

**Partners Meeting Summary**  
Wednesday May 5, 2010  
9:00 a.m. - 1:00 p.m.  
Orange County Health Care Agency  
1241 E. Dyer Road, Suite 120  
Santa Ana, CA 92705

**Attendees:**

<b>BPSOS:</b>	<b>Herald</b>	<b>NOAA/MSRP:</b>
Tiffany Nguyen		Jennifer Boyce
<b>Cabrillo:</b>	<b>Community Center:</b>	Gabrielle Dorr
Alfonso Montiel	Connie Kwok	<b>OCHCA:</b>
<b>City of Long Beach:</b>	Rebecca Soong	Jenafer Forester
Jackie Hampton	<b>ITSI (EPA Contractor):</b>	Karen Newe
<b>CRC:</b>	Ed Gillera	Suntara Sovan
Howard Wang	Riz Sarmiento	Jessica Warren
Yolanda Lasmarias	<b>LA County Env't. Health:</b>	<b>SGA (EPA Contractor):</b>
<b>DTSC:</b>	Carolyn Anderson	Elizabeth Anderson
Tim Chauvel	<b>LA County Public Health:</b>	Stephen Groner
<b>Heal the Bay:</b>	Kelly Ho	Tiffany Jonick
James Alamillo	Elva Silva	<b>USEPA:</b>
Frankie Orrala	<b>LAUSD:</b>	Jackie Lane
OEHHA	Angelina Nicolas	Sharon Lin
Bob Brodberg (via phone)	<b>LB Environmental Health:</b>	Carmen White
	Monica Cardenas	

**I. Welcome/Introductions**

Stephen Groner (SGA) opened the Partners Meeting by first welcoming the attendees and then walking through the agenda. Sharon Lin (EPA) thanked the partners for their significant contributions over the past eight years, as highlighted by the program's recent win of the 2009 National Achievements in Environmental Justice Award. S. Lin mentioned that an increased emphasis will be placed on analyzing and evaluating market inspection and commercial fish landing data to determine how to best move the program forward. This information will be used to assess risk and allocate resources to those efforts that most effectively address the health risks associated with the consumption of contaminated fish. S. Lin explained that the end goal is to align all of FCEC's various components with the data collected, which has been the focus for the past three months. Adding to this body of research, the forthcoming Consumption Study will also serve as a valuable tool to this end by revealing the populations of greatest risk. Together, this research will inform the overall Institutional Controls (ICs) program by providing substantiated technical data from which FCEC can outline informed courses of action.

## II. Angler Outreach Program

### A. Angler Outreach Tip Card - Tiffany Jonick (SGA)

[Link to presentation](#)

- The Messaging Workgroup has made a number of changes to the Angler Outreach Tip Card since it was last presented to the group at the October 15 Strategic Planning Meeting. The changes to the material include:
  - The material now folds into four panels. It measures four inches high and three in length, fitting perfectly within a fishing license holder. It was made foldable for several reasons:
    - More information fits on the foldable version,
    - A ruler could be added to this version, which was requested by participants during field testing,
    - The foldable version is smaller and more easily transportable - which was also requested during field testing.
  - Fish were crossed out individually, as requested by anglers during field testing.
  - Barracuda and black croaker were added to the “Do Not Consume” (DNC) species list.
  - A key was developed, where the blue color links back to the inside of the card (what can be safely consumed), and where the red color links to the front of the card (what fish should be avoided). The key was created to make the connection between the messages presented on the back and those presented on the front. During field testing, some participants did not make the connection between the messages presented on both sides of the card.
  - A link is provided that directs users to the advisory document on OEHHA’s website.
  - The picture of the doctor and the child was replaced with that of an angler and his son. During field testing, many participants mistook the image of the doctor to mean “go see a physician.” The current image of the angler and his son is clearer and more relevant.
  - On the inside of the card, images of fish that can be safely consumed were included. This addition not only makes the material’s messages more positive, but it also makes the connection between the card’s message to only consume the skinless fillet of “other” (non-DNC) fish one time a week. During field testing, some participants mistakenly thought that this fish preparation and consumption advice applied to the DNC fish.
  - Real fish images were used for the fillet serving size advice, which was also requested during field testing.
  - A ruler was included in addition to size regulations to make the material more relevant to anglers and ensure their retention of the card’s messages. This was also suggested by anglers during field testing.

