



**Welcome to the CLU-IN Internet
Seminar**

**Community Engagement Activities at
Superfund Sites**

Sponsored by: National Institute of Environmental Health Sciences,
Superfund Research Program

Delivered: March 31, 2011, 1:00 PM - 3:00 PM, EDT (17:00-19:00 GMT)

Instructors:

Anna Goodman Hoover, University of Kentucky, (Anna.Hoover@uky.edu)

Sharon Lin, U.S. EPA Region 9 (lin.sharon@epa.gov)

Moderator:

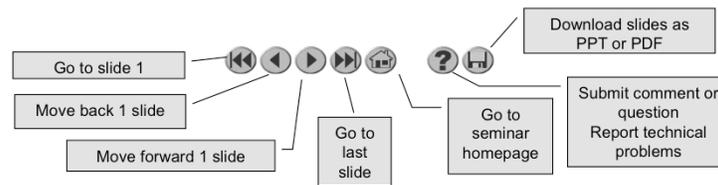
Beth Anderson, Superfund Research Program (NIEHS) (tainer@niehs.nih.gov)

Visit the Clean Up Information Network online at www.cluin.org

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Housekeeping

- Please mute your phone lines, Do NOT put this call on hold
- Q&A
- Turn off any pop-up blockers
- Move through slides using # links on left or buttons



- This event is being recorded
- Archives accessed for free <http://clu.in.org/live/archive/>

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Although I'm sure that some of you have these rules memorized from previous CLU-IN events, let's run through them quickly for our new participants.

Please mute your phone lines during the seminar to minimize disruption and background noise. If you do not have a mute button, press *6 to mute #6 to unmute your lines at anytime. Also, please do NOT put this call on hold as this may bring delightful, but unwanted background music over the lines and interrupt the seminar.

You should note that throughout the seminar, we will ask for your feedback. You do not need to wait for Q&A breaks to ask questions or provide comments. To submit comments/questions and report technical problems, please use the ? icon at the top of your screen. You can move forward/backward in the slides by using the single arrow buttons (left moves back 1 slide, right moves advances 1 slide). The double arrowed buttons will take you to 1st and last slides respectively. You may also advance to any slide using the numbered links that appear on the left side of your screen. The button with a house icon will take you back to main seminar page which displays our agenda, speaker information, links to the slides and additional resources. Lastly, the button with a computer disc can be used to download and save today's presentation materials.

With that, please move to slide 3.

□

Identifying the Relationship Between Citizen Values & Environmental Health

Using Community-Based Participatory Communication in Superfund Communities



Anna Hoover, M.A., Chike Anyaegbunam, Ph.D., Lindell Ormsbee, Ph.D.
University of Kentucky

www.paducahvision.com

Overview

- Community-Based Participatory Communication: Goals and Tools
- Case Study: The Paducah Gaseous Diffusion Plant Future Vision Study
- Challenges and Future Directions for CBPC

Roots of CBPC

- Action Research (1940s)
- Rapid Rural Appraisal (1970s)
- Participatory Rural Appraisal (1980s)
- Participatory Learning and Action (1990s)
- Participatory Rural Communication Appraisal (1990s)
- Community-Based Participatory Research (1990s)



To date, CBPC has been used by the United Nations FAO and the World Bank in Rural Africa, ongoing since 1994

???? Appalachian Kentucky, 2003 -2005

NIOSH in its Social Marketing of Tractor Safety: US National Project, 2007-2009

The Goals of Community-Based Participatory Communication (CBPC)



- Engagement
- Empowerment
- Collaboration
- Context
- Trust



The Tools of CBPC

- Visualizations
- Projective Techniques
- Interviews
- Group Work
- Dialogue
- Ranking and Scoring



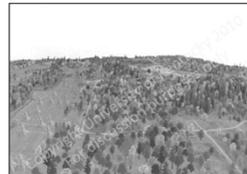
Case Study: The Paducah Gaseous Diffusion Plant Future Vision Study



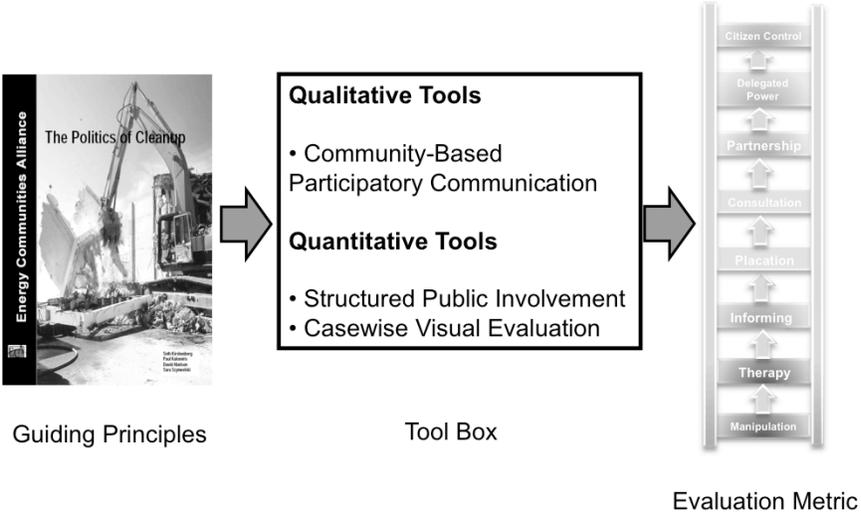
- Only operating US uranium enrichment plant
- 1,200 workers
- \$121 million payroll
- Buffered by West Kentucky Wildlife Management Area
- TCE and Tc-99 found in nearby private drinking wells (1988)
- US EPA Superfund National Priority List (1993-94)
- Among the world's largest TCE plumes
- Plant scheduled to close in 5-10 years

