4/12/22
LCD Tech
Attendees; Kathy Sean, Ken, danielle, erin, phil, mary, trevor

Crown_Ecological_Connectivity_v2 (earthengine.app)

- Connectedness is a measure of physical continuity of landscape features - measured for each pixel
    - Methods - resistance estimation
        - How similar is the focal cell to neighboring cells
        - Added smaller scales to account for smaller scale flows
- Categories
    - Human development
        - Hard development (buildings and roads), road capacity, ag
    - Hydro
        - Wetness
        - Flow gradient - steepness of streams
        - Flow volume - how much water is flowing through the system
    - Moisture
        - Winter precip
        - Climatic moisture deficit - droughty ness of places
    - Chemical substrate
        - Percent clay
        - Ph
        - Soil moisture
    - Climate/energy
        - Mean temp in warmest month
        - Growing degree days
        - Mean summer stream temp
    - Physical disturbance
        - Slope
- Connectivity vs protected status
    - Protected areas have higher values of connectivity, as did IUCN 1
- Questions:
    - Did aspect impact your analysis?
        - Tried to limit topographic variables - because there is so much topographic complexity on the landscape, it limits connectivity - ended up unfairly downgrading places like glacier
    - What are the White areas?
        - Development, ag, and roads are use in estimating the connectedness
    - Variable weights - what variables seemed to be having the most effect?
        - Not sure, because each of the variables is weighted differently
- Future predictions
    - How to deal with future climate predictions

        - In california, there is a standard climate projection that typically people use
        - Reference Most recent IPCC models
        - Use Warmest, coldest day of the year
        - RCP 4.5 and 8.5
    - predict future development?
        - Could do buffering around developed areas with assumption that they will sprawl
        - In AB, ALCES does this work: https://www.alces.ca/
    - Most landscape features will change with climate