



Palos Verdes Shelf

Institutional Controls Program

Sharon Lin

April 4, 2006

Video

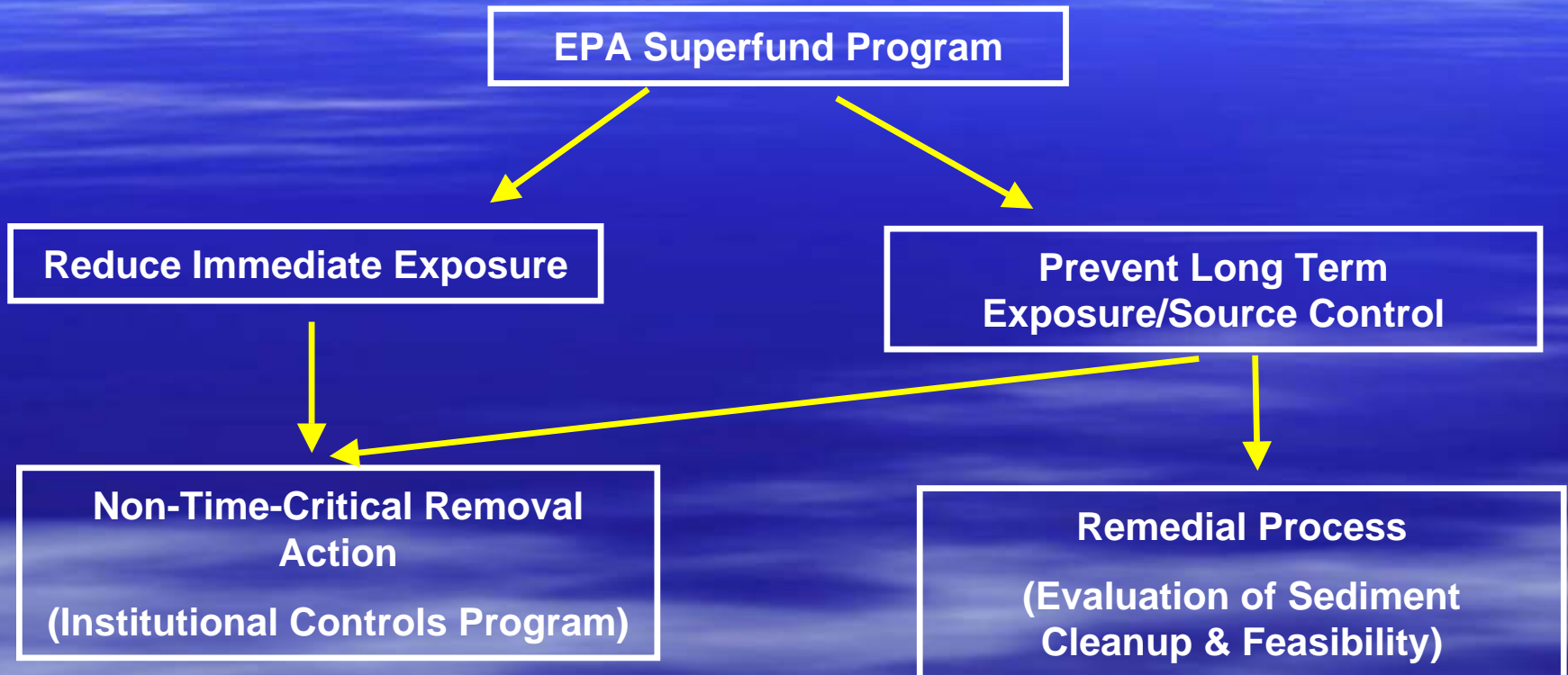
- PV Shelf site background
- Introduction of ICs program
 - Public outreach & education (Fish Contamination Education Collaborative)
 - Fish contaminant monitoring
 - Enforcement of existing fishing regulations
- Focusing on Fish Contamination Education Collaborative