Project Goals

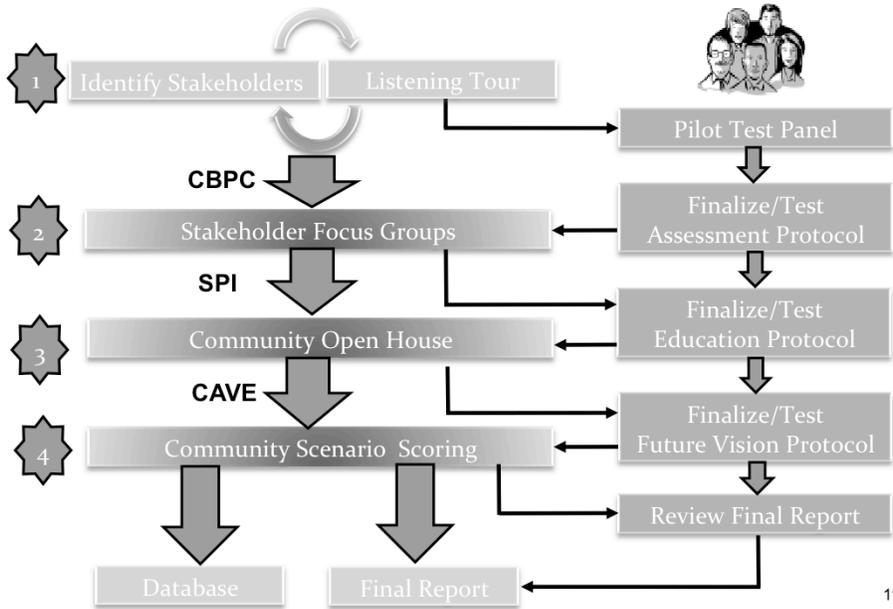
- Involve communities in visioning for site remediation, use, and monitoring.
- Ensure that future use goals help advance local needs and values.



Mixed-Methods Approach



Adapting the CBPC Process



Methods: Listening Tour Protocol

- Overview: Project and Process
- What are your individual/organizational concerns?
- What long-term development opportunities exist?
- What long-term development challenges exist?
- What is your individual/organizational long-term vision for the site?
- What do we need to know?
- Who should be involved?

Stakeholder Clusters/Pilot Test Panel

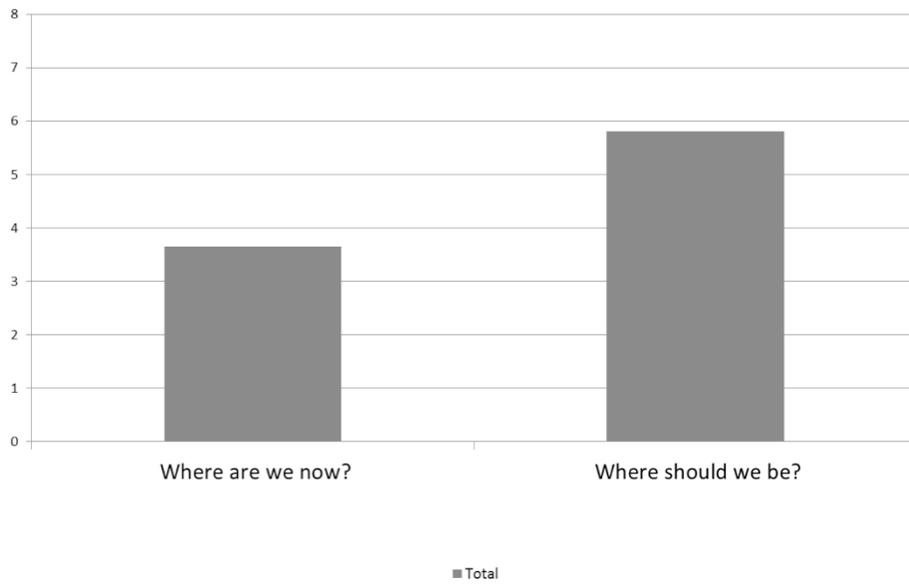
- Water Policy District Residents
- USEC Employees
- Environmental/Health Advocates
- Healthcare Providers
- Education (Postsecondary)
- Media
- Religious/Spiritual
- Tourism
- Ballard Countians
- US DOE
- US DOE Subcontractors
- Paducah Government
- Wildlife/Recreation Enthusiasts
- PGDP Citizens Advisory Board
- Regulatory Agencies

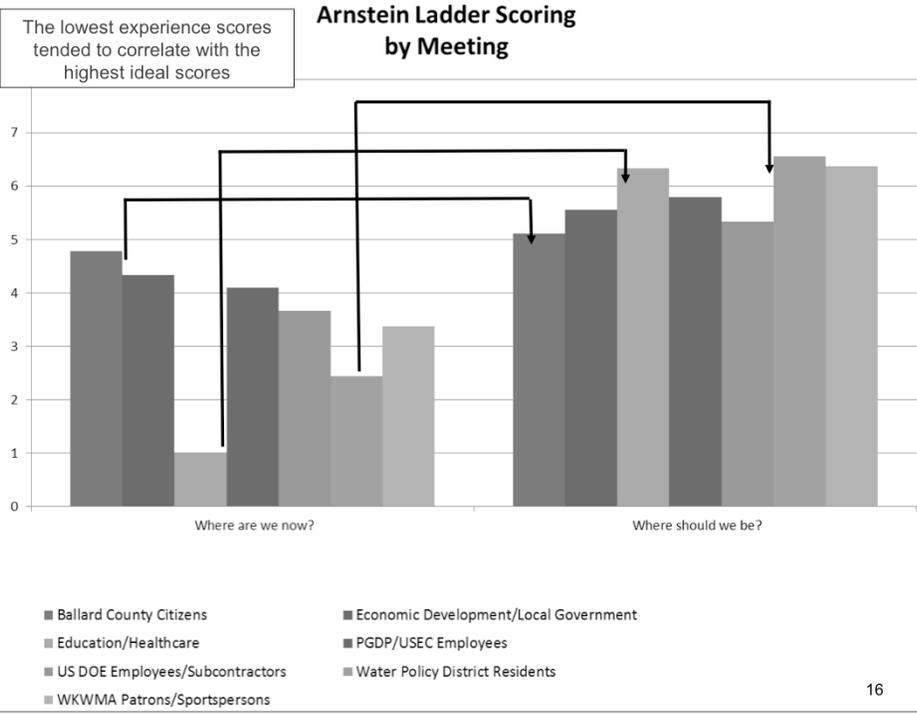
Methods: Focus Group Protocol



- Project Overview
- Arnstein Ladder
- Community Values
 - Paducah's Best Qualities
 - Qualities of the Ideal City
- Scenario Small Group Work
- Scenario Presentations, Discussion, and Evaluations
- Information Gaps

