

Nearshore Research Task Force

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ODFW Marine Resources Program Research Activities



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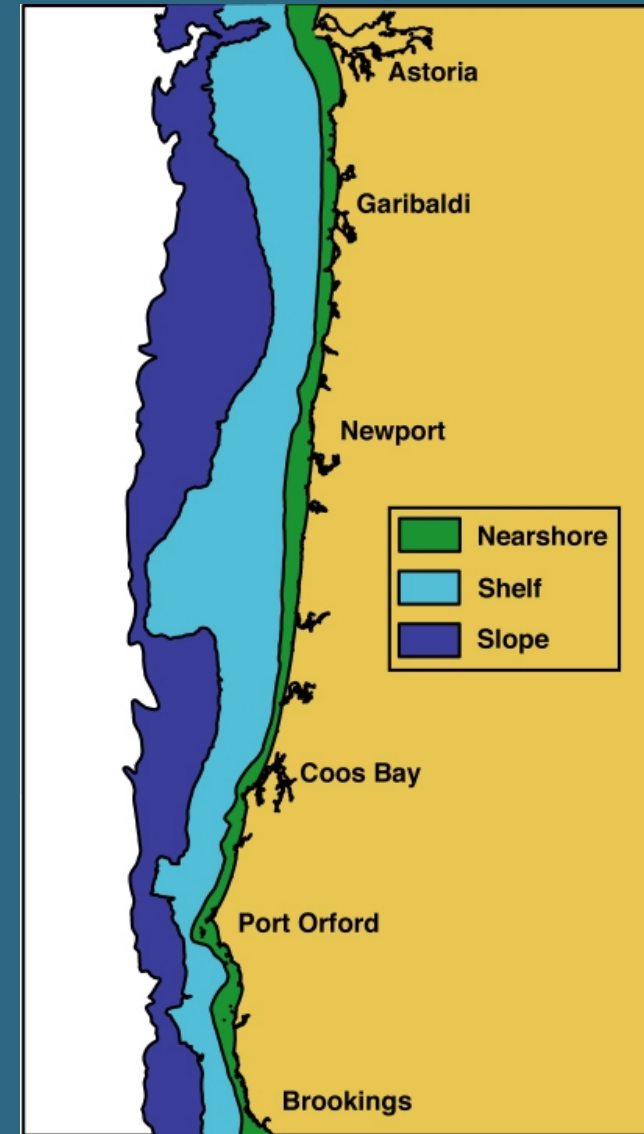
Outline of Presentation

- Program basics
- Key program elements
- Funding
- Process for prioritizing and selecting research projects (with examples)
- Relationship with other institutions
- Strengths and Weaknesses



Program Basics

- Marine Resources Program
 - Natural resource management
 - Research and monitoring
 - Public information and education
- Data collection and analysis used to support natural resource management decisions
 - Research (hypothesis driven)
 - Monitoring (keeping track of variables)
 - Surveys (inventory of resources); Basic biological information
- How data are used
 - Resource management
 - State agency advice
 - Other institutional research

