



FCEC Palos Verdes Shelf Institutional Controls

Program "Road Map" Goals and Objectives



Presentation Outline

- Review purpose of Road Map
- Present document
 - Highlight document changes
 - Comments received
- Questions and comments
- Consensus
- Next steps



Road Map Outline

- Program Goal
- Long-Term Objectives
 - Baseline
 - Numeric Objectives
 - Target Audience
 - Barriers
 - Motivators
 - Strengths/Opportunities
 - Weakness/Threats



Program Goal

- **Protection of the most vulnerable populations** (in Los Angeles and Orange Counties) from the health effects of consuming contaminated fish related to the **Palos Verdes Shelf superfund site**.



Program Goal

- **Reduce risk by targeting the two routes of exposure for DDT and PCB**
 1. Consumption of contaminated fish bought through commercial markets
 2. Consumption of contaminated fish caught by local anglers



Long Term Objectives

- **Commercial:** Eliminate availability of contaminated White Croaker
 - Restaurants
 - Grocery stores
 - Fish markets
- **Angler:** Adherence to local fishing advisories and bag limit
 - Reduce risk from angler caught **contaminated** White Croaker
 - Reduce risk from consumption of **contaminated** caught fish





Commercially Available White Croaker

Baseline:

- 1996 – 9 markets sampled – all 9 contained contaminated White Croaker
- 2004 – 68 markets samples – 6 contained contaminated White Croaker



Numeric Objectives:

- 2010 – three markets or less
- 2014 - zero markets



Target Audiences

- Fish markets
- Families/communities served
- Commercial fishing operators/distributors
- Enforcement agencies (e.g., local health inspectors, State Fish and Game, State DHS-Food & Drug Branch)



Barriers

- Regulations:** Uncertainty of catch ban area
- Enforcement:** Enforcement difficult - lack of resources
- Knowledge:** Unclear if all commercial fishing operations know regulations
- Economics:** Financial incentive to sell any fish caught



Barriers

- Legality:** Not all White Croaker is illegal, may be confusing for markets
- Inspection:** Impossible for distributors and markets to visually differentiate good vs. bad fish



Motivators

- It's illegal** - regulations are in place
- Bad Customer Relations** - Potential bad public relations for markets/ restaurants
- Market Pressure** - Potential pressure from distributors and markets to verify non-contaminated White Croaker



Strengths/Opportunities



- Breadth of Partnership:** FCEC has a strong partnership with various agencies
- Health Inspectors:** Good working relationship with local health inspectors
- Contaminant Data:** Data is out regarding levels of contamination in fish
- Media Interest:** Interest in the issue



Strengths/Opportunities

- ❑ **Enforcement Funding:** Availability of funding for enforcement
- ❑ **Market Monitoring:** Good collaborative process for monitoring markets
- ❑ **Market Locations:** Good understanding of the types and regions where contaminated White Croaker has shown up



Weaknesses/Threats

- ❑ **Distribution Information:** How are contaminated White Croaker reaching market
- ❑ **Catch and Landing Info:** Lack of/not having accurate catch and landing information from commercial fishers
- ❑ **Awareness of Catch Blocks:** The commercial fishers level of awareness regarding catch blocks



Weaknesses/Threats

- ❑ **Landed vs. Sold:** Information gap between White Croaker reported landed vs. what reaches the market
- ❑ **Enforcement Agencies:** Lack of resources for enforcement



Local Fishing Advisories

Baseline



- ❑ Awareness of local fish advisory
 - 0% in 1991
 - 55% in 2002-03 angler survey
- ❑ Behavior – consumption
 - 26% of anglers would eat White Croaker if they caught it (1994 SMBRC – Seafood Consumption Study)



Local Fishing Advisories

Baseline



- ❑ Behavior – preparation (1994 SMBRC)
 - 65% of anglers ate fillet
 - 33% of anglers ate whole fish/gutted
 - 47% of anglers fry fish
 - 17% of anglers broil/barbecue



Local Fishing Advisories

Baseline



- ❑ Behavior – fishing*
 - Average number fish caught per person for consumption in **red zone**
 - Average number of White Croaker caught per person for consumption in **red zone**

*Need to establish a baseline





Local Fishing Advisories

Numeric Objective

- 20% increase in awareness of local fish advisory by 2010
- Decrease in anglers catching and consuming fish (from red zone) to within the advisory limits*
- Decrease in anglers catching and consuming white croaker (from red zone)*

*Set objectives once baseline data is collected





Local Fishing Advisories

Numeric Objective


- Decrease in anglers exceeding bag limit for locally caught White Croaker*
- Increase in the knowledge and behavior of angler families regarding adherence to "Best Practices" for preparing their caught fish*

*Set objectives once baseline data is collected





Target Audiences

- Local anglers (on-shore fishing)
- Boat owner/anglers (off-shore)
- Local angler families
- Angler supply stores





Barriers


- Economics:** Subsistence fishing
- Ease of Catch:** White Croaker is comparatively easy to catch




White croaker
(kingfish, tomcod)



Barriers




- Complex Health Issue:** Long-term health impact must be balanced with the fact that fish in other aspects is a very healthy food source
- Complex Communication:** Not a single message or issue (DDT/PCB vs. Mercury)
- Inertia:** Resistance of some anglers to change (i.e., "always done it this way")



Motivators

- Legal Limit– Bag limit for White Croaker**
- Family Health** - Potential risk to children - more vulnerable family members





Strengths/Opportunities

- ❑ **Very Targeted:** Outreach very focused on the population at risk (audience and location)
- ❑ **Visibility:** Program very visible to angler community



Strengths/Opportunities



- ❑ **Data Collection:** Lots of data collected with outreach effort
- ❑ **Existing Regulations:** Existing regulations on bag limit for White Croaker
- ❑ **Local Fish Advisory:** New data allows for a stronger advisory



Weaknesses/Threats

- ❑ **Lack of Data:** Lack of key behavioral data regarding fishing / difficult to collect personal data from anglers
- ❑ **Minimal Enforcement:** Advisory is not enforceable; it exists as a recommendation
- ❑ **Fish Identification:** Various names for fish species; difficult to identify fish



Next Steps

- ❑ Prioritize target behaviors (risks)
- ❑ Collect data to establish additional baselines
- ❑ Draft plan outlining tactics (interventions) targeting specific behaviors