Title: Remote Sensing of Cyanobacteria Abundance: Next Steps in Utilizing Satellite Imagery and Data

Remote sensing of cyanobacteria abundance in large water bodies using satellite imagery is a valuable tool for understanding the spatial and temporal patterns of harmful algal blooms (HABs). Satellite data also provides near-real time screening tool for nuisance blooms of cyanobacteria that may be dominated by toxin-producing cyanobacteria, providing managers the tools to initiate field monitoring to assess risk and protect human, animal, and wildlife health. Additionally, satellite data can be a valuable resource to water and land managers for understanding inter-relationships between environmental conditions driving HABs, including land use and hydrologic alteration, nutrient loading, and associated impacts to protected species, drinking water resources, and waterbody impairments. This presentation will outline satellite data collected in California to date and highlight how other programs can integrate this remote sensing data to improve understanding of the drivers and implications of HABs on other resource management issues.

Presenter: Randy Turner, San Francisco Estuary Institute - Aquatic Science Center

Randy Turner is an Associate Environmental Scientist for the San Francisco Estuary Institute and admittedly, a life-long fish-head. He received his Master's in Environmental Science and Management at UC Santa Barbara's Bren School and has worked for more than a decade on fisheries and water quality monitoring projects on the Klamath River and many Northern California coastal streams. For the San Francisco Estuary Institute, Randy has two main roles: he is the Principal Investigator for CyanoHAB projects and is the Coordinator of the Klamath Basin Monitoring Program, whose goal is to help stakeholders implement, coordinate, and collaborate on water quality monitoring and research to better inform resource management throughout the Klamath Basin.