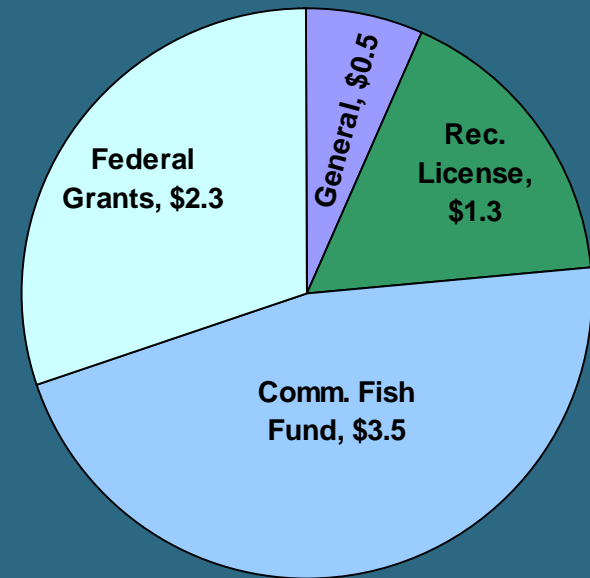


Program History

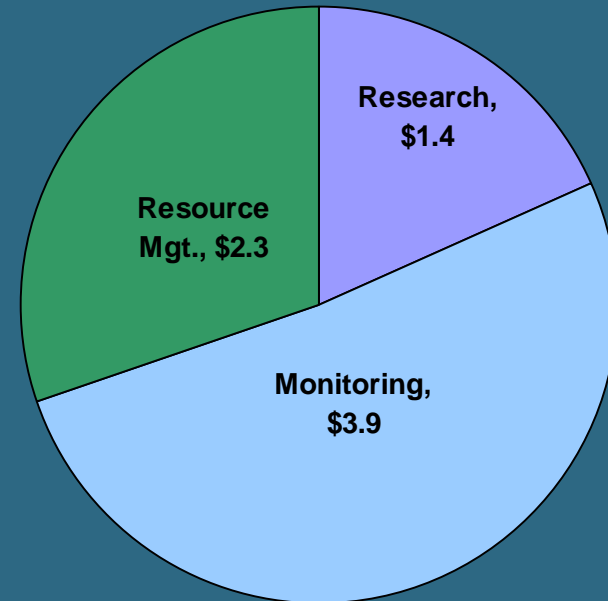
- 1940's and earlier – fishery catch information and basic life histories
- 1950's – 1970's – species and habitat surveys; inventories in estuaries and along shoreline; some work in the nearshore
- 1980's – program contraction focus on core monitoring program, new work in offshore areas
- 1990's – groundfish fishery management demands; new funding available; new focus on nearshore
- 2000's – use of nearshore resources demands new information; nearshore strategy completed; many new issues, other than traditional fishery management

Funding

- Sources: Commercial Fish Fund, Recreational Fishing License, Federal Grants, some General Fund
- Steady decline in federal funding, decline in state General Fund
- Demands on program and inflation has outpaced fund growth
- Demands – increases in management complexity and expectations, new legislative mandates, new uses, ESA



Source (Millions \$/yr.)



Use of Funds
(Millions \$/yr.)

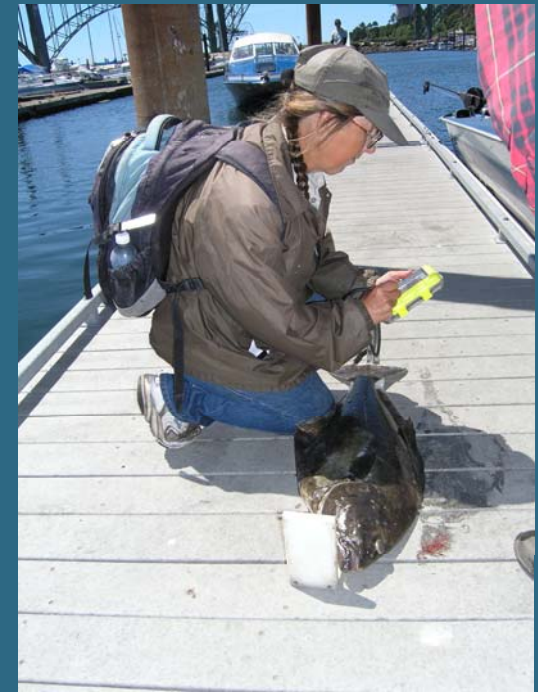
Determining Research and Monitoring Priorities

- Fishery monitoring
- Fish stock assessment
- Specific management issues
- Basic survey and inventory of species and habitat (what is where); basic biological information to support management decisions



Fishery Monitoring

- Sport and commercial fisheries
- Determine catch and effort
- Generate data for quota management



- Gather biological data for stock assessments fisheries
- Needs driven primarily by federal fishery management system

