

**INTERAGENCY COORDINATING COMMITTEE (IACC)
JOINT MARINAS AND RECREATIONAL BOATING AND
ANTIFOULING STRATEGIES (AFS) WORKGROUP**

MINUTES FOR THE DECEMBER 7, 2011 MEETING

SAVE THE DATE: The next in-person meeting is scheduled for: **March 14, 2012**

Meeting Attendees: Nan Singhasemanon; Sarah Sugar (California State Lands Commission); Kathy O'Brien (Sun Harbor Marina); Tim Leathers (Clean Marina Program); Alan White (CalRecycle); Mara Noelle, Jack Gregg, Lesley Ewing, & Eben Schwartz (California Coastal Commission)

Phone Attendees: Christopher Scianni (California State Lands Commission); Neal Blossom (American Chemet); Vivian Matuk (CCC/Department of Boating and Waterways); Karen McDowell & James Muller (San Francisco Estuary Project); Jim Haussener (California Marine Affairs & Navigation Conference); Virginia St. Jean (SF Department of Public Health); Linda Candelaria (Santa Ana Regional Board); Jenny Newman (Los Angeles Regional Board); Michelle Bowman (AMEC); Ray Heimstra (Orange County Coast Keeper); Ignacio Rivera – Duarte (US Navy), John Hopewell (American Coatings Association); Marie Hobson, Frank Szafranski (International Paint); Bruce Posthumus (San Diego Regional Board)

Marina IACC Meeting

1. Announcements and Updates

California Clean Boating Network - Vivian Matuk

Vivian Matuk announced that the next combined Northern California & Delta CCBN Chapters meeting will be on Wednesday, December 14th at the Oakland Yacht Club (Regatta Room) from 9:30 – 1 p.m. Thanks to Mr. Doug Hipsley, Oakland Yacht Club and the Club staff. (Editor's note: It was an excellent meeting)

During this meeting, John Craig, the principal Race Officer of America's Cup Race Management 34th America's Cup, will provide meeting participants with an overview of the AC34 event. Mr. Craig is also going to provide information on how boaters, marina and yacht club operators can participate in the event, and what resources will be available to them.

Following, Vivian Matuk, the Environmental Boating Program Coordinator with the California Department of Boating and Waterways and California Coastal Commission will provide an update about the 2011 activities for the Statewide Boating Clean and Green and the Keep the Delta Clean Programs.

Then, James Muller with the San Francisco Estuary Partnership will be presenting on the recent Honey Pot Days SFEP has piloted in the Sacramento Delta and San Francisco Bay. Originally piloted by the Santa Monica Bay Restoration Foundation, Honey Pot Days combine outreach and education with free mobile pumpouts to fulfill two goals; 1) To increase awareness of sewage related issues and 2) To promote mobile pumpout service companies in the bay and delta as viable, cost effective alternatives to pumping out dock side. Boater surveys administered by the Department of Boating and Waterways and the California Coastal Commission, among other studies and papers, have highlighted convenience as a major factor that boaters consider when deciding how to dispose of their sewage. By improving boater education concerning sewage discharges and letting them know about mobile pumpout services, SFEP hopes to curb illegal sewage discharges throughout the bay and delta. James will review the two very different event strategies employed in the Bay and Delta. He will also review lessons learned that SFEP will use in the future to increase the effectiveness of these events.

Finally, Karen Holman Manager, Environmental Programs Port of San Diego will be talking about the Port of San Diego Hull Cleaning Permit Process and Plan, next steps, grant funds for hull paint transition, and the CA Senate Bill 623.

2. Presentations

California Clean Marina Program (CMP) Review Update- Jack Gregg

CMP, then as now, had a small staff and the work was conducted on a part time basis, partly paid and partly volunteer.

- CMP responded to the 2007 review by the state agency group by meeting with members of the IACC, agreeing with many comments and disagreeing with some.
- CMP made some changes to their CMP Manual and checklist in 2010, but with CMP staff working part time, loss of state staff, and other priorities, many responses were never memorialized as changes to the CMP documents, or formal responses where the CMP disagreed with the comments. In 2011, CCC staff was preparing for another round of CMP review, but it became apparent that the 2007 review was never completed and implemented. I made the decision to not present any new comments until we finalize the old ones.
- Mara Noelle, Kendall Webster and I conducted a forensic evaluation of the responses to comments, the current CMP manual and CMP checklist in October. We provided a list of comments still requiring a response to Tim Leathers and I have been meeting with him to get final agreement on the changes they will make.

(Note: There was one more meeting Friday December 9, where the 2007 comments were finalized. The negotiated changes will be made to the CMP website.)

- Tim is optimistic that can implement the remaining responses soon (January?), but he is still unpaid and understaffed. Completion of this effort is a priority for our staff and so we will keep working with Tim until it gets done. The CCC will then compose a letter for the CMP stating that the 2007 review is complete.
- During this final comment resolution Mara and Kendall have been identifying new recommendations for the CMP from their work and from input from other agencies (e.g., Invasive Species control).
- CCC staff will work with Tim to identify a scope and schedule for the next round of comments and responses for the program.
- It is anticipated the project would be completed within the next 12 months or less.