- On the inside of the card next to the fish that can be consumed, a picture of a young girl was included to act as a motivator. The “thumbs up” makes it clear that these fish can be safely consumed.
- Disclaimer information was also included to urge anglers to both be aware of and seek out additional information to ensure that they are engaging in safe and legal fishing practices.

### Questions/Comments

- S. Lin applauded the Messaging Workgroup for their thorough and rigorous development and testing of the Tip Card and delivered a product in a timely manner .
- T. Jonick noted that an impressive characteristic of the outreach material is how much of its format, organization and overall aesthetic originated from the anglers while field testing the previous Tip Card. In fact, Heal the Bay outreach workers reinvented the old material based on angler’s feedback during field testing to create what would be the template for the current card.
- T. Jonick noted that the material will be translated into Spanish, Chinese, and Vietnamese. Howard Wang (CRC) asked if the Chinese translation will be in simplified or traditional Chinese. Rebecca Soong (HCC) clarified that the material will be translated into traditional Chinese.

### B. Angler Outreach Strategy - Alfonso Montiel (Cabrillo Marine Aquarium) [Link to presentation](#)

- The revised messages that will be communicated during angler outreach include:
  - Do not eat white croaker, barred sand bass, barracuda, black croaker or topsmelt caught from Santa Monica Pier to Seal Beach Pier,
  - Only eat the skinless fillet of all other fish caught in the affected zone,
  - Only eat one serving of locally caught fish a week.
- Educational Outreach will be conducted twice a week, and will include the following:
  - The angler outreach team will place more or less emphasis on certain DNC fish based on their individual availability throughout the duration of outreach. This targeted strategy will allow the team to focus on the fish of greatest risk when anglers are most likely to catch them.
  - Educational Outreach (and Tip Card field testing data) will be collected through “Intervention Tally Sheets.” These sheets allow the outreach worker to track how many anglers he or she came into contact with on a given day and location. A space will also be provided in the tally sheet to record Tip Card field test impressions and responses; specifically, the tally sheet will include ONE question relating to an element of the Tip Card. Each month, this question will be rotated with another. By rotating questions, we will be able to conduct a

comprehensive field test throughout the year without seriously protracting the length of the outreach session.

- In addition to providing educational information, outreach workers will also seek to gain commitments from survey participants that they will follow the advice presented. Participants will make this commitment by signing the intervention tally sheet column that says: “I commit to releasing the five contaminated fish on the booklet I received today.”
- Behavioral Monitoring Data will be collected once a week , and will include the following:
  - Monitoring data is collected to track the effectiveness of the educational outreach, and will be collected through the Behavioral Monitoring surveys.
  - If the respondent refuses to participate in the survey, a non-response survey must be completed. By examining the audience that does not wish to participate, we can glean insightful clues about how to better reach this demographic. It also provides us with a clearer picture of the true demographic make-up at the piers, while also reducing self-selection bias.

#### Questions/Comments

- Jen Boyce (NOAA) asked where anglers provide their commitment to engage in the safe fish consumption practices advocated by the outreach team. A. Montiel clarified that commitments are collected on the Intervention Tally Sheet.
- Yolanda Lasmarias (CRC/LAUSD) asked if the survey is filled in by the survey taker or the survey participant. A. Montiel answered that the survey is filled out by the administrator. Y. Lasmarias then asked how long the survey takes to complete. A. Montiel explained that it typically takes five to ten minutes per person. Jackie Lane (EPA) added that since the Angler Outreach staff has been engaged in this work for so long, the surveys have become second nature and are completed at an extremely efficient rate. A. Montiel concurred, adding that anglers are also anxious to continue fishing so they do not typically protract the length of the survey process.
- S. Lin mentioned that all of the Angler Outreach data since 2007 has been added to the GIS Monitoring and Enforcement map, which can be located on the FCEC website, [www.pvsfish.org](http://www.pvsfish.org). The map is now a “one stop shop” for any and all data collected by the program.
- Tim Chauvel (DTSC) asked what the response rate has typically been for the Angler Outreach program. Elizabeth Anderson (SGA) responded that non-response data has not been collected in the past, but that this practice will be instituted in this next phase of the outreach program.

