

# Central Coast Groundfish Project: Collaborative Research

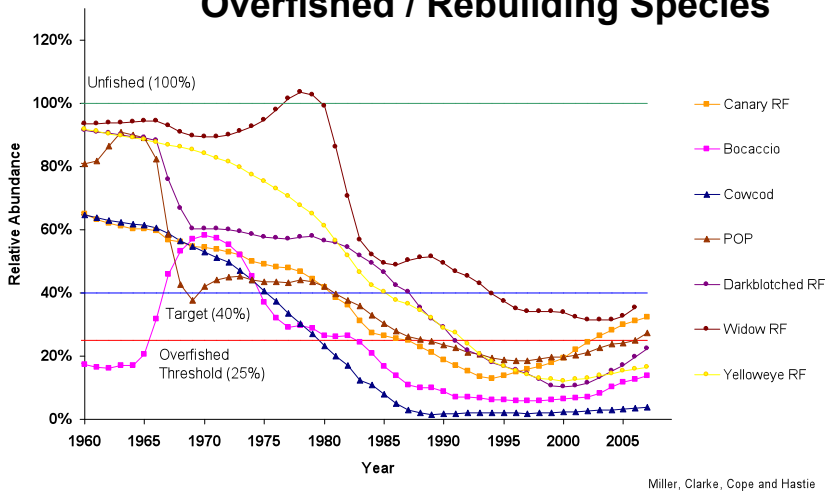


**MBNMS Sanctuary Advisory Council – August 19, 2010**

**Mary Gleason, Lead Scientist, The Nature Conservancy**

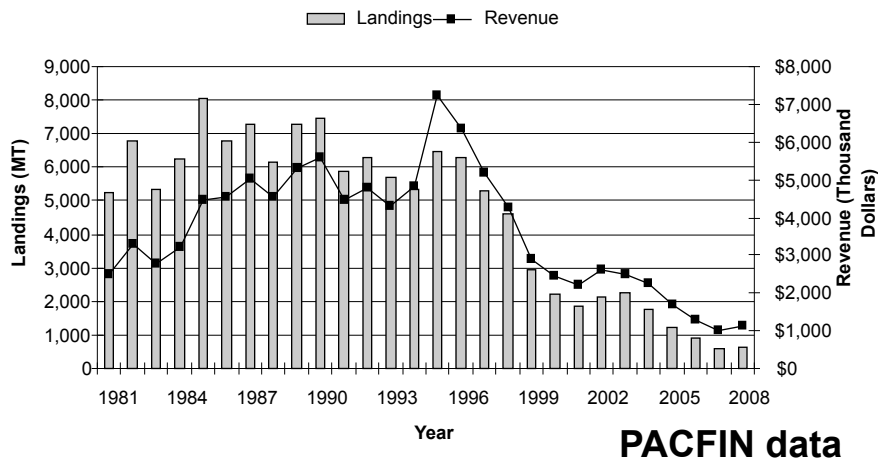
# Trends in west coast groundfish fishery

## Overfished / Rebuilding Species



- Concerns about impacts of bottom trawling on seafloor habitats; high bycatch and discard rates; overfished species.
- Concerns about declining economic opportunity; yet bottom trawling is only commercially viable means of catching most flatfish species.

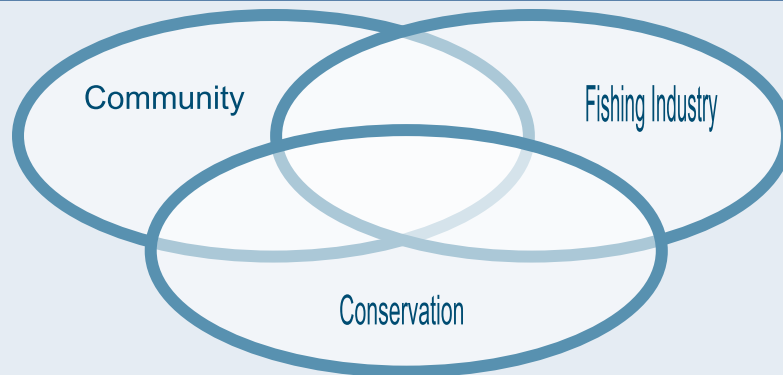
## Central Coast Trawl Landings and Revenue



- Fishery transitioning to “catch shares” (individual transferable quota system).



