

A New Approach to Managing Marine Resources in Baja California Sur:

An Evolving Case History

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Baja California Sur

Marine Resources Form Base of Economic Activity --- Ecotourism

- sportfishing (> \$100 million U.S. per annum); whale watching, diving, kayaking, birding, etc
- Declining resource base threatens this economic activity.

commercial landings declines,

shifts in species composition;

declining recreational catches and encounter rates;

hammerhead shark aggregations gone

A Variety of Terrestrial and Marine “MPA”s in BCS:

- Established to meet a variety of resource protection objectives since 1920s ...
- Variety of zones and uses controlled:
- Revillagigedo Islands – no extraction
- Complejo Lagunar Ojo de Liebre;
- Bahia de Loreto;
- Cabo Pulmo; Estero San Jose.
- Cabo San Lucas – Cascades de Arena; etc ...
- The Islands within the Gulf of California (Sea of Cortez)



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HECHO EN MEXICO
CULIACAN, SIN., MEXICO

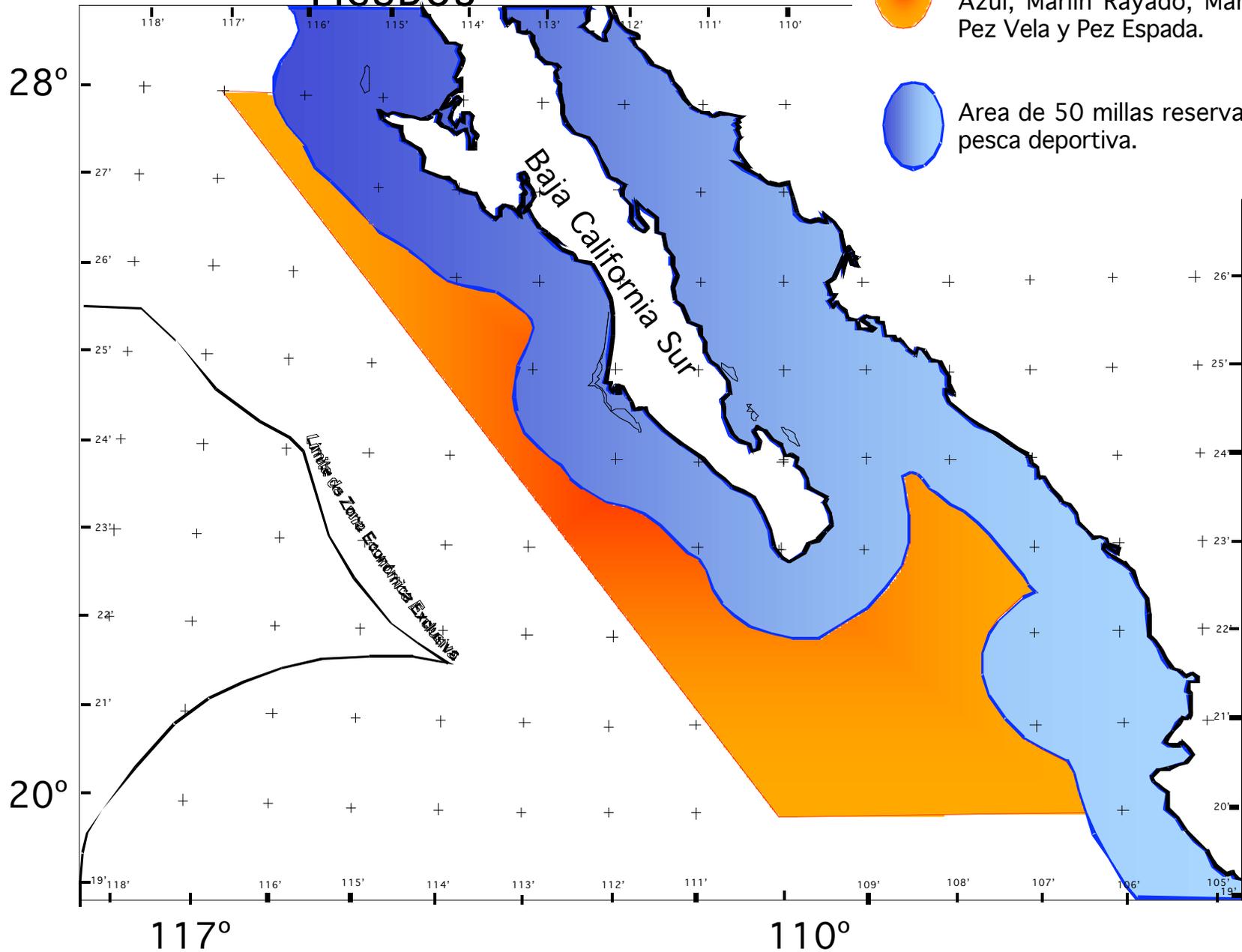
VEDA INDEFINIDA DE LAS ESPECIES DE PICUDOS



Zona de Veda para la captura comercial de Marlin Negro, Marlin Azul, Marlin Rayado, Marlin Blanco, Pez Vela y Pez Espada.



Area de 50 millas reservadas a la pesca deportiva.





Year: 2000

- La Fundación para la Conservación de los Picudos, A.C (FCP)
- The Billfish Foundation (TBF)
- 48 new longline & drift gillnet permits for “sharks”
 - Fish within the conservation zones
 - 80% to 90% of catch anticipated to be marlins, sailfish and protected species : sea turtles, marine mammals

Process Evaluation

- Review of fisheries laws, regulations
- Interviews with federal marine fisheries, protected resources officials, commercial & sport fishing, academic, conservation interests
- Data & research review
- SEAWATCH – time series of interviews with artisanal fishers, divers, subsistence and sport fishers around Sea of Cortez

Focus on Five Areas

- Fisheries Management
- Data Collection and Research
- Enforcement
- Program Funding
- Political processes – direct and indirect points of influence on outcomes

Process Category	Problem Identified
Fisheries Management	Insulation of management decisions under an Undersecretary for fisheries (PESCA) limited transparency of decision making
Fisheries Management	Little intergovernmental collaboration on fisheries issues
Fisheries Management	Isolation of management under federal control limited regional input
