DECEMBER 12 MEETING NOTES

NEXT MEETING DATE SCHEDULED FOR: MARCH 13, 2013

INTERAGENCY COORDINATING COMMITTEE (IACC) JOINT MARINAS AND RECREATIONAL BOATING

Introductions and Announcements	**10:00 AM - 10:10 AM**
Jack Gregg, California Coastal Commission (CCC)	*Time: 10 Minutes*
Jowin Cheung, State Water Resources Control Board (SWRCB)	

Meeting Attendees: Jack Gregg,CCC; Nan Singhasemanon (Department of Pesticide Regulation [DPR]); Jowin Cheung, SWRCB; Lisa Corvington, Department of Fish and Game; Errin Kramer-Wilt, California Ocean Science Trust (OST); Clare O'Reilly, Ocean Protection Council (OPC); Erin Prahler,Center for Ocean Solution (COS); Gail Ashton, Smithsonian Environmental Research Center (SERC), James Muller, San Francisco Estuary Partnership (SFEP); Karen McDowell, SFEP; Andrew Bleier, KECO Inc. USA; Kevin Atkinson, Department of Boating and Waterways (DBW);

Phone Attendees: Leigh Johnson (UC Extension); Athar Khan (RB-8); Ray Hiemstra (Orange County Coast Keeper); Jenny Newman (RB-4); Holly Grover (RB-5); Iffy Davis (EPA); Vivian Matuk (CCC, DBW);

All attachments for the IACC and Joint Marinas and Recreational Boating workgroup can be found on the CCC website.

Recreational and Fishing Vessels as Vectors for Marine AIS	**10:10 AM - 10:40 AM**
In California: Current Situation And Management Options	*Time: 30 Minutes*
Errin Kramer-Wilt, OST; Erin Prahler, COS; Gail Ashton, SERC	

Clare O'Reilly from OPC opened the presentation by explaining that the OPC funded the California OST to evaluate vectors of aquatic invasive species (AIS) in California. OST's mission is to "ensure that the best available science is applied to California policies and ocean management to successfully maintain a healthy, resilient, and productive ocean and coast."

Errin Kramer-Wilt of OST explained that a relative risk assessment was conducted on different invasive species introduction scenarios for state waters, focusing on six pathways (vectors) including commercial fishing, recreational boating, live bait vendors, live imported seafood, aquariums and aquaculture. OST assembled three teams of aquatic invasive species experts, each of which will study two of the high priority vectors listed above. The teams are using a combination of literature and database review, with direct sampling and interviews being employed where appropriate. Following the completion of the six vector risk assessments, OST is planning to conduct a multidisciplinary risk analysis across vectors, which will result in more specific recommendations to the State about the relative risks of each vector and the costs and opportunities of management options.

Erin Proehler of COS discussed the policy options for limiting introduction of AIS focusing on prevention, targeting high risk vectors, seeking complementary options and recognizing limitation of funds for this work. One idea is to fund a study of the fuel savings on boats that have hull cleaning before transits in order to support outreach and education. Another is to add a section to the Dockwalkers outreach program on reducing AIS, but there was concern that this outreach program already has a full plate. They also are considering the benefits of licensing of underwater hull cleaners to promote BMPs and gather information on current practices. They would like to find ways to get more information on practices of commercial fishermen (regarding hull cleaning), but it is difficult to convince this group to provide information voluntarily. The group would welcome participation from other entities that can help facilitate data collection or information sharing on this topic. More info can be found at:

Website: http://calost.org/science-initiatives/?page=aquatic-invasive-species
Factsheet: http://calost.org/pdf/science-initiatives/ais/AIS_Handout.pdf

Related items with this section: Recreational and Fishing Vessels as Vectors for Marine Aquatic Invasive Species in California 121212.pdf

Clean Vessel Act Program: Preventing Sewage Discharge Using Innovative Strategies	**10:40 AM - 11:00 AM** *Time: 20 Minutes*
James Muller, SFEP	

