Anadromous salmonid populations within California are declining and many populations are expected to disappear entirely within the next 100 years (Katz et al., 2013). I am interested in whether protected areas increase resiliency for Pacific salmon within California. Generally, does the amount of protected area within a watershed impact anadromous salmon populations? To answer this question, I will likely use data from California Department of Fish and Wildlife's California Monitoring Plan for Salmon and Steelhead, as well as the California Protected Areas Database. One potential approach could be using OLS to see if the percent of watershed protected is correlated with spawning density, another would be to investigate the relationship between percent of watershed protected and the rate at which salmon populations have changed over time.

Links to Data Sources:

<https://wildlife.ca.gov/Conservation/Fishes/Salmonid-Monitoring/CMP>

<https://data.cnra.ca.gov/dataset/california-protected-areas-database>

Citations:

Katz, J., Moyle, P. B., Quiñones, R. M., Israel, J., & Purdy, S. (2013). Impending extinction of salmon, steelhead, and trout (Salmonidae) in California. Environmental Biology of Fishes, 96(10), 1169–1186. https://doi.org/10.1007/s10641-012-9974-8