#### C. Pier Signage - Liz Anderson (SGA)

[Link to presentation](#)

- Prioritizing Fishing Locations:

- SGA surveyed 24 fishing locations between Santa Monica Pier and Seal Beach Pier to gather pertinent observational data to assess each location. Information collected by these surveys (such as angler foot traffic at the site, angler demographics, etc.) will be compiled into a report that the Messaging Workgroup will utilize to inform their prioritization of fishing locations where signage should be posted.
- SGA also compiled and analyzed all demographic data collected by the Angler Outreach program between 2007 and 2010. This information will also be included in the aforementioned report to determine those fishing locations with the highest percentage of the at-risk populations.
- Identify and Reach Out to Appropriate Contacts:
  - While conducting research on potential signage locations, SGA will also identify and correspond with appropriate government contacts to obtain signage posting and maintenance commitments.
  - SGA is also working with S. Lin to develop a formal letter from EPA urging these government contacts to comply with FCEC's signage posting requests.
- The Messaging Workgroup will be extremely involved throughout the entire signage process. Their first conference call to discuss these efforts will be scheduled within the coming weeks.

#### Questions/Comments

- S. Lin suggested reviewing the Rec Fin data to obtain a range of fishing pressure across the area of concern. E. Anderson agreed that this item will be researched and factored into the recommendation and the report.
- James Alamillo (Heal the Bay) suggested that signage should at least be posted all along the shore within the area of concern. Anderson replied that although it would be ideal to post signage completely along the shoreline, finite program resources in terms of both dollars and manpower limits the group's ability to post signs at every possible fishing location within the area of concern. Additionally, since signage must be posted and maintained by an outside public authority, obtaining commitments for such a broad range of locations is also a challenge constricting this approach. In response to these limitations, research is being conducted to analyze and prioritize pier locations. This targeted approach will conserve program resources while also effectively reaching the most at-risk populations. SGA will also make contact and build relationships with the appropriate public entities to ensure that signage is not only posted, but maintained as long as there is risk.
- Jenafer Forester (OCHCA) asked how long FCEC anticipates angler outreach taking place. E. Anderson replied that outreach will take place as long as risk exists.
- J. Forester also pointed out that a drawback to signage is the target population's disproportionately high illiteracy rate.

- S. Lin noted that results from the trustee's 2002-2003 joint angler survey indicated that signage was not an extremely effective tool in modifying risky fish consumption behaviors. Of the 2000 anglers surveyed, the majority cited that they knew about fish contamination from posted signage, yet only 40% of those individuals engaged in safe fish consumption behaviors as a result. In response to these findings, FCEC redirected the program's focus from raising awareness to promoting behavior change.
- S. Lin commented that she and C. White attended an EPA Region 9 meeting where there was considerable discussion regarding clean-up approaches to Superfund sites. These discussions centered around the challenges associated with an engineering-driven approach and the merits of integrating ICs more into the clean-up approach. Using FCEC partly as a model, in the future more contaminated sediment sites will most likely have a more integrated ICs approach in the remediation.

### III. Enforcement Program - S. Lin (EPA)

#### A. Inspection Update [Link to presentation](#)

- As of March 2010, Orange County Health Care Agency (OCHCA) has completed 48 inspections and one joint inspection with the California Department of Fish and Game (CDFG).
- Long Beach Environmental Health has conducted 17 inspections and one joint inspection with CDFG in April.
- Los Angeles County Public Health is currently conducting the remainder of their inspections and conducted joint inspections with CDFG in May. Five white croaker samples were also collected from Shun Fan Market in Monterey Park. The origin of the fish collected is currently being investigated.

#### Questions/Comments

- H. Wang asked what factors place markets on the inspection list. S. Lin explained that in establishing the inspection agreement, EPA examined several data sources including the 1997 Heal the Bay study and the 2004 market inspection data. In addition, EPA conducted an inventory of all markets likely to distribute white croaker as well as all ethnic markets to build the current market inspection list.
- H. Wang noted that occasionally he will see markets advertising their sale of white croaker in the newspaper. He asked if that was enough evidence to investigate that particular store. S. Lin answered that this is enough evidence, and that he should email EPA a list of these markets so that they can be added to the list. S. Lin continued that the market list is regularly modified and adapted to the most current information available.
- T. Jonick asked if the only time white croaker is embargoed is when the market can not provide a valid invoice. S. Lin confirmed this and added

- that even when the market does provide a valid invoice, the fish is collected for monitoring purposes.
- Ed Gillera (ITSI) asked what happens to fish that are red tagged but not collected. S. Lin answered that these fish can be untagged and distributed if the invoice is found to be valid.
  - Monica Cardenas and Jackie Hampton (City of Long Beach Environmental Health) notified the group that operators have told them that sport and recreational anglers have tried to sell them locally-caught fish without a commercial license. The operators do not always call this into the department out of fear of retaliation.