Arnstein Ladder Scoring





Outputs: Community Values

- Jobs
- Trust
- Family
- Safety & Security
- Friends & Sense of Community
- Open & Honest Communication
- Outdoor Recreation Opportunities
- Education & Cultural Opportunities
- Clean Water & Healthy Environment



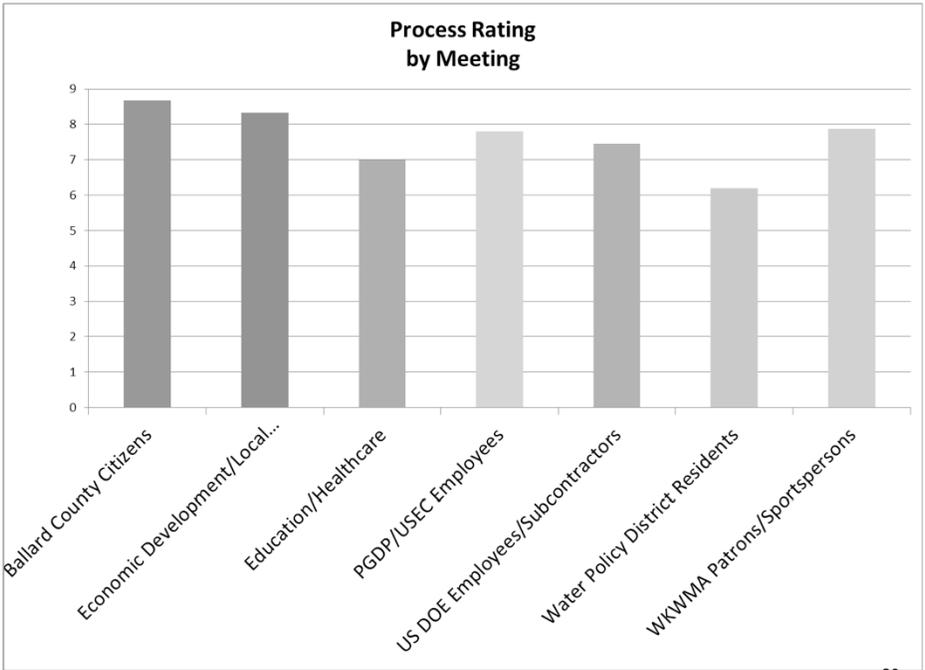
Outputs: Public Information Meetings

- Interactive Quiz Show Format
- Five Categories
 - The Past
 - The Present
 - The Future
 - Science
 - Cleanup
- Answers Included References to Existing Information Resources

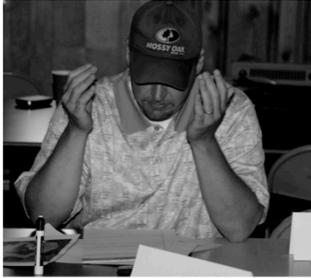


Outcomes

- Increased knowledge of PGDP-related issues and available resources
- Increased awareness of pending closure and potential future uses of the site
- Mobilized community around future use issues
- Provided capacity-building experience in collaborative visioning
- Documented community values and scenario preferences for future advocacy



Challenges for CBPC



- Legacy Trust Issues
- Entrenched Belief Systems
- Institutional Barriers
- Competing Academic-Community Knowledges & Languages
- Evaluation

Future Directions for CBPC

- Improving our understanding of how communities construct and balance competing risks
- Creating engaged emergency response plans
- Providing opportunities for citizens to participate in the creation of agency risk communication policies
- Informing the creation of health literacy interventions

Acknowledgments

- Citizens of McCracken and Ballard Counties
- University of Kentucky Superfund Research Program Research Translation Core
- Kentucky Research Consortium for Energy and the Environment
- Kentucky Water Resources Research Institute
- Kentucky Transportation Center
- Local and State Government Agencies and Staff
- Chas Hartman, M.A., Mitchael Schwartz, M.A., & Jason Martin, M.A.
- The project described was supported in part by grant number **P42 ES007380** from the **National Institute of Environmental Health Sciences, NIH** and by grant number **DE/FG05-03OR23032** from the **United States Department of Energy**. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the NIEHS, NIH or USDOE.

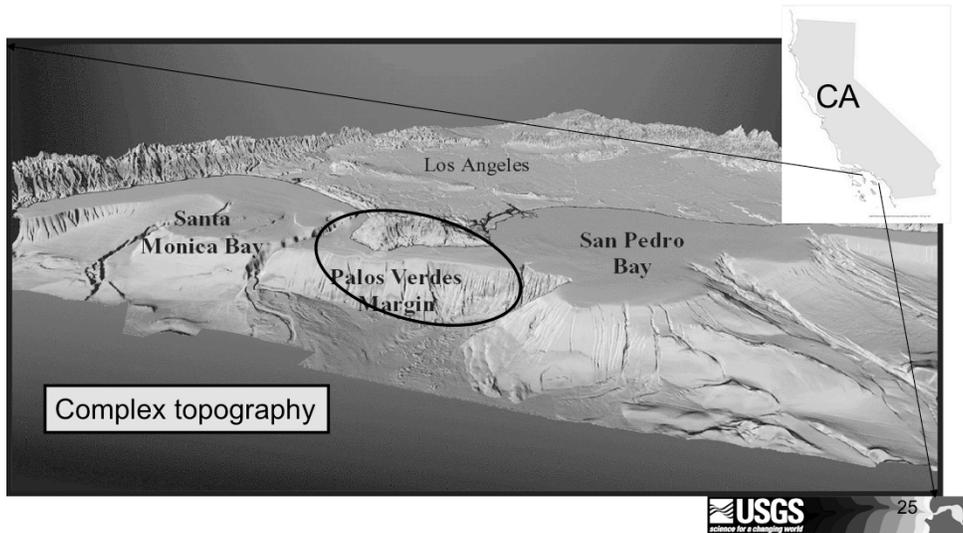
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Risk Reduction through Behavior Change - Palos Verdes Shelf Superfund Program

