

QUIZ#10: Least Cost Path

Download the and unzip **Quiz10_TananaRiver_boat_landing.zip** from :
http://dverbyla.net/nrm435/quiz_data_2017/

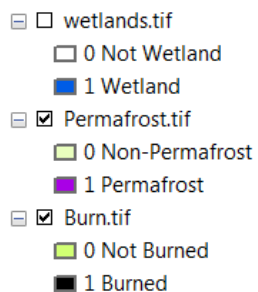


The folder contains integer rasters with no raster attribute tables. Use the geoprocessing tool Build Raster Attribute Table to create your raster attribute tables.

We want to build the least cost path from the Parks Highway to the Tanana River:



There are 3 factors that will affect the cost of road building:



- 1) The road must **not** go within 100 meters of any wetland.
- 2) Road construction costs are as follows:
 - \$5 per meter of non-permafrost,
 - \$10 per meter on permafrost
- 3) There is a \$10 cost per meter for road construction outside the burn (since the large trees have already been killed by wildfire in the burn, and have to be cut down and removed outside the burn).

Determine your least-cost path from the Parks Highway to the Tanana River and create a dbf table showing the length in KM and total cost in \$ of the least-cost route.

	Shape *	LineKM	DollarCost
	Polyline	0.0	\$0.00

All geoprocessing output should be to your *Quiz10_TananaRiver_boat_landing*.

Email me (dverbyla@alaska.edu) your map package **mpk** file. (not your .mxd file) as an attachment