## B. Commercial Landing Information

[Link to presentation](#)

- Between 2005 and 2009, 243,536 pounds of barracuda were landed and 141,872 pounds of white croaker were landed were from catch blocks in/near the area of concern.
- In 2009, 21,705 pounds of barracuda and 5,416 of white croaker were landed, which is considerably lower than previous years. This reduced landing is consistent with the decreased fish landings of other species as well.
- San Pedro landed the highest quantity of barracuda between 2005 and 2009, while Huntington and Terminal Island landed the highest quantity of white croaker.
- Between 2005 and 2009, the highest quantity of white croaker landed was in 2005 at 38,482. The least amount of white croaker landed occurred in 2009 at 5,416, which is again consistent with general fish landings for that year.
- Between 2005 and 2009, approximately 75% of all white croaker landed were caught in catch block 740; one of the three blocks that contains a portion of the catch ban.

### Questions/Comments

- J. Alamillo noted that according to the graph, landing of all fish was down considerably in 2009 across the board. He asked if this decreased landing could be due to El Nino weather patterns. Bob Brodberg (OEHHA) answered that weather patterns do affect fish landing distributions and could have affected this particular distribution; however, a decreased number in fish for one year is not a trend - it is a change.
- S. Groner asked the group how the commercial fish landing data presented might affect the PV Shelf program. More specifically, S. Groner asked if the catch ban should be expanded to include each catch block to which it extends; and if so, what FCEC can do to accomplish this expansion. B. Brodberg stated that the fish advisory only applies to sport fish, and can not necessarily be carried over to commercial fish. In other words, the State's fish advisory can not be used to enforce regulations restricting the

catch of certain species in certain catch blocks on a commercial level because this is under Federal jurisdiction. Carmen White (EPA) replied that the commercial landing data does inform enforcement efforts, and that combined with contaminant data, it can be used to reassess the catch ban. J. Boyce interjected that to do so, EPA would have to analyze white croaker contaminant data over a long period of time, as opposed to a few years. S. Lin clarified that C. White's contaminant data dates back to more than 15 years.

- J. Alamillo commented that in the past, outreach has been focused on pier and shoreline anglers. However, given the new advisory, outreach should be extended to boating anglers. S. Lin agreed, relating that since February 2009, California Department of Fish and Game (CDFG) has been patrolling sport and recreational fisherman in boats. J. Alamillo asked if these efforts focus on enforcement or education. S. Lin clarified that CDFG wardens are also educating boating anglers.

#### IV. Electronic Outreach - T. Jonick (SGA)

- SGA recently launched a blog, which has been incorporated into the FCEC website:
  - This new element allows for direct interaction with web visitors through blog comments.
  - The blog will include weekly posts in addition to program updates, events and will feature photos and videos.
  - Planned blog post topics include: FCEC and partner events, FCEC partner highlights, posts on each one of the five DNC fish, updates on what fish are being caught at the various piers in the area of concern.
- SGA recently launched a Facebook page:
  - 29 people "like" the page.
  - The Facebook content mirrors and reinforces blog content, but does contain some unique features such as a "favorites" section which features Heal the Bay's Facebook page as well as EPA, CDPH, Cabrillo, NOAA, DTSC and more. The page also includes an RSS feed and an eNewsletter sign-up page.
- SGA has continued to develop and send the quarterly eNewsletter:
  - eNewsletter articles have been incorporated into the blog so that users can comment on and discuss the articles interactively.
  - The distribution list has also grown through sign-ups at community events and angler outreach, from about 100 in Oct. 2008 to nearly 500 by March 2010.
- The website is also being translated into Spanish and Chinese and updated to reflect the 2009 fish advisory:
  - Tiffany Nguyen (BP SOS) is assisting with the translation and review of updates being made to the existing Vietnamese site.

