**The source maps and their respective outputs**

* The **WDPA** layer is **the same** for all calculations
* The **KBA** layer is **the same** for all calculations
* The **GMBA** layer is **different** for the different calculations:
  + GMBA\_Inventory\_v2.0\_broad\_300
  + GMBA\_Inventory\_v2.0\_standard\_basic
  + GMBA\_Inventory\_v2.0\_standard\_300 (calculation can be repeated with this layer, or alternatively, the results from GMBA\_Inventory\_v2.0\_standard\_basic can be aggregated (see conversion file I sent you)

1. GMBA\_Inventory\_v2.0\_broad\_300 (“system” level, 292 mountain system units)

Intersect GMBA\_Inventory\_v2.0\_broad\_300 with KBA (I have to intersect the two layers for the raster approach, but perhaps you do not even have to do this, you only need to attribute the corresponding GMBA\_V2\_ID to each WCMC “mountain” KBA.)

The resulting layer is used for calculating the values in combination with the WCMC approach: the KBAs that have been selected by WCMC and Birdlife. The key outputs are thus calculated on the basis of the average of the individual KBA overlaps, per unit of analysis (country, system, country | system).

Here calculate and report:

Essential

* Country\_Highland\_KBA/PA\_WCMC\_Site – **almost all values = zero**
* Country\_Highland\_KBA/PA\_WCMC\_Area
* **System\_Highland\_KBA/PA\_WCMC\_Site – could not find this one in your results**
* (System\_Highland\_KBA/PA\_WCMC\_Area) – could not find this one in your results
* **CountrySystem\_Highland\_KBA/PA\_WCMC\_Site – could not find this one in your results**
* (CountrySystem\_Highland\_KBA/PA\_WCMC\_Area) – could not find this one in your results

Optional

* Country\_Terrestrial\_KBA/PA\_WCMC\_Site
* Country\_Terrestrial\_KBA/PA\_WCMC\_Area
* Country\_Lowland\_KBA/PA\_WCMC\_Site
* Country\_Lowland\_KBA/PA\_WCMC\_Area

1. GMBA\_Inventory\_v2.0\_standard\_300 (“system” level, 291 mountain system units)

The script can be run with this layer as input, or alternatively, the output of the next script (using the “basic layer”) can be aggregated to the 300 (system) level with the conversion table (from the GMBA Selection Tool) I shared with you some time ago.

Intersect GMBA\_Inventory\_v2.0\_ standard\_300 with KBA

Essential

* Country\_Highland\_KBA/PA\_GMBA\_Area
* CountrySystem\_Highland\_KBA/PA\_GMBA\_Area
* System\_Highland\_KBA/PA\_GMBA\_Area
* CountrySystem\_Highland\_PA\_GMBA\_Area

Optional

* Country\_Highland\_PA\_GMBA\_Area
* System\_Highland\_PA\_GMBA\_Area

1. GMBA\_Inventory\_v2.0\_standard\_basic (“range” level, 6717 basic mountain units)

Intersect GMBA\_Inventory\_v2.0\_ standard\_basic with KBA

Essential

* Range\_Highland\_KBA/PA\_GMBA\_Area

Optional

* Range\_Highland\_PA\_GMBA\_Area

Other combinations can also be calculated (e.g. CountryRange\_Highland\_KBA/PA\_GMBA\_Area) but these are not a priority at all, as I suspect the creation of many small polygons as the result of the intersections will create a significant error margin.

Additional, non-essential calculations you provided:

* CountryRange\_Highland\_KBAPA\_GMBA\_Area: can’t check, but looks OK
* CountryRange\_Highland\_KBAPA\_WCMC\_Area: can’t check, but looks OK
* CountryRange\_Highland\_KBAPA\_WCMC\_Site: **almost all values zero**
* Range\_Highland\_KBAPA\_WCMC\_Area: all records (at least for 2020) double
* Range\_Highland\_KBAPA\_WCMC\_Site: **almost all values zero**