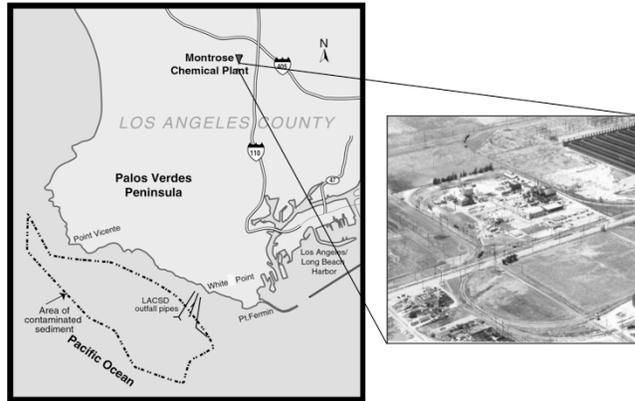
Sharon Lin
EPA Pacific Southwest Region (Region 9)
March 31, 2011

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Palos Verdes Shelf

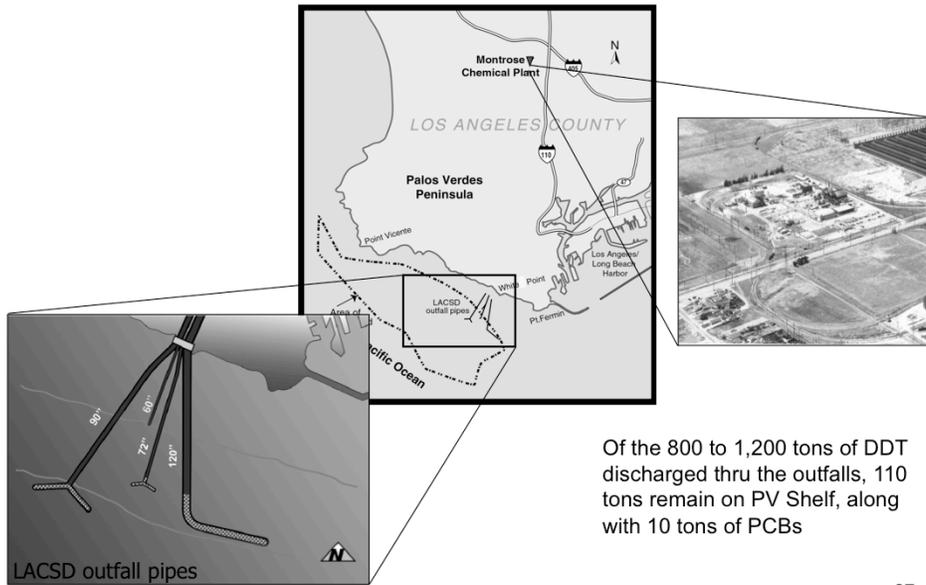


Where did the DDT come from?

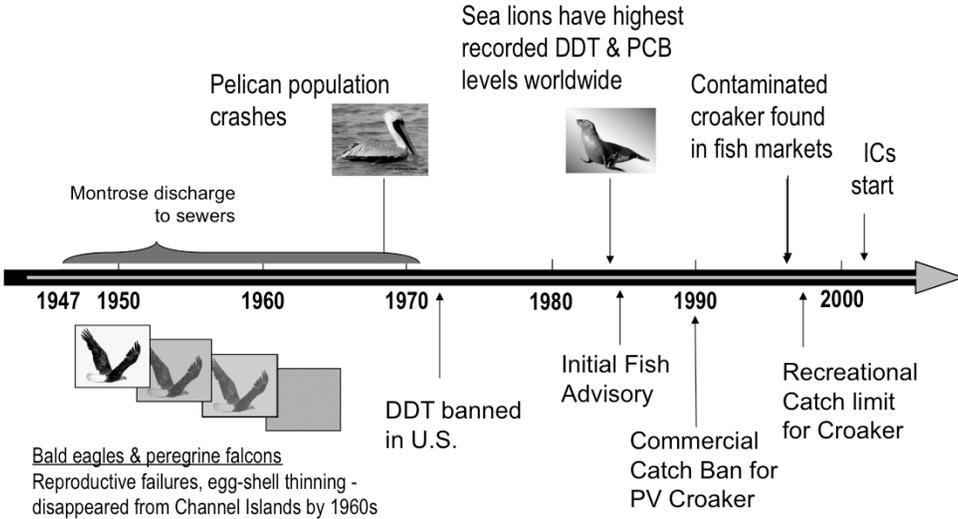


Of the 800 to 1,200 tons of DDT discharged thru the outfalls, 110 tons remain on PV Shelf, along with 10 tons of PCBs

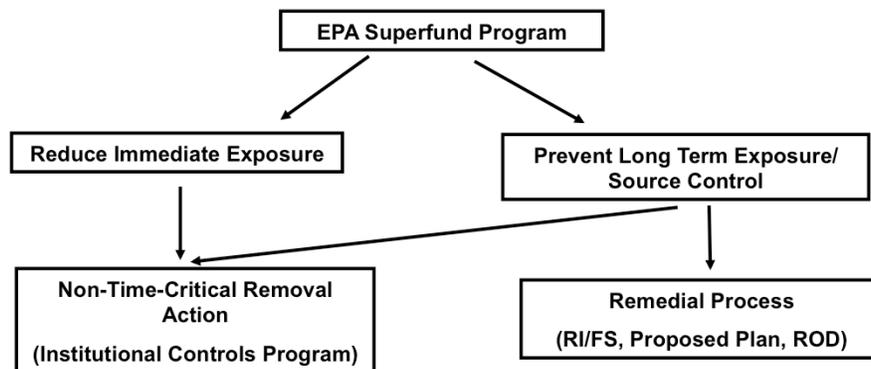
Where did the DDT come from?