- Frankie Orrala (Heal the Bay) and Connie Kwok and Rebecca Soong (HCC) are assisting in the translation and review of the Spanish and Chinese sites, respectively.
- As a result of the regular site updates and the overall growth of the program, web traffic has increased dramatically over the course of the year; averaging approximately 6,000 unique visitors per month in 2008-2009, growing to approximately 9,000 unique visitors per month in the 2009-2010 program year.

### Questions/Comments

- T. Chauvel asked if the web-hosting site provides information on where users are coming from. S. Groner replied that they can generally find out where users are originating from their IP address - their organization, for example - but not their specific geographic location. He added that they can see if users are accessing the FCEC site directly, or if they are coming to the site through a different source.
- T. Jonick noted that SGA is currently reaching out to various fishing groups and organizations to cross-link and promote the website to expand its reach.
- S. Lin commented that the GIS map has also been posted to the website. The map links and visually displays data collected from each component of the program - enforcement data, market monitoring, and angler outreach data - serving as a “one-stop shop” for all FCEC-related outreach and data collection efforts.
- T. Jonick said that SGA is considering joining the social media site Twitter so that anglers can comment on what fish are being caught on the piers. S. Groner added that Twitter is also a useful resource because subsistence fisherman are more likely to have a cell phone than a computer, allowing FCEC to communicate with these anglers on their mobile phones through Twitter.
- Monica Cardenas (City of Long Beach Environmental Health) asked if the trifolds are being phased out and why a yellow zone was not included in the revised Angler Outreach Tip Card. T. Jonick clarified that the old trifolds will no longer be used because their information is outdated and only advises against the consumption of white croaker. There is also no longer a yellow zone - the entire area of concern (Santa Monica Pier to Seal Beach Pier) is a red “Do Not Consume” (DNC) zone.
- T. Jonick noted that the market monitoring surveys should be revised to include monitoring for additional DNC fish. S. Lin agreed that the market monitoring surveys should be revisited.
- J. Forester asked if an FCEC Partner contact sheet is available on the website. T. Jonick answered that a contact sheet can be accessed on the tool bar by clicking “contact us,” but needs to be updated.
- C. White asked if providing an update on the remedial work would be of interest for the eNewsletter or the blog. Currently, EPA has shot a video of collected sediment cores. Additionally, when Chris Lowe (California State

University, Long Beach), collects fish for monitoring, a video could also be taken. C. White said that it is important to provide an update to anglers on the remediation work through angler outreach and/or social media to tell anglers that if they catch a fish with tags, they should release it and notify EPA. J. Boyce commented that a remediation update on the blog or eNewsletter would of interest as NOAA/MSRP regularly receive questions about these efforts.

## V. Community Outreach Highlights

### A. Large Scale Community Events - S. Groner (SGA)

[Link to presentation](#)

- SGA attended six large scale community events to promote FCEC's messages between October and April 2010. At the events, SGA reached over 1,000 community members and obtained over 100 eNewsletter sign-ups. Attended events included:
  - Cabrillo Marine Aquarium Sea Fair on Sunday, October 18, 2009
  - Girl Scouts Family Science Festival on Sunday, October 25, 2009
  - Sustainable Seafood Day on Saturday, March 6, 2010
  - L.A. Environmental Education Fair on Saturday, March 13, 2010
  - Cabrillo Marine Aquarium Earth Day on Saturday, April 17, 2010
  - Aquarium of the Pacific Earth Day on Saturday & Sunday, April 24 & 25, 2010
- Several new elements were also developed to support community outreach, including:
  - FCEC stickers were created to act as prizes for fish game participants.
  - An FCEC tote bag was also developed to act as an incentive to increase eNewsletter sign-ups.
  - An updated display board was also developed reflecting the new advisory information.

#### Questions/Comments

- No questions/comments.

### B. Vietnamese Community Outreach - T. Nguyen (BPSOS)

[Link to presentation](#)

- BP SOS has attended four outreach events between February and April 2010 and has reached over 400 Vietnamese community members with FCEC's messages. Events attended include:
  - Westminster Health Fair on Sunday February 28, 2010
  - Asian American Business Networking Event on Thursday March 18, 2010
  - Census 2010 Rock the Count Concert on Sunday April 11, 2010
  - Boat People Commemoration on Sunday April 25, 2010
- The main challenges that BP SOS has encountered while conducting outreach has been communicating the DNC messages without a visual

material to refer to. Without a visual image of the five DNC fish, it is very difficult to ensure that community members recognize the fish that they are being advised to avoid.

