## Linking Landscape Performance and Water Quality: A Case Study of Laguna Lake, San Luis Obispo

## **Project Description**

This project focuses on Laguna Lake in San Luis Obispo, California, serving as a real-world case study to analyze the effects of urbanization, land use change, and climate-related stressors on inland water bodies. Situated in a rapidly developing area, Laguna Lake is facing environmental challenges, including pollution, habitat fragmentation, thermal stress, and sedimentation.

A comprehensive assessment of the lake's environmental condition will be conducted using spatial, ecological, and hydrological datasets and tools. The ultimate goal is to generate data-driven, site-specific recommendations for enhancing watershed resilience, ecological integrity, and public benefit.