Historic Timeline – Injury



Superfund Program at PV Shelf



Palos Verdes Shelf Institutional Controls

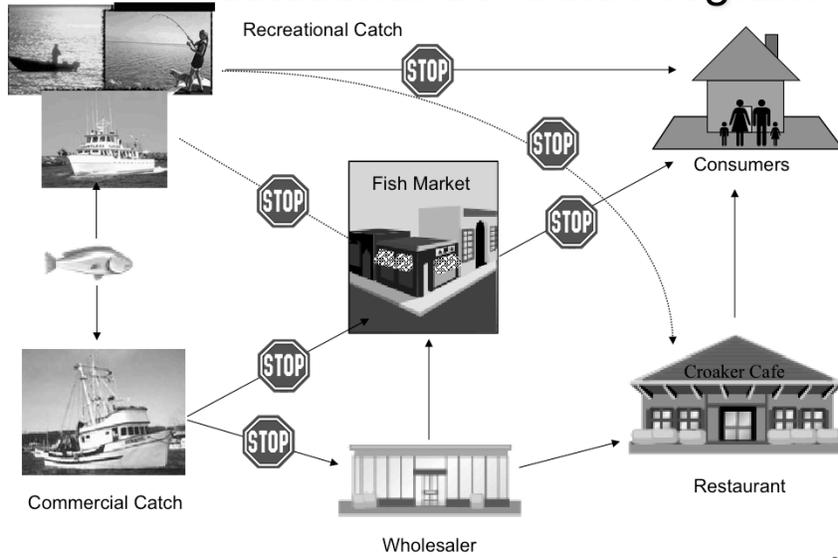
1. Public Outreach & Education

2. Monitoring (markets & ocean)



3. Enforcement of White Croaker fishing ban & catch limit

Conceptual Model for Institutional Controls Program



Public Outreach & Education

Educate communities about fishing and fish eating behaviors that would reduce their risks

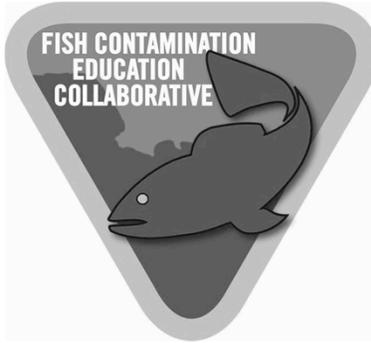


Fish Contamination Education Collaborative - FCEC

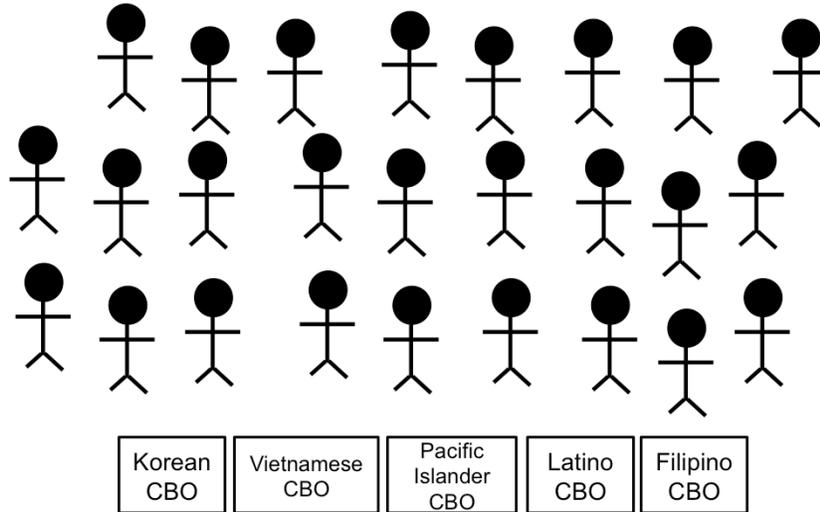


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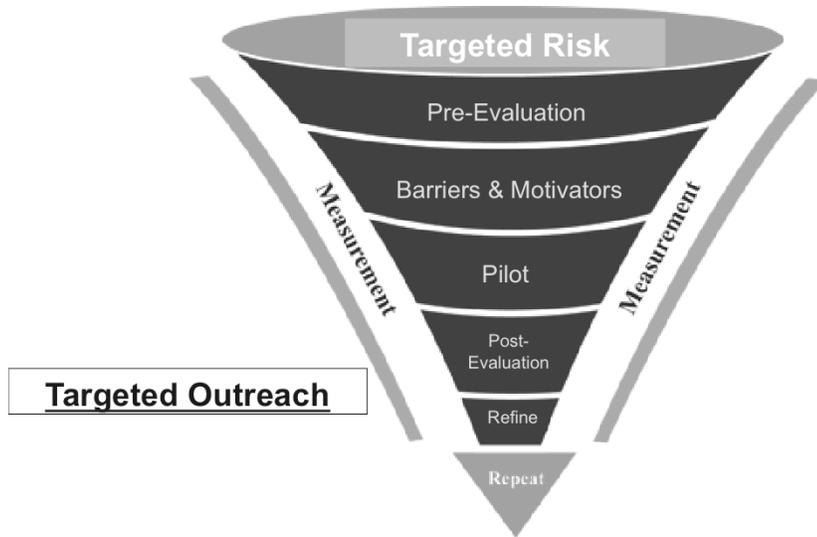
Fish Contamination Education Collaborative - FCEC



Raising Awareness



Community Based Social Marketing



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Monitoring Program

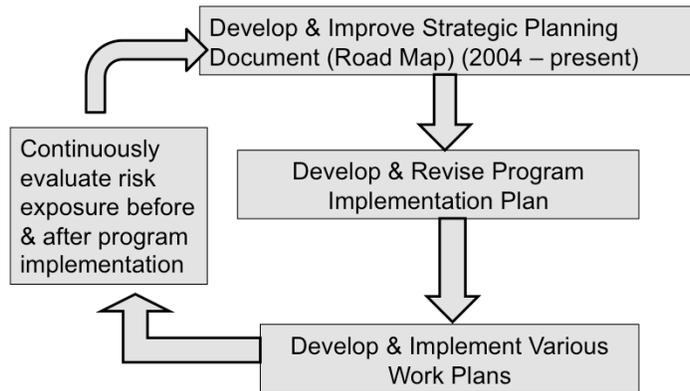
- Fish in Ocean (EPA, NOAA, State)
- Market place (EPA, Local health agencies)
- Pier fishing (EPA, Community)
- Behavior monitoring
 - Community based social marketing – focused on quantitative measure of behavior change (exposure)
 - Angler fishing behavior (types fish to catch)
 - Community fish consumption behavior (remove fatty parts of the fish, fillet vs. whole fish)