Fisheries Management	Strong influence by organized commercial fishing interests
Fisheries Management	No formal pathways for constituent input into management decisions
Fisheries Management	Little understanding of sportfishing and conservation needs and interests within fisheries agency

Process Category	Problem Identified
Data and Research	Few standardized landings data programs (tuna an exception)
Data and Research	No long term recreational landings, catch and effort data collection
Data and Research	Little research by federal fisheries institute on sport fishing species
Data and Research	Tuna fleet observer program could provide model for expanding data collection
Data and Research	Little nexus between federal research and fisheries management needs, lack of forecasting
Data and Research	More use could be made of academic resources for applied fisheries research
Data and Research	Little emphasis on fisheries economics, social dynamics

Process Category	Problem Identified
Enforcement	Multiple authorities with distinct jurisdictions (PESCA, PROFEPA, NAVY) but lack of close coordination
Enforcement	Little attempt to integrate management tools with enforcement resources and capabilities
Enforcement	Severe lack of fiscal and personnel resources
Enforcement	Enforcement of existing conservation measures inadequate to prevent significant violations or promote wide-scale compliance

Process Category	Problem Identified
Program Funding	Total fiscal resources inadequate for modern fisheries management
Program funding	Sport fishing license fees to federal treasury, not dedicated to management needs
Political Influences	Commercial fishing interests well organized, politically active
Political Influences	Mexican conservation groups not focused on non-protected species fisheries issues
Political Influences	Sport fishing interests with little organization, affect on fisheries issues
Political Influences	Unplanned for and extensive subsidies encouraged severe overcapitalization
Political Influences	No organized tourism interests active in fisheries issues

General Conclusions

- Centralized federal management w/out transparency, regional or broad constituent input
- Interactions between sport fishing interests and federal fisheries officials:
 - conflict w/out communication
- Virtually no stock assessment capability, science based management, direct or indirect controls on harvest or effort
- Data collection efforts inadequate for modern fisheries management

