



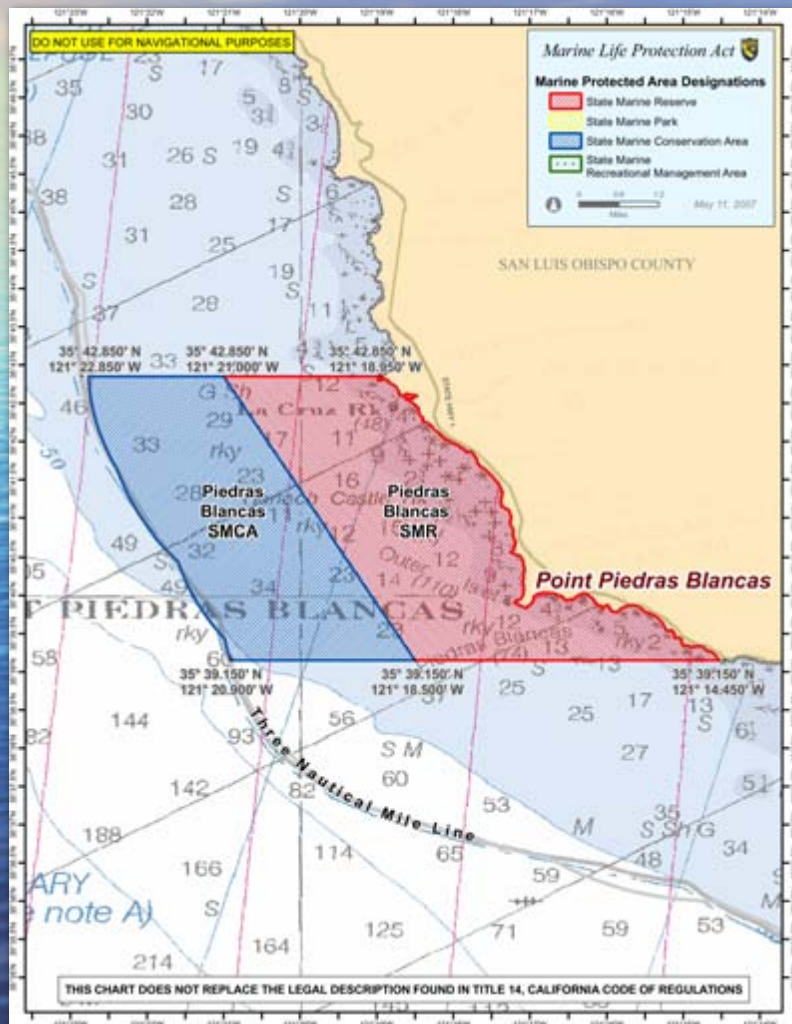
# MARINE PROTECTED AREAS

# What Are MPAs?

- Marine Protected Areas (MPAs) are geographic areas designated to protect or conserve marine life and habitat
- **State Marine Reserve (SMR):** Also called “No take” zones. The most restrictive type of MPA
- **State Marine Park (SMP):** Prohibits commercial fishing, but allows recreational fishing
- **State Marine Conservation Area (SMCA):** Allows for specified commercial and recreational activities
- **State Marine Recreational Management Area (SMRMA):** may restrict some recreational opportunities (often duck hunting areas). Only one in Central coast region