James Muller works for the SFEP and among other things fulfills a contract to the California DBW to educate the boating public about ways to keep sewage out of state waters. Mr. Muller reminded the audience that SFEP is not regulatory and that the work they do to promote prevention of sewage discharge from boats is an outreach and education program. The program focuses on ways to keep pathogens from boating activities out of the water and does not deal with hazardous wastes. Getting boaters to make the use of pump-outs as a standard practice is made difficult by long standing practices of boaters and lack of understanding of the potential adverse impacts. Part of his work is to convince boat owners that discharge of human wastes into state waters is a serious and controllable issue, in addition to being illegal. It is difficult for regulatory agencies to have an effective enforcement program since the evidence for releases is very short lived and it only takes a few chronic scofflaws to impact water quality. In addition, there are limited funds for outreach to boaters about this issue.

One of the program messages is that marinas that install pump out systems can have up to 75% of the installation costs funded by the federal Clean Vessel Act grant program. These grants do come with some responsibilities, including tracking the use and maintenance of the pump-out facilities and making them available to the public. One of the methods of the SFEP program is to periodically provide free pump-outs to groups of boaters so they understand how the systems work and can hear about the benefits of using pump-outs.

More info on SFEP programs can be found at:http://sfep.sfei.org/our-projects/water-quality-improvement/boatin/. And more info on the Clean Vessel Act grant program is at: http://www.dbw.ca.gov/Funding/Pumpout.aspx

Related items with this section: Clean Vessel Act Program Boater Education Program 121212.pdf

In-Slip Sewage Pump Out Systems	**11:00 AM - 11:40 AM**
Andrew Bleier, KECO Inc. USA	*Time: 40 Minutes*

Andrew Bleier, representing KECO Pump-a-Head, Inc., spoke to the group about different types of sewage pump out systems and their history. He said the pump-outs were primarily placed on fuel docks beginning in the 1950's. During the 1970's and 1980's thousands of systems were installed to bring marinas into compliance with advancing water quality protection regulations. Over the years Mr. Bleier's company has found that access to the pump out equipment is one of the main obstacles to acceptance and use of pump-outs by boaters. KECO developed and sells a variety of mobile systems, since it is often easier to move the pump-out system along the docks to a boat, than to move the boat. Boaters can be discouraged when there is a line of boats waiting to use a pump-out and they need to maintain their position in a busy waterway. The mobile units can be motorized or moved by hand, can be secured so only used by trained individuals and can be made to shut off if there is a leak in the system.

Another way to improve access to pump-out systems is to install a fixed pumping system at the head of the docks and extend fixed piping under or along the docks to hydrants distributed through-out the marina. These centralized pump-out systems have been in use since the 1980's and they are usually designed so that a flexible hose from the hydrants to the boat is no longer than about 50 feet. The pumps are usually on the floating docks so that the pump is at the same elevation as the hydrants, otherwise tidal changes would drastically affect pumping efficiency.

The systems use sealed pipes and vacuum pumps so that any leaks in the system can immediately be detected due to changes in pumping performance. Various pipe materials and pump types have been used, but at this time KECO recommends HDPE pipe because the joints are less likely to leak or separate and peristaltic pumps since they can maintain a vacuum and do not need to be primed. The hydrants currently sold by KECO utilize two valves so that the system cannot operate unless the hydrants and hoses are properly attached.

While these centralized systems have advantages in making pump-outs more accessible, installation is only practical for new marinas or where floating docks are being completely constructed according to Mr. Bleier. The KECO systems put the pipes and supports under the decking, making installation on existing docks very expensive. More info on pump-outs and KECO can be found at: http://www.pumpahead.com/

Related items with this section: Keco Sewage Pumpout Systems 121212.pdf

Announcements	**11:40 AM - 11:55 AM**
Jack Gregg, CCC	*Time: 15 Minutes*

There were no announcements at the meeting.

Wrap Up and Next Meeting Date	**11:55 AM - 12:00 PM**
Jowin Cheung, SWRCB	*Time: 5 Minutes*

The next meeting date is: Wednesday, March 13, 2013.

