**Supplementary Material**

**A simple and extensible framework to identify key areas for the conservation of single vulnerable freshwater species**

D. Valencia-Rodriguez et al.

**Content:**

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**Table A1.** Values by sub-basin of the cartographic information used in the analysis of the different aspects related to the human activities.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sub-basin** | **Number of reservoirs** | **Reservoir area (Km²)** | **Number of populated centers** | **Population density** | **Number of mining titles** |
| Río Palacé | 0 | 0 | 6 | 157746 | 4 |
| Río Ovejas | 0 | 0 | 7 | 104246 | 1 |
| Río Palo | 0 | 0 | 10 | 256709 | 37 |
| Río Guachal | 0 | 0 | 12 | 205851 | 17 |
| Ríos Guabas, Sabaletas y Sonso | 0 | 0 | 11 | 74015 | 11 |
| Ríos Amaime y Cerrito | 0 | 0 | 20 | 292819 | 8 |
| Ríos Guadalajara y San Pedro | 0 | 0 | 6 | 52362 | 7 |
| Alto Río Cauca | 1 | 0.07 | 6 | 264903 | 26 |
| Rio Salado | 1 | 0.69 | 2 | 160605 | 24 |
| Rios Arroyohondo | 0 | 0 | 5 | 177734 | 80 |
| Río Quinamayo | 0 | 0 | 8 | 118878 | 25 |
| Río Timba | 0 | 0 | 3 | 342529 | 21 |
| Ríos Claro y Jamundí | 0 | 0 | 8 | 937972 | 43 |
| Rios Pescador y Catarina | 3 | 0.12 | 12 | 194426 | 34 |
| Río Otún | 1 | 0.78 | 9 | 598777 | 25 |
| Río Chinchiná | 2 | 0.15 | 8 | 463666 | 79 |
| Ríos Tulua y Morales | 0 | 0 | 7 | 201764 | 1 |
| Río Bugalagrande | 0 | 0 | 5 | 171512 | 12 |
| Río Paila | 0 | 0 | 4 | 43182 | 6 |
| Cíenaga La Raya | 0 | 0 | 16 | 122410 | 99 |
| Río Risaralda | 1 | 0.02 | 14 | 193557 | 36 |
| Río La Vieja | 0 | 0 | 26 | 1399641 | 111 |
| Río Frío | 0 | 0 | 24 | 201069 | 162 |
| Río San Juan | 0 | 0 | 18 | 178445 | 33 |
| Rio Tapias | 0 | 0 | 13 | 123647 | 40 |
| Río Frío | 0 | 0 | 6 | 46164 | 7 |
| Río Arma | 0 | 0 | 12 | 139191 | 56 |
| Río San Juan y Puerto Valdia | 1 | 22.23 | 20 | 171459 | 75 |
| Río Cauca entre Río San Juan y Pto Valdivia | 1 | 20.74 | 38 | 746013 | 213 |
| Rios Las Cañas, Los Micos y Obando | 10 | 0.43 | 7 | 137183 | 15 |
| Río Porce | 7 | 26.34 | 33 | 3480837 | 294 |
| Alto Nechí | 1 | 6.97 | 8 | 102579 | 46 |
| Río Cauca entre Puerto Valdivia y Río Nechí | 0 | 0 | 4 | 32461 | 20 |
| Ríos Taraza y Man | 0 | 0 | 13 | 126721 | 28 |
| Bajo San Jorge - La Mojana | 0 | 0 | 167 | 1817404 | 38 |
| Río Nare | 5 | 86.35 | 37 | 673881 | 155 |
| Rió San Bartolo | 0 | 0 | 11 | 226914 | 100 |
| Directos al Bajo Nechí | 0 | 0 | 0 | 32320 | 37 |
| Bajo Nechí | 2 | 0.23 | 6 | 176905 | 271 |
| Canal del Dique margen derecho | 5 | 125.67 | 29 | 564995 | 118 |
| Bajo Magdalena entre Calamar y desembocadura | 0 | 0 | 26 | 1548263 | 17 |
| Bajo Magdalena entre El Plato y Calamar | 1 | 0.42 | 19 | 209175 | 18 |
| Canal del Dique | 2 | 20.34 | 43 | 983457 | 30 |
| Río Piendamo | 1 | 17.92 | 4 | 51850 | 11 |
| Ríos Chimicuica y Corozal | 0 | 0 | 11 | 105340 | 30 |
| Río Ariguaní | 0 | 0 | 16 | 727032 | 65 |
| Río Desbaratado | 0 | 0 | 1 | 30538 | 3 |
| Bajo Magdalena entre El Banco y El Plato | 0 | 0 | 103 | 404657 | 32 |
| Ríos Cali | 0 | 0 | 2 | 945996 | 22 |
| Ríos Lilí, Melendez y Canaveralejo | 0 | 0 | 3 | 839101 | 8 |
| Cienaga Mallorquin | 0 | 0 | 6 | 775901 | 27 |

**Fig A1**. **Delineation of the study area**. To delimit the study area, we identified the sub-basins with suitable environmental conditions for *B. henni*, using the binary (presence-absence) potential distribution model of the species, the presence-absence records, and expert opinions. This allowed us to eliminate the areas within the Magdalena macrobasin predicted as suitable but possibly due to overprediction, and to include all sub-basins north of the Cauca basin despite having only a few areas regarded as suitable.

Mapa

Descripción generada automáticamente

**Fig A2. Delineation of sub-basins with high priority for conservation using different selection metrics and weights.** The sub-basins delineated in yellow are identified as high priority for implementing conservation strategies for *B. henni*. (A) Sub-basins with a high conservation priority with the original implementation of the protocol, (B) results of analyses including different cartographic information regarding human activities, (C) using the potential distribution in continuous output format to measure representativeness, (D) standardizing the viability criterion with the proportion of the species potential presence –in binary output format– in each sub-basin, (E) standardizing the viability criterion using the map in continuous output format, and (F) assigning double the weight of other criteria to the criteria of representativeness and viability.

Mapa

Descripción generada automáticamente

**Fig A3. Sub-basins prioritized for conservation based on six alternative strategies.** Colored sub-basins were identified as priorities for conservation of *B. henni* based on single or more (up to six) alternative methodologies. For information on the results of each methodology, see Figure **A2**.



**Fig A4. Limiting criteria for each sub-basin.** The color in each sub-basin represents the criteria that most contributed to its conservation priority. For example, the limiting criteria in most sub-basins was complementarity, which indicates that the state of protection of the fluvial networks is nearly non-existent. The sub-basins outlined in black represent the sub-basins with priority to implement conservation efforts for *B. henni*.

Mapa

Descripción generada automáticamente