Stock Assessments



Biology

Growth and Age
Maturity and Fecundity
Natural Mortality
Movement and Migration

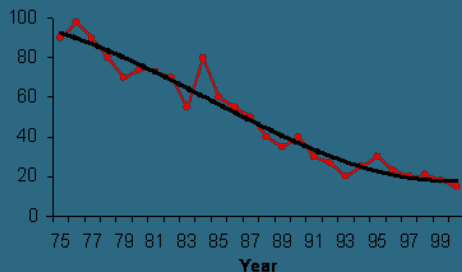
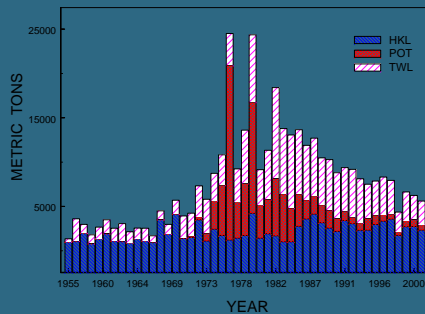
Fishery
Catch

Population
Model

Population
Status

Abundance
Index

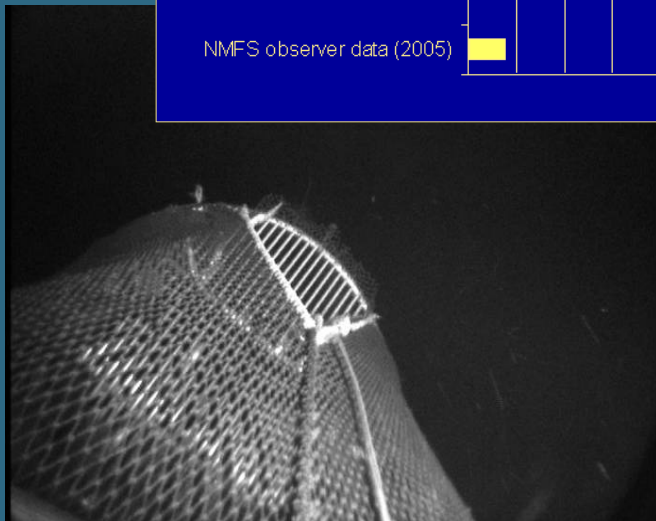
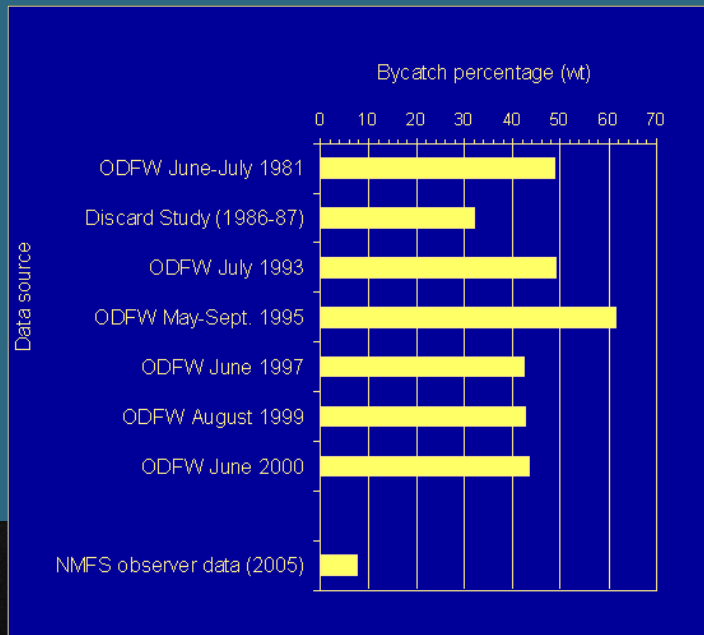
Fishery Independent Survey