General Conclusions

- Little coordination between government and academia on applied fisheries research
- Enforcement inadequate (policy and resource limitations) – inter agency “turf wars”
- Quasi-legal “permits” circumvent conservation efforts
- Organized commercial fishing interests dominated political arena – subsidies ramping up effort

General Conclusions

- Federal Tourism agency lacked understanding of sport fishing and marine ecotourism potential
- Most Mexican conservation NGOs not focused on fisheries
- Declining resources, species shifts, negative economic impacts, little hope for positive change
- Commercial fisheries largely overcapitalized and facing diminished resource base

TBF & FCP: Action Plan

- 1) expand the support base for marine conservation by including Mexico's tourism industry and the offices of the Secretary of Tourism;**
- 2) increase the transparency of decision making and input from constituents in the management process and transform conflicts into positive interactions;**
- 3) continue to resist efforts to undermine the few conservation safe guards already in place;**

TBF & FCP: Action Plan

- 4) promote an increased enforcement presence and conservation commitment;**
- 5) secure a stronger voice for sportfishing and conservation interests through educational campaigns intended to inform the public and conservation community about existing marine fisheries problems; and**
- 6) gain increased influence over data collection, research and enforcement efforts by seeking control over the use and distribution of license fees.**

Success Would Depend on Our
Ability To

Link Conservation Issues With
Sustainable Economic
Development

A Science and Fact Based
Approach

Year: 2001

- 50 mile & Billfish Conservation Zones placed into Federal Law
- *TIANGUIS* >> Successful overtures to Sec. of Tourism
- Newspaper, television and web-based media led to stories on fisheries and protected species interactions
- Congress launches series of 25 meetings to review fisheries management

Year: 2002

- *PESCA* becomes *CONAPESCA*
 - Cabinet officials (*Consejo Tecnico*) oversight-
Tourism, Environment, Navy, Natural
Resources, Economy, communications,
Transportation join Sec. of Agriculture
- *CONAPESCA* Citizens
Advisory committee (*Consejo Nacional de
Pesca y Acuacultura*) – 2 seats for sport
fishing representation

Year: 2002

- State Advisory Body (*Consejo Estatal de Pesca y Acuicultura de BCS*)

Comision Nautico-Recreativa y de Pesca Deportiva) National advisory body to federal government on marine related tourism and sport fishing issues

Re-organization has not resolved all
identified problems

Has opened the process to potential reforms

- VMS proposal meets with acceptance
- Shark Management Plan & 240 potential new longline vessels in Sea of Cortez on hold – issue not resolved

Year: 2003 - 2004

- **Enforcement and research/data collection problems diluting conservation benefits of minimal existing regulations**
- **Negotiations with federal and BCS officials: Pilot program utilizing recreational fishing license funds**

Year: 2003 - 2004

- **FONMAR (Fondo para la Proteccion de los Recursos Marinos) Established**
 - **BCS License fees ~\$300,000/year**
 - **Board of Directors from BCS state and local government and private sector: sportfishing, tourism, marina, and conservation interests**

A Cooperative Effort Between The Federal Secretary of Agriculture *et al*, Javier Usabiaga Arroyo and BCS Governor, Leonel Cota Montaña