- In the same vein, the image-driven Vietnamese recipe brochure has been very successful, providing an easy, visual safe preparation guide that community members can take home and retain.
- BP SOS will conduct three more outreach events in May, including two health fairs and a community event at a local temple; meeting the fiscal year's eight-event requirement.

#### **Questions/Comments**

- J. Forester asked what kinds of events BP SOS attends. T. Nguyen said that they attend large scale community events, such as health fairs and Vietnamese cultural festivals, etc.
- S. Lin commented that if partners are interested in staffing an event with BP SOS, or are aware of a relevant event, they should contact T. Nguyen.

#### **C. Chinese Community Outreach - Connie Kwok & Rebecca Soong (HCC)**

[Link to presentation](#)

- BP SOS has attended seven outreach events in between January and April 2010 and has reached over 1,000 Chinese community members with FCEC's messages. Attended events include:
  - Temple City Park Chinese New Year Celebration on January 30, 2010
  - Volunteers Appreciation Dinner on Wednesday, February 3, 2010
  - Youth Summit on Saturday, February 20, 2010
  - HCC Chinese New Year Celebration on Saturday, February 27, 2010
  - Health Fair on Saturday, March 13, 2010
  - Health Workshop on Saturday, March 20, 2010
  - HCC Walk-a-thon & Community Carnival on April 17, 2010
- A large number of younger adults that HCC reached were not aware of the contamination.
- HCC has one more event to attend to meet the fiscal year's eight-event requirement.
- HCC has begun to reach out to outer San Gabriel Valley such as Rowland Heights and Diamond Bar.

#### **Questions/Comments**

- S. Lin noted that she recently read an article from a Chinese-language newspaper that advised against the consumption of yellow, as opposed to white croaker. S. Lin added that there is a great deal of misinformation regarding this topic and would like all information about FCEC and the program's messages to originate directly from the collaborative itself. H. Wang commented that the error could be due to the complications associated with the direct translation of white croaker in Chinese. S. Lin

concluded that she wrote a letter to the editor informing them of the error.

- J. Forester suggested that it might be difficult for community members to visualize the fish of concern, and that perhaps a 3-dimensional model could be utilized to aid outreach workers when educating the public. S. Lin replied that a similar material is in place - cloth fish that were constructed for the program's fishing game. Gabrielle Dorr (NOAA/MSRP) suggested that perhaps the program could utilize realistic rubber models of the five DNC fish.
- H. Wang suggested that HCC should expand its outreach efforts to Chinese-language schools and the Chinatown area of Los Angeles.

## VI. Partners' Updates/Announcements - All Partners

### A. EPA Remediation - C. White (EPA)

- The Record of Decision (ROD) for cleaning-up the Palos Verdes Shelf was signed this past fall.
- Before EPA can place the thin silt cap on the outfall area, baseline surveys measuring contaminant concentrations in the sediment, water columns and fish around the outfalls must first be collected:
  - *Sediment Sampling*: Thanks to the Los Angeles County Sanitation District (LACSD), 57 sediment cores have already been collected. This will be the first time since 1992 that sediment at depth will be analyzed for DDT and DDT-daughter products. The first half of this data set has already been analyzed.
  - *Water Sampling*: EPA and Southern California Coastal Water Research Project (SCCWRP) are currently working together to analyze contaminant concentrations in the water column. To do so, devices will be deployed close to the ocean floor and throughout the depth of water column to determine the extent to which contaminants are coming off the sediment and then where these contaminants are being transported. Since the clean-up goal for water is so low, it is going to be very difficult to measure differences before and after the cap is in place.
  - *Fish Tracking*: EPA will also be tracking fish around the outfalls to determine where they are getting their body burden. EPA will be working with NOAA and Professor Chris Lowe, a national expert on fish tracking, via acoustic telemetry. Over the two year study period, 200 fish will be collected: 50 barred sand bass and 150 white croaker. These fish will be affixed with acoustic tags that will trace their movement. Some fish will be collected for tissue sampling, which will be analyzed by NOAA. This fish tracking will answer a number of interesting questions related to where fish are obtaining their body burden. For example, barred sand bass spawns in the Huntington Flats, and it is presently unknown if the fish are first contaminated around

the Palos Verdes Shelf and then spawn, or if there is a population that is not being examined that obtains their body burden in the flats.