Health Risks from Fish Consumption

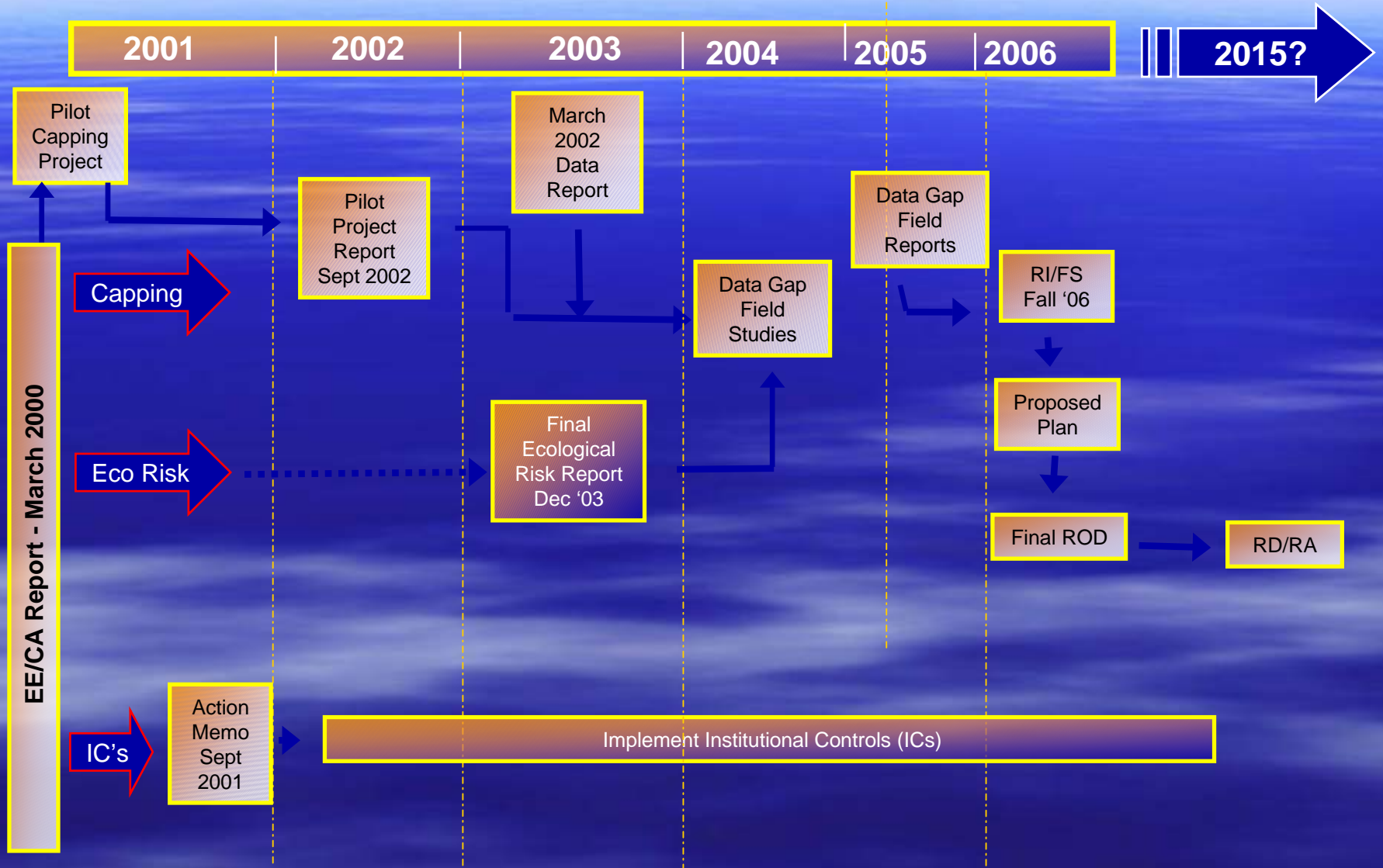
| Scenario: White Croaker | Exposed Population | Cancer Risk | Non-Cancer HQ | |
|------------------------------------|------------------------------------|------------------------|----------------------|-------------|
| | | | DDT | PCBs |
| 6 meals / month | Adult Anglers | 2 in 1,000 | 17 | 32 |
| Mother eats 1 meal / month | Nursing Infants 1 year exposure | - | 222 | 370 |

- Highest health risks are from the consumption of white croaker
- 5-10% of white croaker in fish markets exceed FDA limits for DDT and PCBs

EPA Superfund Program at PV Shelf



Flow Chart for Palos Verdes Shelf Activities



Conceptual Model for Human Exposure Pathways

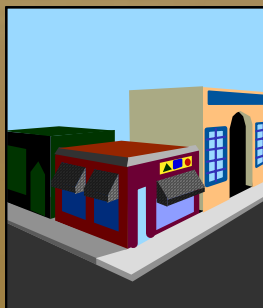


Commercial Catch



Sport / Recreational Catch

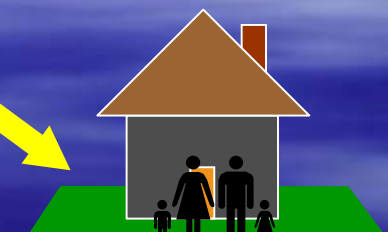
Fish Market



Wholesaler



Restaurant



Consumers



Institutional Controls

1. Public Outreach & Education

2. Monitoring (markets & ocean)



3. Enforcement of White Croaker fishing ban & catch limit

Institutional Controls



***A partnership of federal, state, and local agencies,
and community-based organizations***

ICs Challenges

- Expansive geographic area; diverse ethnic population
 - ID needs and partner with local agencies and community based organizations
 - Target women of child bearing age and children
 - ID effective message delivery methods
- State enforcement priority
 - Partnership with local entities
- Long term sustainability, leveraging resources
 - Transition ICs to locally based agency

Evaluate Success

- Enforcement component is critical
- Outreach program is successful
 - Pier/Marina outreach: 98% of 14,400 anglers outreached (2003-2005) said they would implement behavior change
 - Angler survey: 50% behavior change
 - Market outreach: 203 markets/restaurants visited (2005), only 5 indicated that they had sold white croakers in the past year.
 - Market monitoring: 6 out of 68 markets (135 visits) carried white croakers

Moving Forward

- ICs Strategic Planning Sessions – facilitated (Fall 2005)
 - All stakeholders
 - Vision/Measure of success
 - Action plan (living document)
 - Revise ICs implementation plan
- Transition to local entity – leveraging resources
- Complement final remedy

For more info, visit us at

<http://www.epa.gov/Region9/features/pvshelf/>

&

<http://www.pvsfish.org>