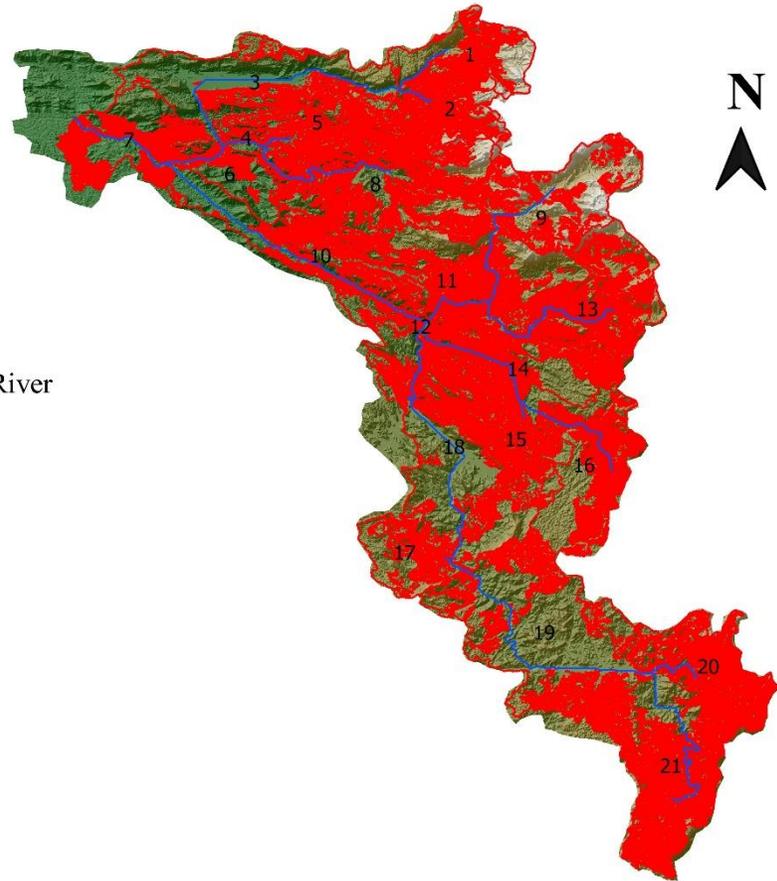


HRU ANALYSIS FOR PERIYAR RIVER BASIN, KERALA, INDIA

MAP DESCRIPTION AND ANALYSIS



Legend

Watershed

- Streams (net)
- Subbasins of Periyar River

Inlets/outlets ()

- ▶ Outlet
- ◀ Inlet
- Reservoir
- Point source

- Watershed
- HRU

Hillshade

- 1
- 255

DEM

- 4 - 900
- 900 - 1797
- 1797 - 2694

0 10 20 km

Periyar river is a 244 km long, west flowing river, originating from Western Ghats in Tamil Nadu and draining to Arabian sea in the Eranakulam district of Kerala. Its basin size is 5398 km². Recent flood situation in Kerala has resulted in great loss and one of the worst affected region is the Periyar basin.

Simulation:

- Length(Years)-11
- Warm up (yrs) – 2
- HRUs – 34
- Sub basins – 21
- Output timestep – Monthly
- Precipitation method – Measured
- Watershed area – 3863.5 km²

Water balance ratio:

- Streamflow/Precipitation: 0.81
- Base flow/ Total flow: 0.7
- Surface runoff/ total flow: 0.3
- Perc/prec. – 0.81
- ET/Prec. – 0.81

Total subbasin load:

- Flow(cms) – 364.63
- Sediment(Mg/yr) – 374196.00



Team Name :KARTEGIS

Topic:Flood Mapping of Periyar Basin

Contact: Akshay Mohan S- lalukmohan66@gmail.com