– <http://www.dfg.ca.gov/mlpa>

# Piedras Blancas Marine Protected Areas

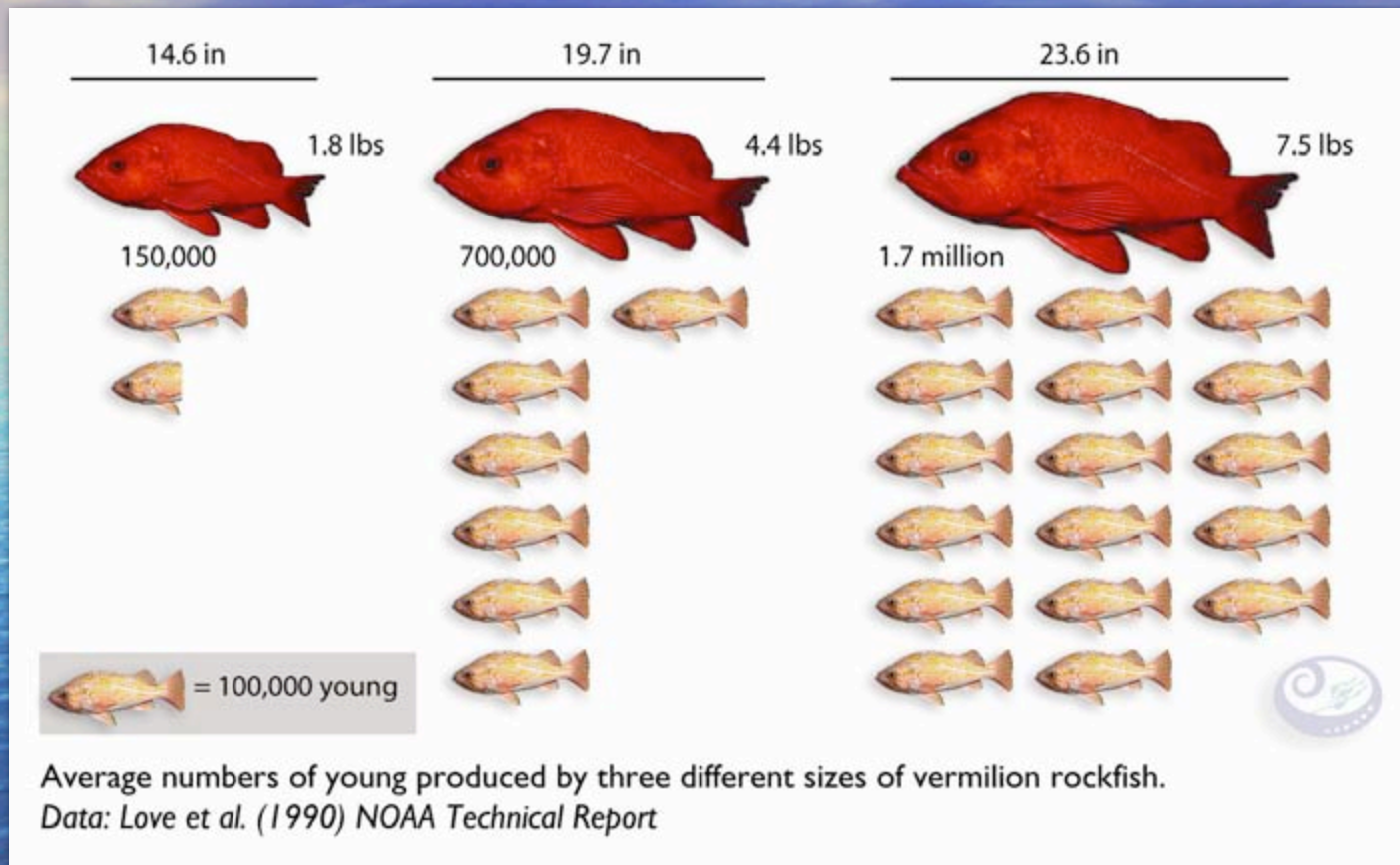


- Piedras Blancas State Marine Reserve and Piedras Blancas State Marine Conservation Area
- All fishing prohibited in Reserve; all but albacore and salmon in Conservation Area

# The Science of MPAs

- Efforts to control overfishing by establishing limits have not been successful
- Marine reserves have improved overall ocean health

# The Science of MPAs



Older, larger fish produce more offspring. Protecting fish spawning grounds enhances fish populations.

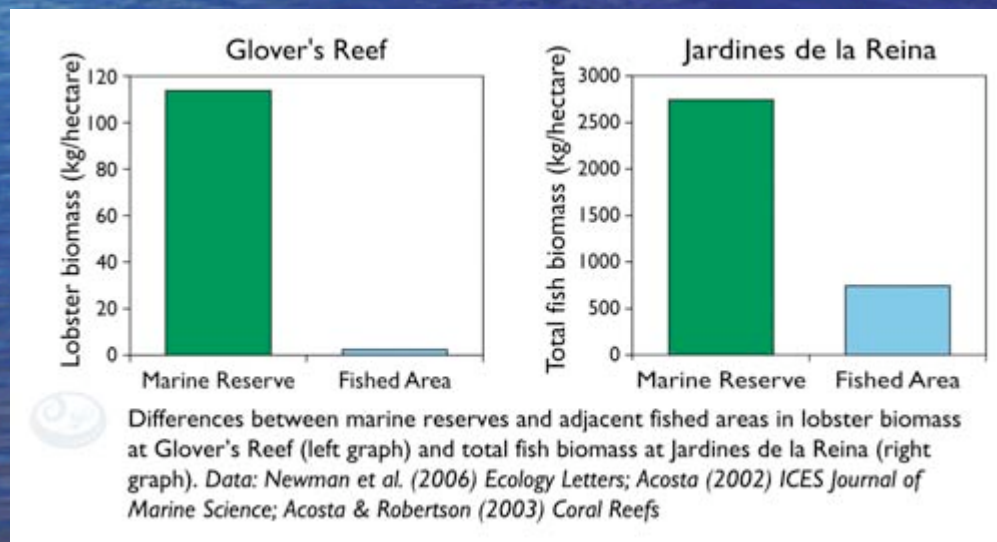
# Anacapa Island Example

- Comparison of marine reserve and fished areas
- Lobsters 6 times more abundant in reserve
- Kelp forest in reserve healthy; kelp forest stressed in fished areas
- Lobsters keep urchins under control, restoring natural balance

# Benefits of marine reserves

Fish species show:

- Higher abundances
- Increase in size
- Increase diversity
- Increase biomass



# History of California MPAs

- Created pursuant to the California Marine Life Protection Act of 1999
- Requires a comprehensive science-based network of protected areas to foster healthy habitats and improve fishing

# California MPAs

- MLPA plan to establish a statewide network by 2011
- Central Coast first area completed, after a lengthy process of community meetings involving stakeholders
- North Central Coast just completed
- Other areas except SF Bay now underway

# Central Coast MPAs



- MPA size selected to provide safety for resident species
- Offspring drift into adjacent areas, increasing the number of fish
- Spacing designated to encourage repopulation

# Central Coast MPAs



- 29 protected areas designated on the Central Coast
- 13 marine reserves, 7.5% of region, prohibit fishing
- 14 marine conservation areas, 10% of region, limit fishing

# Piedras Blancas MPA Unique Features

- Elephant seal rookery
- Other marine mammals
- Extensive kelp forest
- Deepwater rocky reef with large forage fish populations and shelter for rockfish
- Near-pristine tidepool areas

# Piedras Blancas MPAs

- Scientific monitoring to evaluate effectiveness is an important part of the MPA process
- Monitoring includes catch and release fishing and netting, observation by submersibles, and intertidal monitoring stations
- You may see monitoring devices or researchers from the bluffs