Enforcement

- Enforcing white croaker commercial catch ban area and daily bag limit - *CDFG*
- Market owners buy fish from approved sources – local health departments – *Los Angeles County, Orange County and City of Long Beach Health inspectors and CDFG*



Strategic planning and quantitative risk reduction



Using technology to create public transparency



- Real time project progress
 - interactive GIS map
- Project e-newsletter
- Project website (www.pvsfish.org)
 - >10,000 unique visitors/month
 - Continuous & frequent content update

FCEC Blog

The screenshot displays the FCEC Blog website. At the top, there is a header with a navigation menu: Home Page, About FCEC, Education, Health, Resources, Blog, and Contact Us. Below the navigation is a banner image with the text "FOR COMMUNITY EDUCATION COLLABORATION". The main content area is titled "See What We're Doing" and features two blog posts:

- FCEC Partner Meeting on May 5** (Posted by admin | April 30, 2012)
FCEC is holding a Partners Meeting on May 5 at the Orange County Health Care Agency from 9am to 1pm. The meeting will address a number of topics including outreach to fishermen (in light of the 2009 fish consumption advisory), community outreach and market research work. We'll also be discussing new outreach material our teams will be using. To learn more please visit our next event calendar. Tags: FCEC, fish contamination, Partner Event. Posted in Events | No Comments »
- FCEC Does Earth Day in Long Beach** (Posted by admin | April 28, 2012)
FCEC spent the 28th and 29th of April celebrating Earth Day at the wonderful location of the Beach in Long Beach. In all we were able to reach out to over 400 community members about fish contamination. One of the people we spoke with was aware of the contamination on Palms Beaches Shell and expressed a hopeful outlook: "I just go to the islands or San Clemente to go fishing," said Alfred of Sim Valley.

The sidebar on the right contains a Facebook widget for "Fish Contamination Education Collaborative" with 29 likes and a "Like" button. Below it is a "Sign up for our Newsletter" form with the email address "example@subscribe.com" and a "Subscribe" button.

Connects to Facebook, flickr, YouTube and eNewsletter sign-up form

Allows for users to leave comments!

See What We're Doing

Take a Walk with an FCEC Partner Posted by admin | April 9, 2010

Come on out on Saturday, April 17 to the Herold Community Center in San Gabriel in the morning to participate in a walk-a-thon fundraiser and arrival that will help support one of FCEC's great partner organizations. Proceeds from the walk will help fund the great work the organization does.



FCEC educational materials will also be handed out during the day's event, so it will also be a great way to spread the word about our program.

To learn more please call Connie Kwok at 626-286-2000.

Your support is greatly appreciated!

Tags: FCEC, Herold Community Center, volunteer event
Posted in: Events

2 Responses to "Take a Walk with an FCEC Partner"

Rebecca Soong says:
April 13, 2010 at 6:16 pm

2010 Annual Walkthon - Schedule and detail info:-

- a) April 17 10. 8 :30 am registration , walk start 9:00 -11:am at 715 E Mission Rd , San Gabriel Ca 91776 where the CCHC building is , we will walk approx 2.8 mil & back to CCHC.
- b) Participant for the walk is \$ 20.00 per person , u will receive a free t shirt & a baseball cap as a gift , each participant with sponsorship \$ 100.00 or more will also receive a travel bag if you register before 9:00am.
- d) If u wish after the walk , fun continues , pls join us the Charity Carnival - food , performance , charity sale , games , prizes & FCEC , Census and Global Energy booth. So , pls mark your calendar , bring family & friends!

facebook

Fish Contamination Education Collaborative

29 people like Fish Contamination Education Collaborative



Sign up for our Newsletter

example@subscrib.e.com

Privacy or Get SafeSubscribe!

FCEC Photos



Website Translation

The screenshot shows a web browser window displaying the Vietnamese version of the FCEC website. The browser's address bar shows the URL <http://pvfish.org/index-Vietnam.html>. The website's header includes a search bar and several navigation links: Trang Chính, Về Chương Trình FCEC, Giáo Dục, Sức Khỏe, Tài Liệu, and Liên Lạc Với Chúng Tôi. Below the header is a banner with three images: a fish market, a person looking at a display board, and a boat on the water. The main content area is titled "TIN TỨC BÁO CHÍ" and features a sidebar with links to "Cơ Quan Hợp Tác Với FCEC", "Phương Tiện Truyền Thông", "Thị Trường", "Người Câu Cá", and "Cộng Đồng". The main text area begins with "Xin chào quý vị" followed by a paragraph about the FCEC's role in providing information and education to the Palos Verdes Shelf Superfund Site.

Trang Chính | Về Chương Trình FCEC | Giáo Dục | Sức Khỏe | Tài Liệu | Liên Lạc Với Chúng Tôi

TIN TỨC BÁO CHÍ

→ Cơ Quan Hợp Tác Với FCEC
→ Phương Tiện Truyền Thông
→ Thị Trường
→ Người Câu Cá
→ Cộng Đồng

Xin chào quý vị

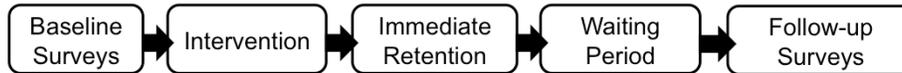
Ủy Ban Hợp Tác Giáo Dục Và Cá Ô Nhiễm (FCEC) là thành phần của chương trình thông tin và giáo dục của Cơ Quan Bảo Vệ Môi Trường Nước Mỹ (USEPA) để bảo vệ sức khỏe của những dân cư từ sự nguy hiểm ẩn cấ bi ô nhiễm trong vùng Palos Verdes Shelf Superfund Site

FCEC là một thành phần chính của chương trình Điều Khiển (Institutional Controls) của Cơ Quan Bảo Vệ Môi Trường Nước Mỹ (US EPA) phối hợp với chương trình Theo Dõi (Monitoring) và Áp Dụng Luật Đánh Cá (Enforcement).