- In January, the cap design was discussed during meetings with the project's technical advisory committee and contracted engineering firm.
- Another component of the ROD is the completion of the Seafood Consumption Study. The survey will determine the fish species that are being caught and consumed in the impacted area; characterize exposures of general fishing populations to DDTs and PCBs from consumption of fish and shellfish; identify demographic and ethnic subgroups within the general fishing population that may be consuming large quantities of contaminants; and finally, provide the quantitative data to EPA needed to determine whether the existing human health risk assessment needs to be revised before issuing a final ROD.
- Before moving forward with the study, which was awarded to S. Groner Associates (SGA), approval needs to be obtained from the Office of Management and Budget (OMB). Once OMB signs off on the survey, survey administration will begin hopefully at the end of the summer/early fall. Throughout the process, FCEC will be heavily involved in light of the collaborative's significant stake in the study as well as the expertise that each member of the collaborative can offer to the project.

#### Questions/Comments

- Riz Sarmiento (ITSI) asked if the sensors for the fish tracking will span the entire ban area. C. White explained that the sensors will not span the entire area because they can not be installed along a slope or on reefs. J. Boyce added that sensors will also be placed on boats.
- C. White noted that the installation of these submerged sensors will also allow other organizations or studies to track fish that they tag because any fish with a tag that passes the sensor will be tracked.
- R. Sarmiento asked if each fish is tagged individually, to which C. White answered that they were tagged individually.
- T. Chauvel asked if the sensors are submerged, suspended from the sea bed. C. White confirmed that they were.
- T. Chauvel also suggested that a financial incentive could be offered to anglers who return tagged fish to EPA. C. White agreed that a reinforcement is needed, such as a tote bag, t-shirt or the like. The EPA and FCEC website in addition to the angler outreach team will be utilized to spread the message.

#### B. MSRP - G. Dorr

- The MSRP fish card and the "What's the Catch" comic book have been translated into Chinese with the help of the Asian Youth Center (AYC). The artwork for the Chinese-language comic book was also modified to reflect the culture of the Chinese community.
- *Bald Eagle Restoration:*

- Over 60 bald eagles were released on the Channel Islands and are currently being tracked.
- Four nests are currently on Santa Rosa Island; one of which has hatched, which is the first time a nest has hatched on that island since 1950.
- Three nests have hatched on Santa Cruz.
- Six nests have hatched on Catalina Island.
- The “Eagle Cam” has become extremely popular, and has accrued a faithful following of community members and biologists who track the behaviors and activities of the eagles. NOAA/MSRP scientists oftentimes utilize these notes and logs in their own research.
- On May 27, a media banding event will take place at the Parks and Recreation office in Ventura. Live streaming video captured by the “Eagle Cam” will show the testing and tagging of the newly hatched eagles.
- *Sea Bird Restoration*: Illustrations of common sea birds were just recently completed and will be used for the development of an educational material. Information on nesting times and disturbances will also most likely be included in this material, which will come out this summer.
- *Fish Restoration*:
  - High tech interactive educational kiosks have been installed at two locations: the Huntington Beach Nature Center and the Redondo Sea Lab. Additional kiosks might also be installed at the Cabrillo Marine Aquarium and the Long Beach Aquarium of the Pacific.
  - A “Fish Cam” has also been installed in the Huntington Beach wetlands. NOAA/MSRP may develop a YouStream channel showing this live feed.
  - *Belmont Pier Artificial Reef Project*: all biological services have been completed and the environmental assessment documents are in progress. There is a possibility that the reef will be completed by late next year.
- *Phase II Restoration Planning*: The Phase II plan will document MSRP’s strategy for allocating the remaining funds on restoration work related to the PV Shelf. MSRP will hold an open house to discuss the forthcoming document by the end of this year. Before finalizing the document, MSRP will present and discuss the plan with the FCEC partners.

#### Questions/Comments

- No questions/comments.