# Central Coast Groundfish Project



**Community:** Fishing heritage and economics of fishing industry.

**Fishing Industry:** Local access to resource and stable fishing opportunities.

**Conservation:** Protection of marine habitats and reduction of bycatch & waste.

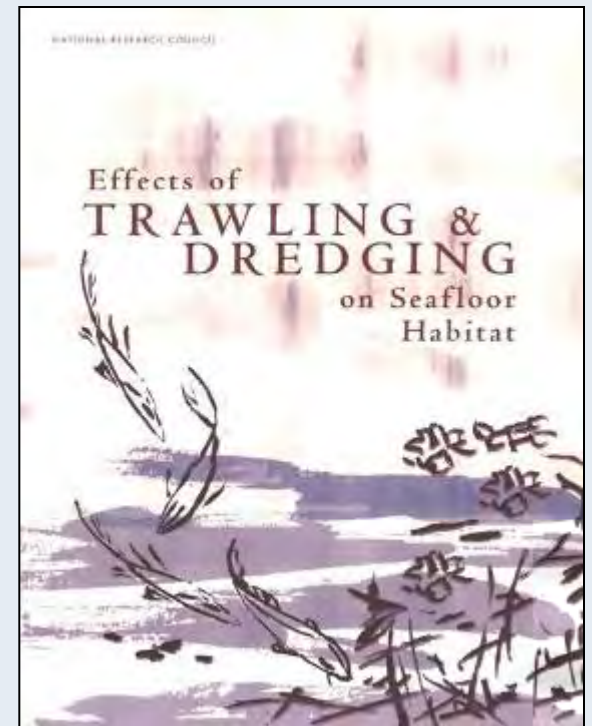
**Shared Goal** – a vibrant local groundfish fishery built upon a healthy and sustainably-managed marine ecosystem.



## Recommendations from NRC report on reducing impacts from bottom trawling:

- Establish trawl closures
- Reduce trawling effort
- Modify gear design or type

National Research Council (2002) *Effects of trawling and dredging on seafloor habitat*. Committee on Ecosystem Effects of Fishing, Ocean Studies Board



## Phase 1 – habitat protection & effort reduction

- TNC purchased federal trawl permits and worked with local fishermen to design and support establishment of trawl closure areas
  - 3.8 million acres of bottom trawl closures achieved through Essential Fish Habitat process
  - Reduced trawl effort by 50% in central coast

## Phase II: Using assets to help transform fishery

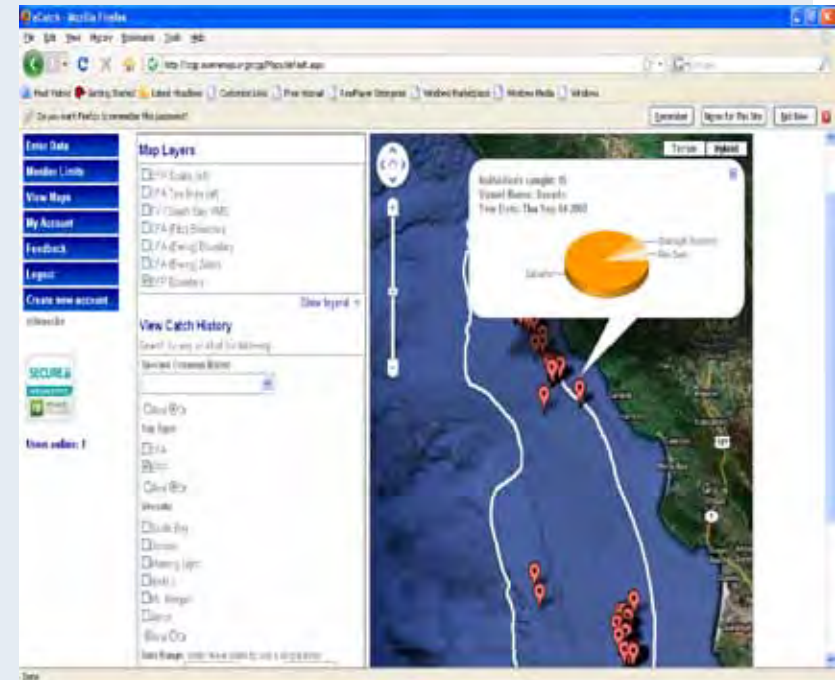
- Fishing demonstration projects – modified trawl & non-trawl gear in use under private agreements
- Science / collaborative research
- Community fishing associations and co-management
- Policy/management improvements