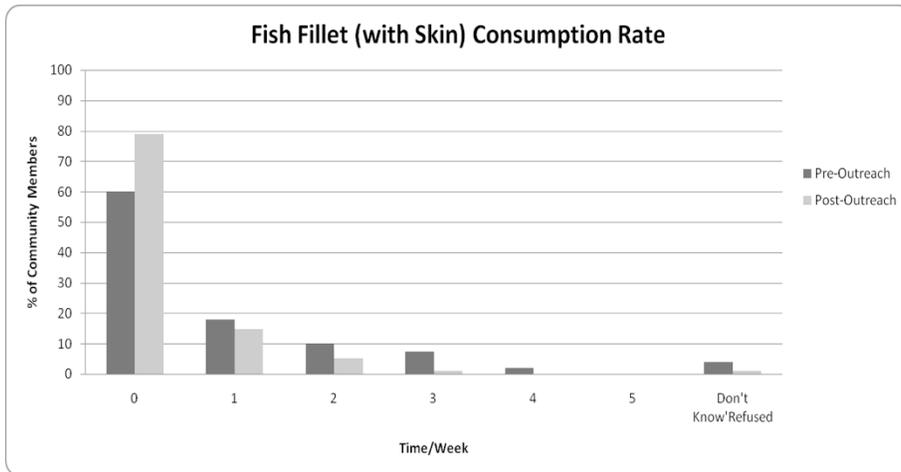
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Evaluate Strategy

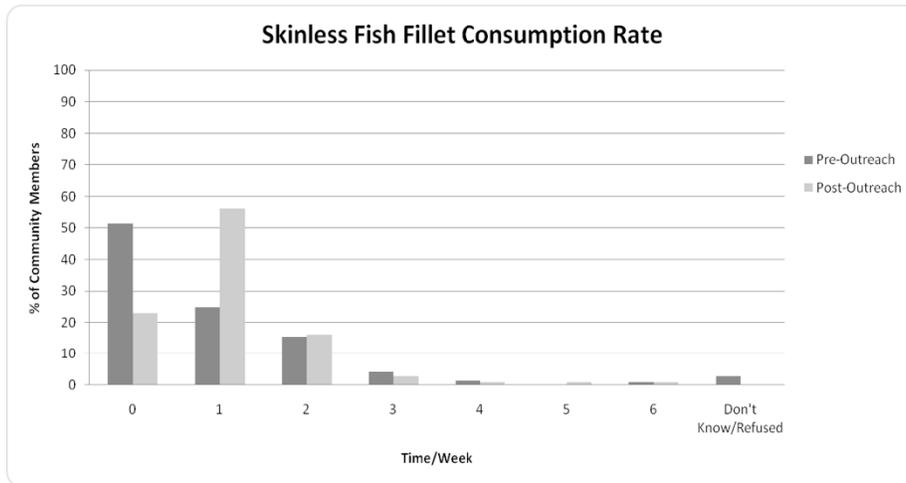
Community outreach



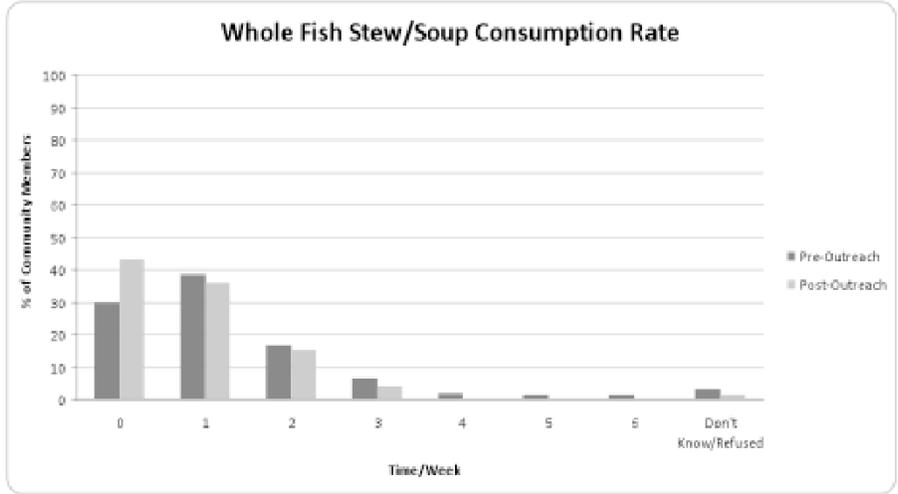
Results: Reducing Unhealthy Fish Eating Behaviors



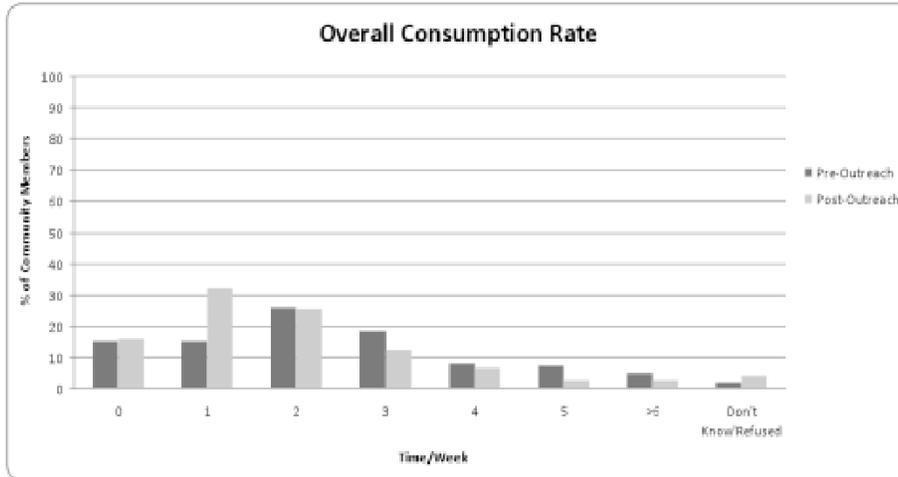
Results: Increasing Healthy Fish Eating Behaviors