ANTIFOULING STRATEGIES (AFS) WORKGROUP

Introductions and Announcements	**1:00 PM - 1:10 PM**
Nan Singhasemanon, Department of Pesticide Regulation (DPR)	*Time: 10 Minutes*

Meeting Attendees: Nan Singhasemanon and Carlos Gutierrez (DPR); Jack Gregg (CCC);; Jowin Cheung (SWRCB); Karen McDowell (SFEP); Andrew Bleier (KECO Inc. USA); Kevin Atkinson, (DBW); Vivian Matuk (CCC/DBW); Bob Palacioz or Miguel Gutierrez (Thunderbolt Wood Treating).

Phone Attendees: Eric Pieters, Rik Breur and Bill Jacobsen (Micanti); Neal Blossom (American Chemet); Iffy Davis and Michael Gobe (US EPA); Rolf Schottle and Michelle Bowman (AMEC); Bill Krauss (APEX); John Kelly (ACA); Leigh Johnson (UC Extension); Katy Wolf (IRTA); Ray Heimstra (OC Coastkeeper); Tom Nielsen (Nielsen-Beaumont Boatyard); Frank Winkelman (Pettit Paint/Kop Coat); John Padera (International Paint); Ignacio Rivera (U.S. Navy SPAWAR); Athar Khan (RB-8), Shana Rapoport (RB-4); Stephanie Bauer, Karen Holman and Michelle White (Port of S.D.); Elizabeth Ellis and David Palazzi (Washington State Dept. of Natural Resources);

A New Way to Prevent Fouling	**1:40 PM - 2:10 PM**
Eric Pieters, Rik Breur & Bill Jacobsen – Micanti	*Time: 30 Minutes*

Dr. Rik Breur the inventor of Thorn-D presented an overview of the antifouling product. Thorn-D is a submersible pliable material engineered with microfibers. Thorn-D sheets (sometimes called foil) form a physical barrier between the boat hull and the surrounding aquatic environment. The product has lasted at least five years so far in the oldest test applications. So, the expected life is still being established. In-water cleaning is easy and can be reduced if the boat is operated occasionally. Thorn-D cannot be applied by a private boat owner yet; at this time it needs to be applied by trained personnel.

Rik showed pictures from test boats in Europe, Florida, and California. In the pictures, fouling was drastically reduced compared to hulls with more traditional coatings. Settlement is not completely prevented though. Single-cell organisms can still settle on the Thorn-D surface. In San Diego Bay, some tube corals have been able to attach on to the surface after 6 months of being in the water; however, Rik said that the fouling can be removed easily with a nylon brush. Thorn-D is also currently being tested on boats in Newport Bay.

Rik then showed hydrodynamic test data that demonstrated Thorn-D's beneficial impact on drag and ripple and wake generation. (See slides for data on drag and flow impacts) Thorn-D can also reduce long-termed fuel consumption.

Athar Khan asked whether surface prepping is needed and what the cost of application is. Rik said wet sanding can be done to help prepare the hull, but it's not necessary. A coating of primer, however, is needed for the application or installation. Rik and Eric Pieters encouraged those who have questions on the technology and product to contact them directly with any questions. Much more details including the presenters' contact info. can be found in the associated PDF file of the presentation.

For more information, visit Micanti's website at www.micanti-usa.com

Related items with this section: Micanti AFS WG presentation.121212.pdf

Treated Wood in Aquatic Environments	**2:10 PM-2:30 PM**
Bob Palacioz or Miguel Gutierrez, Thunderbolt Wood Treating	*Time: 20 Minutes*

Thunderbolt Wood Treating is located in Modesto, CA. Bob gave an overview of the history of wood treatment. For a long time, creosote and pentachlorophenol were the mainstays for treating wood. Then, over the last few decades, waterborne arsenicals such as chromated copper arsenate (CCA) and ammoniacal copper zinc arsenate (ACZA) became more common. Beginning in 2004, there has been a move away from CCA, particularly in the residential setting where non-arsenical copper-based treatments are preferred. Ammoniacal copper quats (ACQ) and copper azoles (CA) are two groups of CCA-replacement compounds.