Unique opportunity for collaborative research with key partners:

1. Fisheries information management: location, catch, discard, cost, revenue data (eCatch database)
2. Pilot testing of benthic habitat mapping technology (NMFS, WC Groundfish Observer Program, OSU)
3. Testing electronic monitoring system for fixed gear (NMFS, WC Groundfish Observer Program, Archipelago Marine Ltd)

## eCatch database



## 4. Trawl impact and recovery study- CSUMB, MBNMS, NMFS, MARE, local fishermen –

- Uniquely positioned to conduct study off Morro Bay to assess trawl gear impacts (ROV, boats, trawl permits, fishermen partners)
- Controlled study of effects of bottom trawling on seafloor microhabitats, epibenthic invertebrates, infauna, and bottom fish

TNC's ROV "Beagle"





# Central Coast Trawl Impact Study

- Understanding the immediate impacts of trawling and recovery patterns will guide best practices and management decisions
- Carefully-designed, controlled, five-year study to inform best practices and management decisions
- External peer review of study design
- Eight study plots on continental shelf off Morro Bay
- In second year of five year study

## Partners in study:

- California State Univ,  
Monterey Bay (CSUMB)
- Marine Applied Research and  
Exploration (MARE)
- Monterey Bay National  
Marine Sanctuary
- NOAA NWFSC/FRAM  
Division
- NOAA West Coast  
Groundfish Observer Program
- Local fishermen (T. Maricich,  
E. Ewing, D. Wainscott, M.  
Tognazzini, M. Leary, others)

## Funded by:

- Ocean Protection Council
- State Coastal Conservancy
- Kabcenell Foundation
- Seaver Foundation
- in-kind match of partners  
(MBNMS, CSUMB)

- Quick look at halibut trawl grounds in Monterey Bay
  - Extra sea days available in May 2010
  - Rapid assessment protocol to scope out habitat and species in the core fishing area
- Intent – begin to assemble some information to inform debate and design of future studies, if appropriate

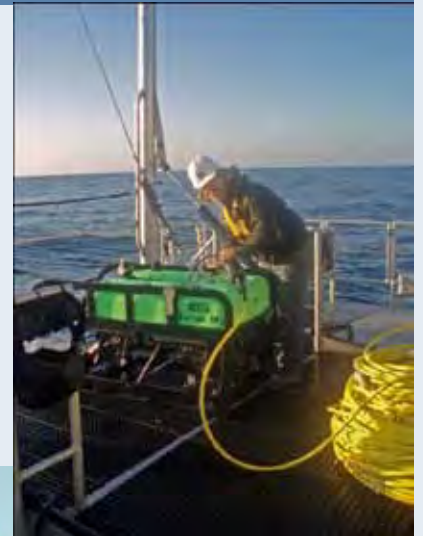
# Other Collaborative Research

Partnering with CSUMB,  
MARE, MBNMS, CDFG,  
others to use ROV in:

- Site characterization in MBNMS
- MPA monitoring in state waters

Interested in other research:

- Stock assessments
- Monitoring of EFH and RCA closures



**F/V Donna Kathleen**