Results: Reducing Unhealthy Fish Eating Behaviors

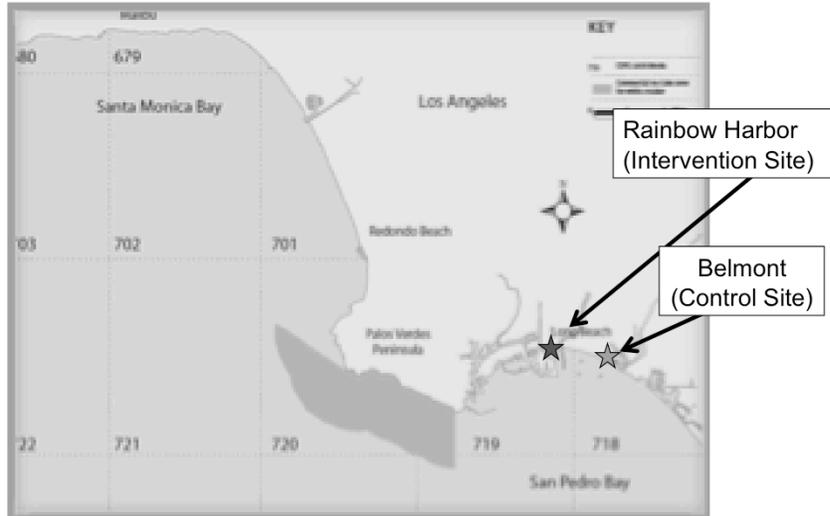


Results: Overall Fish Consumption



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Changing Behavior



Changing Behavior



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Changing Behavior



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Changing Behavior

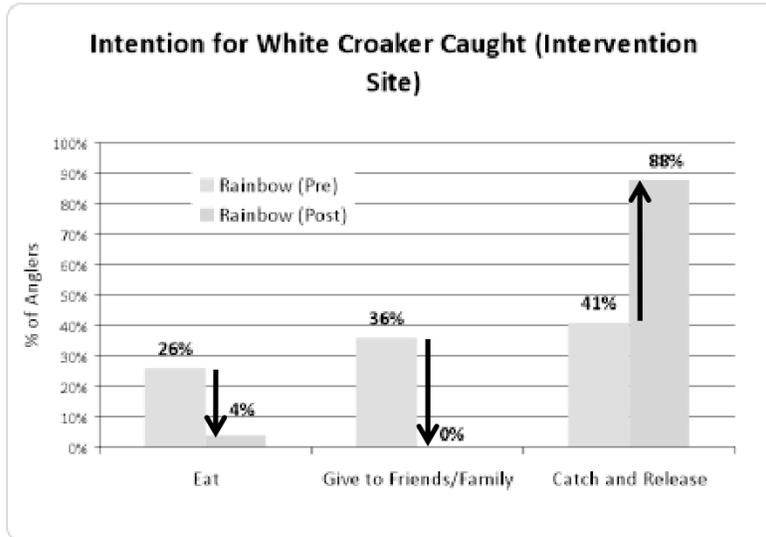


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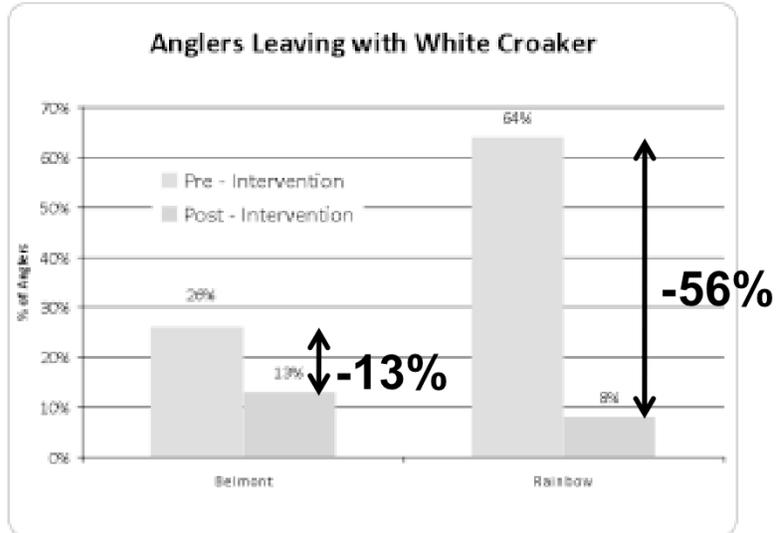
Changing Behavior



Changing Behavior



Changing Behavior



National Awards/recognition



- 2009 Citizen Excellence in Community Involvement Award

- 2009 National Environmental Justice Achievement Award



- 2010 Public Relations Society of America Silver Anvil Award (public service/government category)

Questions/discussion

Key points

- Clear goals for community work at the site
 - Awareness raising vs. behavior change
- If behavior change is the goal, then
 - There needs to be a scientific approach to outreach and education;
 - There needs to be a strong linkage between human controls and engineering controls
- Consider strategic planning tools to bring stakeholders together
- Community work goes beyond fact sheets and public meetings.

Resources & Feedback

- To view a complete list of resources for this seminar, please visit the [**Additional Resources**](#)
- Please complete the [**Feedback Form**](#) to help ensure events like this are offered in the future

The screenshot shows a web form titled "U.S. EPA Technical Support Project Engineering Forum Green Remediation: Opening the Door to Field Use Session C (Green Remediation Tools and Examples) Seminar Feedback Form". The form includes fields for "First Name" (filled with "Jean"), "Last Name" (filled with "Bent"), and "Daytime Phone Number" (filled with "703-603-9924"). The "Email Address" field is filled with "jeant.bent@epa.gov". Below these fields is a checkbox labeled "Please send a copy of my feedback confirmation as a record of my participation to this address." which is currently unchecked. The form also displays the date of the seminar as "December 15, 2009".

Need confirmation of your participation today?

Fill out the feedback form and check box for confirmation email.