ACQ has been used in splash zones and ACQ-treated wood has been used in Pismo Beach, Imperial Beach, Mill Valley and San Clemente. However ACZA or Chemonite is the primary waterborne treatment approved for use in salt water immersion applications.

Miguel talked about the treatment process at Thunderbolt. He also explained the process behind a polyurea spray coating system called Specguard that is used to encapsulate ACZA treated wood. This prevents biocides from leaching into the aquatic environment and helps add durability to the treated wood. This system is used at the Santa Cruz Boardwalk and Santa Cruz Harbor. Treated and coated pilings have last at Santa Cruz Harbor for about 10 years.

In 1904, the American Wood Protection Association (AWPA) was founded to establish standards for the wood preserving industry in U.S. For example, AWPA determines if a preservative is effective and how much of it is needed. AWPA also provides a technical forum for industry, researcher, and users to interact. Moreover, it protects consumers by ensuring uniform product performance.

For more information, visit www.thunderboltwoodtreating.com.

Elizabeth Ellis asked whether the polyurea coating system can be used without an ACZA base coat. Miguel replied that yes, it could, but if the coating has been compromised physically, the wood underneath would then be subjected to pest pressures.

Miguel added that a typical cost for an ACZA treated 60-foot utility pole is about $1,600. Cost for the treated pole coated with polyurea is about $3,100.

Related items with this section: Treated Wood in Aquatic Environments.pdf; Aquatic Guide_August06.pdf; BMP Revise 4-3-12.pdf; Chemonite Brochure 2010; Dr Kenn Brooks ACZA Study #1.pdf; and SG E-375-08 Marine Grade Polyurea Brochure.pdf

DPR Reevaluation Update	**2:30 PM - 2:50 PM**
Carlos Gutierrez, DPR	*Time: 20 Minutes*

Based on the paint-related data submitted by registrants, DPR determined that most copper based AFPs currently belong to either the copolymer (ablative) or the epoxy ester categories. All paint type and leach rate data have been submitted by registrants. Nan mentioned that as new copper AFP products are registered by DPR, they automatically enter reevaluation and must submit the same data that are required by affected registrants.

In the spring and summer of 2012, DPR worked with registrants to develop an underwater hull cleaning study. The study, which is being conducted in San Diego Bay, began in late summer and is still in progress. DPR anticipates the report, which will be used to refine the impacts of passive leaching and underwater hull cleaning in marinas to be submitted in the second quarter of 2013. The researchers will concurrently be pursuing the publication of the study in a peer-reviewed scientific journal. Nan noted that DPR cannot discuss preliminary results or much detail regarding the study at this time, but once the report is published, all of the data will be publically available.

Other Agency Updates	**2:50 PM - 3:00 PM**
All	*Time: 10 Minutes*

Karen Holman reiterated that boater participation in the Port's 319h grant's subsidy program for copper hull paint conversion has been poor. Ray Hiemstra said that the same problem exists for the conversion project for Lower Newport Bay (LNB).

However, the Port of San Diego will soon increase the subsidy amount to help address the relatively large upfront cost associated with biocide-free paints. Karen is hopeful that with increased funding, more SIYB boaters will take advantage of the program, which is set to end on June, 30, 2014 or earlier if funds are depleted. Ray announced that he has similar plans to increase conversion subsidies for LNB.

Shana Rapoport mentioned that the Los Angeles Regional Water Quality Control Board is reconsidering the Marina del Rey (MdR) Toxics TMDL that was originally developed in 2006. The existing TMDL addressed copper and zinc in MdR sediment. There is now interest by the regional board to regulate toxicants in the water column of the boat basin. Nan suggested that perhaps Shana could give the workgroup a more detailed update on MdR in upcoming meetings.

Next meeting date is Wednesday, March 13, 2013.