Center for Marine Protection of BCS Chartered

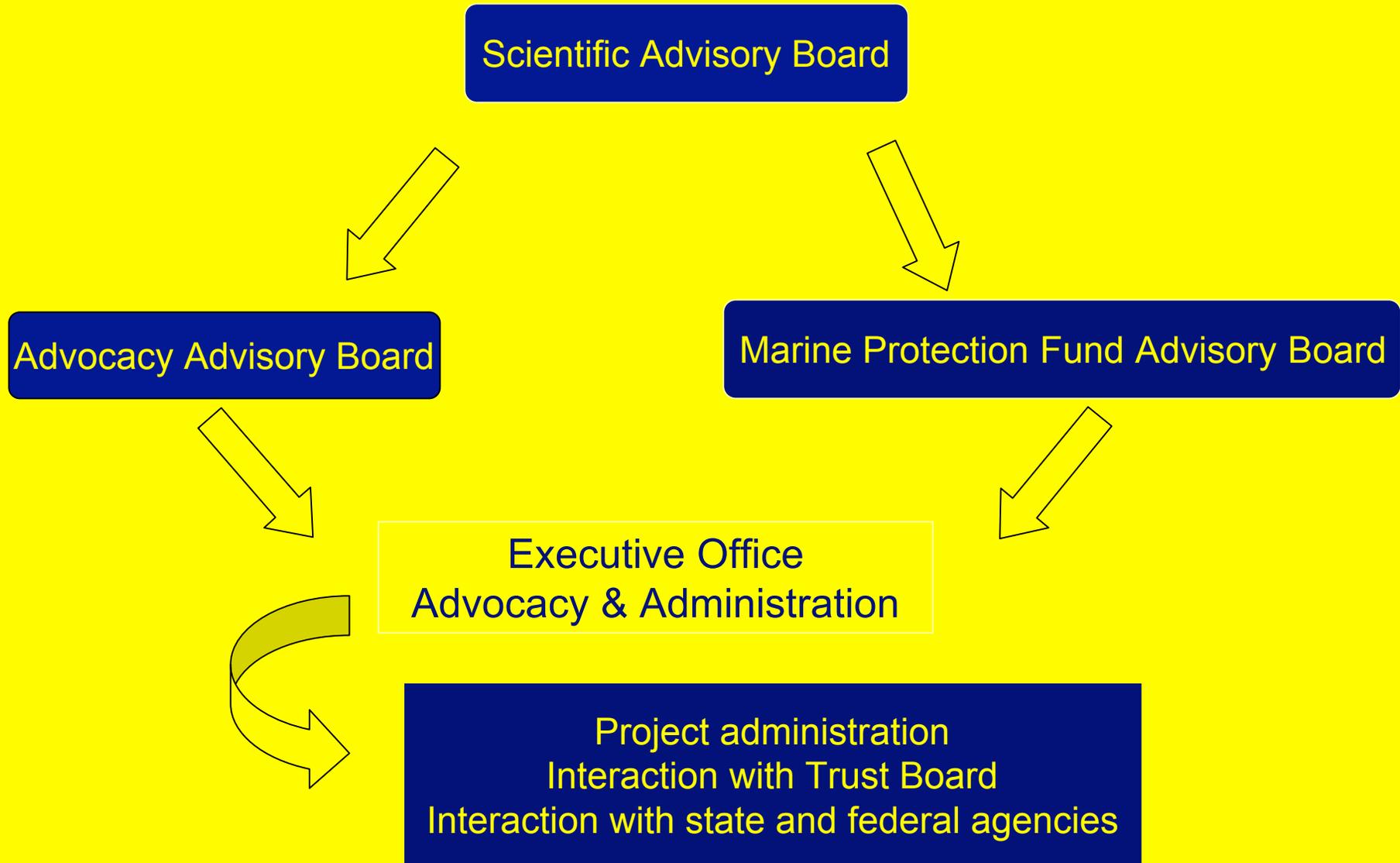
- 1) focus scientific investigation and fisheries data collection problems of most immediate need, with highest probability of successful results;**
- 2) enhance and expand existing enforcement efforts; and**
- 3) increase public understanding of conservation needs, compliance fisheries regulations, protected area designations, and best practices to minimize impacts of fishing activities**

Center for Marine Protection

- Research and Data Collection
- Enforcement
- Education and Outreach
- Conservation Advocacy

- No public funds will be used for administrative or advocacy work – Center will conduct grants program for FONMAR

Center for Marine Protection



What Lies Ahead?

- Guardianes de Mar: local stewardship and participatory enforcement efforts throughout BCS
- Internet based license sales
- Expand coordination with various Cabinet offices & CONAPESCA
- Maintain CONAPESCA after new federal elections
- Comparative economics studies – Instituto Mexicano de la Competitividad
- Research Grants Program
- TBF has begun a parallel effort in Costa Rica
- Center will need additional private donations to succeed