animal species can move to maintain genetic diversity and sustain viable populations of grassland species. Existing grasslands act as 'source habitat', where the main population of grassland 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 scattered scrub could be expected to provide better conditions for grassland species than dense woodland.

Why it is important:
Areas of native natural and semi-natural grasslands that are connected in a landscape, are more resilient to changing climate or land management. Inside the network, structurally-diverse and species-rich grasslands generally provide a higher level of ecosystem services, such as surface water regulation. Within the network, restoration of structurally-diverse and species-rich grasslands 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 grassland network.

Legend

Source grassland

Grassland ecological network
- Highly connected
- Moderately connected
- Poorly connected

0 5 10 15 20 km

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