

# WHERE TO BUILD A SHRIMP FARM

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## RAW DATA



0 10 20 40 Kilometers



In recent years, Costa Rica has been developing organic and sustainable shrimp farming. In particular, it is trying to move the production away from mangrove forests, as intensive shrimp farming is destructive to that environment. It also encourages a practice that moves away from the heavy use of chemicals and antibiotics.

## SITE SELECTION

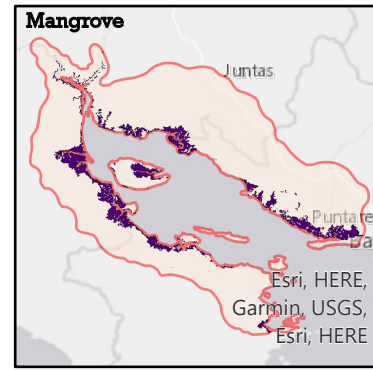
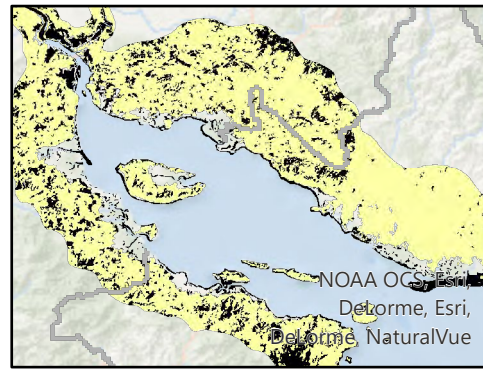
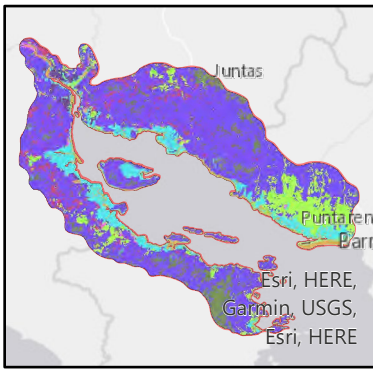


1 2 3 4 5 6 7 8 9 10 (Best)

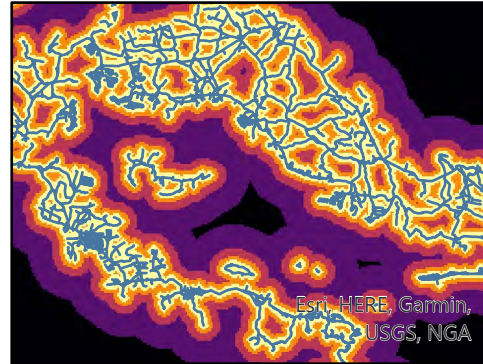


In conducting the site selection analysis, I focused on distance from the bay, distance from roads and streams, and land type for analysis and selection. I perform spatial calculations and reclassify them, rate the land based on the criteria, and finally overlay all layers to get a combined rating.

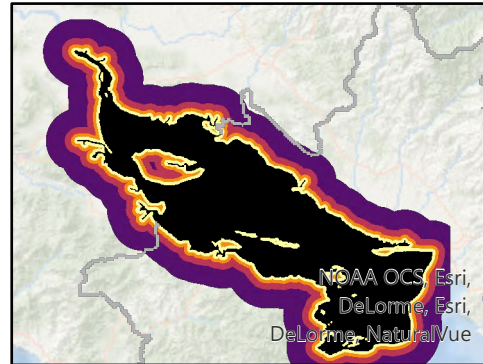
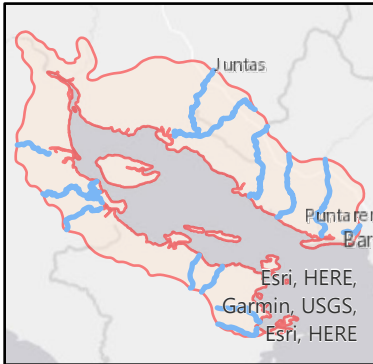
**Landuse Type**



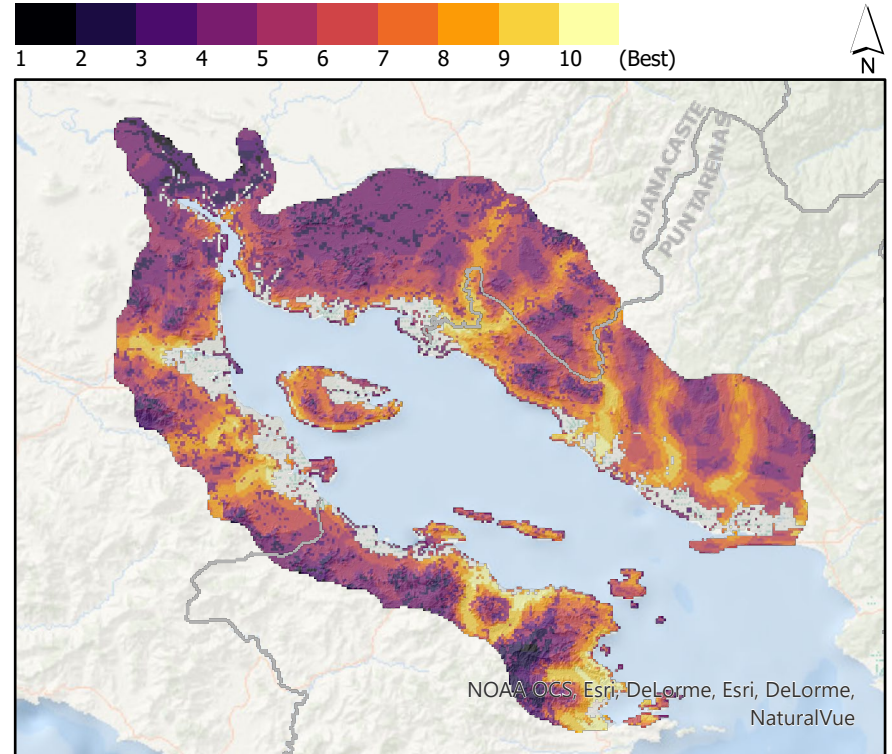
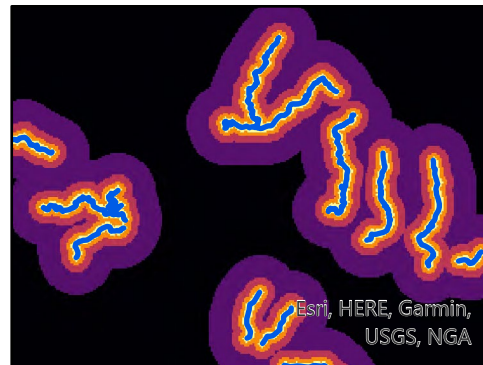
**Distance to Roads**



**Close to Saltwater**



**Close to River**



In the analysis of landuse, I first reclassified the type, remove the mangrove area according to the requirements, and then score the remaining areas, setting the agricultural and shrub areas as full marks and the rest as 4 marks. After that, the distances of land from roads, rivers and bays are calculated separately, and the results are quintuple reclassified. Finally, I added up all the layers in the spatial calculator to get the final result, and overlaid the hillshade layer. In the result map, the brighter the yellow area, the more suitable for building new shrimp farming, and the darker the purple area, the less suitable for building it.