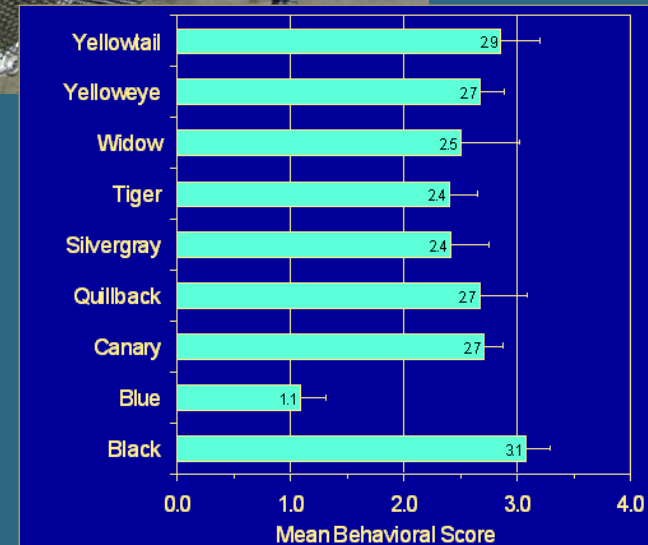
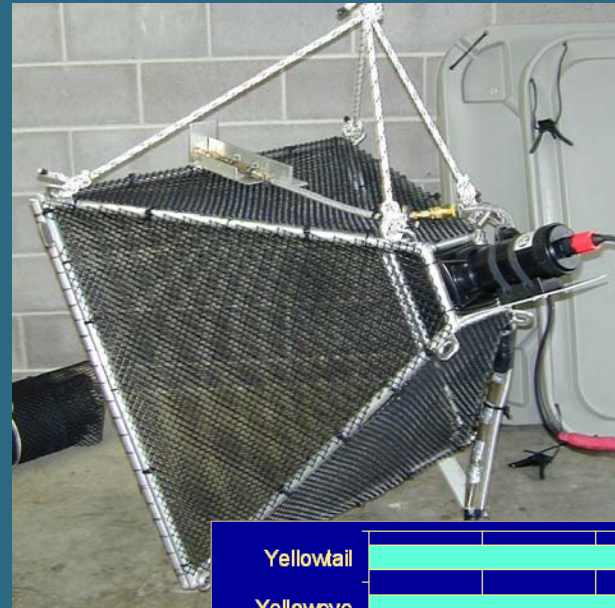
All the data are used to statistically reconstruct the most likely population status

