

Ocean influences on coastal communities in a changing climate

Morgan Lab

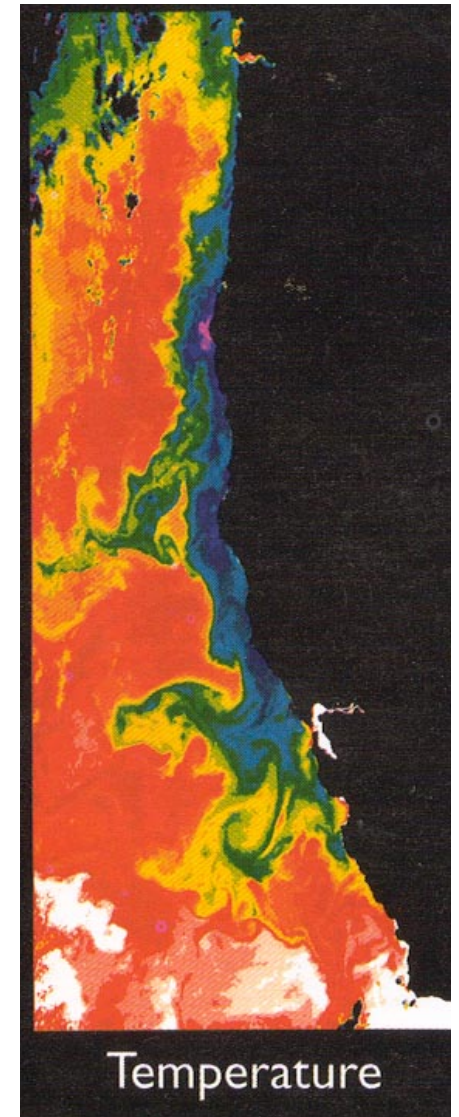
Bodega Marine Laboratory
Environmental Science & Policy



Dynamics and structure of populations & communities

Impact of upwelling, surfzone hydrodynamics & larval behavior in time & space

- Larval replenishment
- Subsidies of food (plankton & macroalgae)
- Marine influences on terrestrial communities



Dynamics and structure of populations & communities in a changing climate

Long-term tracking of environmental conditions on coastal communities

- Replicate boulder (9 yr) & tidepool (6 yr) communities: Impacts of
 - Climate on species interactions
 - Mass mortality events from disease & harmful algal blooms
- Impacts of climate on productivity of plankton communities across shelf (7 yr)

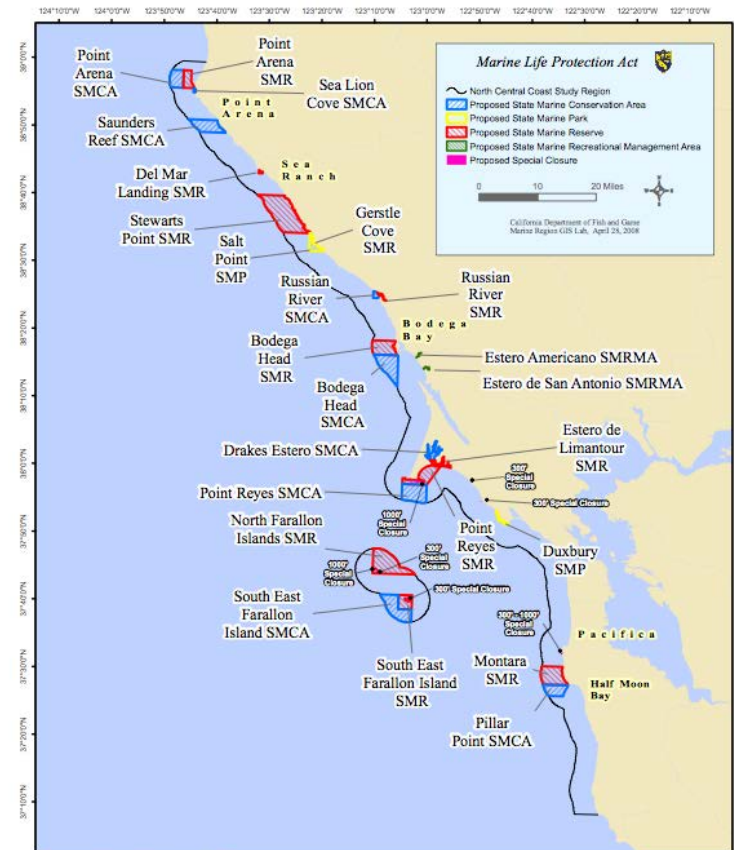


Ecosystem-based management

Evaluate effectiveness of networks of marine protected area

Rapid assessment of ecosystem “health”: Impacts of

- Oil spills
- Superfund sites



Doctoral students

Sarah Gravem *Rocky shore community ecology: TMII & climate*

Sarah Hameed *Ocean conditions affecting recruitment & population connectivity*

Erin Satterthwaite *Coupling of reproduction & recruitment & population connectivity*

Sam Bashevkin *Larval adaptations to predation & UV*

Connor Dibble *Effect of larval transport mechanisms on rocky shore communities*

Chris Griesemer *Population connectivity using parentage analysis (Rick Grosberg)*

Sarah Wheeler *Ocean conditions affecting rockfish recruitment (Todd Anderson)*