Specific Management Issues

Bycatch Reduction

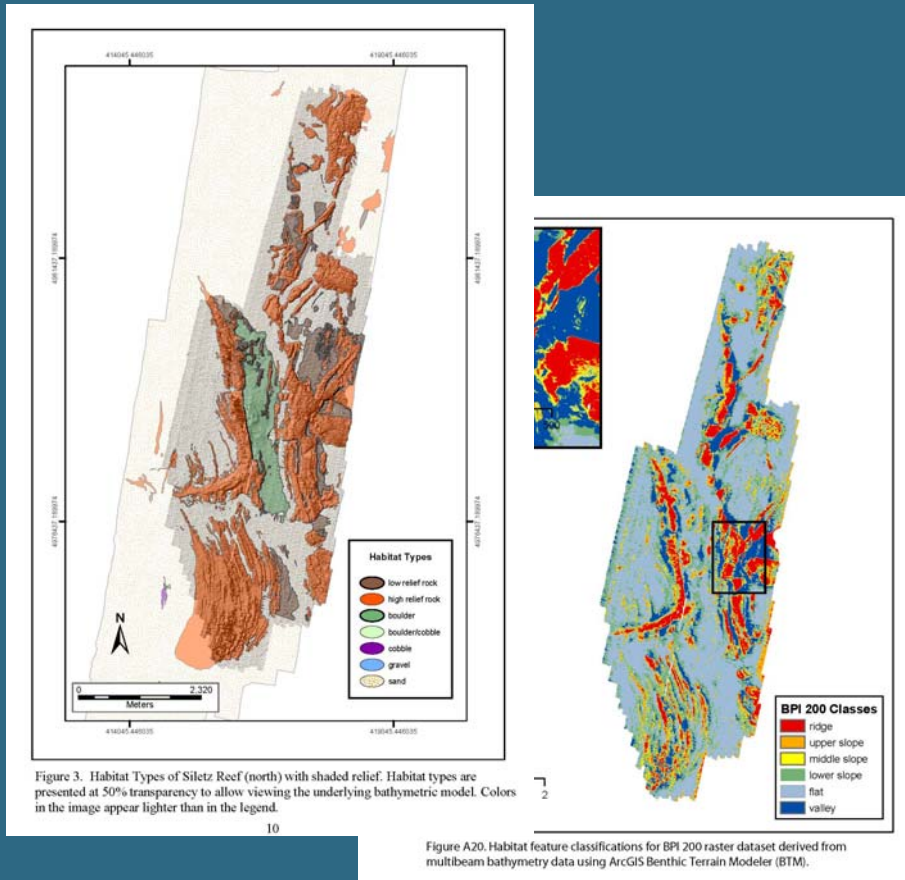


Discard Mortality

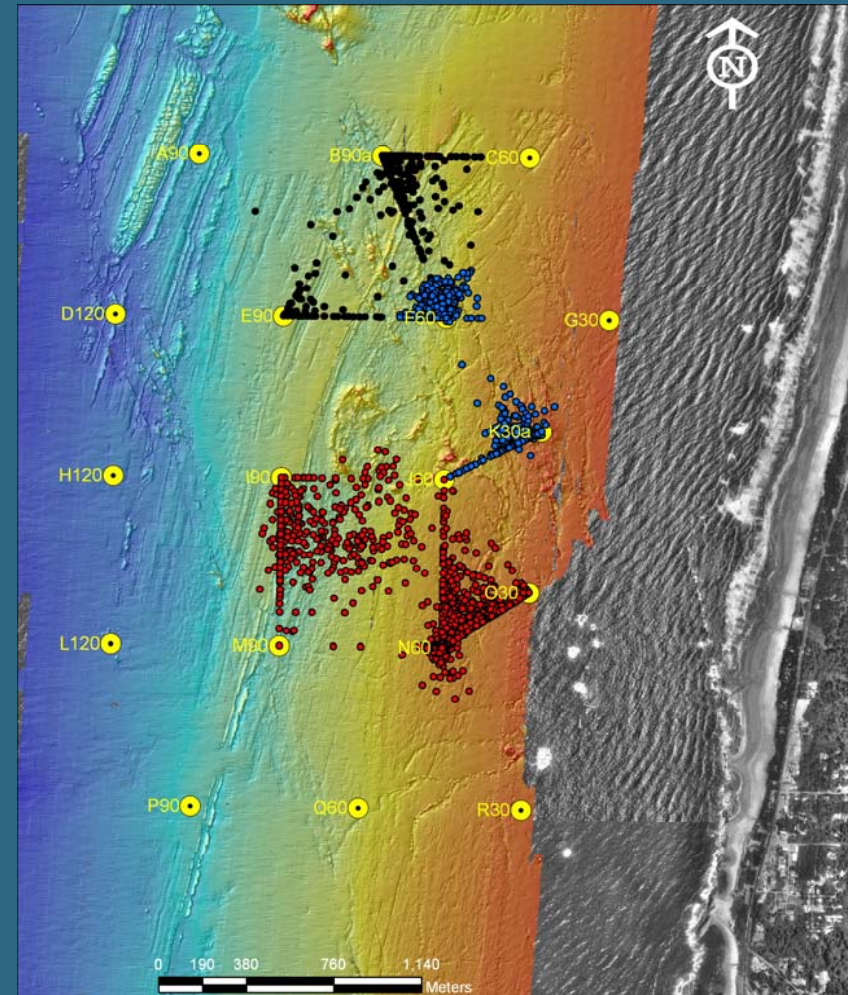


Inventories and Biological Information

Habitat Inventory and Fish-Habitat Relationships



Nearshore Rockfish Movement



Relationship with Other Institutions

- Collaboration
 - State-Federal monitoring programs
 - Provide biological impact info. to other agencies
 - Collaborative research with fishing industry, NMFS, OSU, others
 - Community-based groups (e.g., POORT)
- Data sharing and use
 - Established regional databases for fishery management
 - Provision of data to researchers
 - Data confidentiality



Strengths

- Relevance to resource management
- Public input on priorities
- Collaboration with fishing industry
- Agility for small short-term projects
- Well defined scope
- Long term fishery monitoring
- Basic inventory and assessment



Weaknesses

- Limited funding
- Addressing large scale changes in data needs or large new initiatives
- Data sharing and general publication
- Fiscal and contracting processes
- Need to better coordinate priorities with others
- Inability to undertake large-scale surveys
- Weak on oceanographic and ecosystem process research
- Weak on social and economic sciences