California Clean Marina Program Review Update - Tim Leathers

- The CMP is working to incorporate the negotiated changes into the manual and checklist.
- Approximately 2/3 of the comments are done and will get incorporated into the manual
- The CMP is a volunteer organization. The potential for regulations is scary to the recreational boating industry as the program continues to grow
- The marina industry wants to cooperate with regulators and will work with them on all issues to eliminate the need for additional regulation.

Where's All This Trash Coming From? Land-based Sources of Marine Debris - Eben Schwartz, California Coastal Commission

Copies of the speaker's presentations are provided on the [California Coastal Commission](#) website.

Marine debris issues are not new. Impacts to marine species from derelict fishing gear are well-documented. Some marine trash continues to "ghost fish" and kill animals as it floats in the ocean. There have been laws against dumping in the ocean for 30 years. If so, why was marine debris increasing? It was originally thought that most marine debris came from the ocean, but further analysis indicates that much of the marine debris is from land-based sources.

The North Pacific Gyre, also known as the Great Pacific Garbage Patch is an area in the middle of the Pacific Ocean where currents concentrate floating debris. The gyres are not islands of floating trash, but more like minestrone soup with bits and pieces floating around. The gyres are massive in size holding tons of trash. Gyre garbage is largely from land based sources. Much of land based trash is single use disposable plastic products.

While plastic alone can be fairly inert, it can have adverse impacts on marine life in many ways. Wildlife can be trapped in debris or ingest small pieces of trash that can have effects such as making a species more buoyant or feel full so they don't eat food with nourishment and become weakened. For example, all the Laysan albatross on an island in the Pacific have plastics in their system.

Industrial discharge includes nurdles, which are the raw materials for other plastic products. Nurdles are the single biggest trash problem on Southern California beaches by a factor of 100. They are cheap to produce and easy to spill during transportation and production. There are about 9,000 manufactures in LA that use nurdles, so now nurdles enter the LA River by the millions.

Ocean researchers and environmental agencies are just now beginning to get a handle on the toxicological impacts of nurdles and small plastic particles (micro-plastics). New research indicates toxic chemicals in water (e.g., PCB's and PAHs), can be absorbed by the plastics, concentrating these chemicals into the tiny plastic pieces. The concentrated toxins can then be ingested with the plastics and move into the food chain.

On Coastal Clean-up day, 80% of the trash pieces collected are single use plastic products, and 40% are cigarette butts. Plastic is present throughout the water column. Sheets of plastic can settle on the ocean floor and form an impervious layer that prevents exchange between organisms and their natural environment.

California's Coastal Cleanup Day is an annual event that occurs along the entire coast of California. It is the longest running and the largest volunteer event in the state. Coastal Cleanup Day has moved inland, and now 53 of the 58 counties participate. Santa Cruz has noticed a 1/3 decrease in trash over the years from the clean-up event there. But the trash keeps coming, so the goal is to solve the problem at the source. The State Water Resources Control Board has established regulations to control the amount of trash entering certain California waters. Total Daily Maximum Loads (TMDL's) have been established for some southern California waterways and for the San Francisco Bay Area. The TMDL's are having a greater success of reducing trash in the water than expected. There is now an international coastal clean up day in 105 countries. California remains the largest event. There is a lot of international interest in marine debris prevention. In the past, efforts were focused on clean-up of trash, not prevention. There is a move to bring marine debris problems into discussions on production and consumption, and extended producer responsibility.

The state is involved in many educational campaigns to reduce trash because we are still generating a huge amount of waste. Lots of waste is generated during industrial production. Recycling is not the answer by itself. Even if we can achieve 50% recycling of all trash, the other 50% would still cause adverse impacts.

California's Ocean Protection Council developed a 3 point plan to address marine debris, [An Implementation Strategy for the California Ocean Protection Council Resolution to Reduce and Prevent Ocean Litter](#). Most of this plan is yet to be implemented, but legislation to better control plastic pollution was passed last year. The West Coast Governors' Agreement on Ocean Health identified the lack of coordination as the biggest gap in effectiveness of implementation, and is now developing a comprehensive west coast strategy for prevention and control of marine debris. There is now a group called the West Coast Marine Debris Alliance to cooperatively address marine debris issues on the Pacific Coast from Canada to Mexico. This group could provide footing for other groups to take action to reduce marine debris.

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One of Eben's important messages was in that order to reduce the adverse impacts of trash on coastal waters, one source cannot be the focus; all issues need to be addressed to be effective.

Port & Harbor Damage from the March 11, 2011 Tohoku Oki Tsunami – Lesley Ewing, Sr. Coastal Engineer, California Coastal Commission

Copies of the speaker's presentations are provided on the [California Coastal Commission](#) website.

Lesley visited Crescent City to survey the tsunami damage a day after the Tohoku Oki earthquake and tsunami. She traveled to Japan with an international team from the American Society of Civil Engineers 3 months after the tsunami. The 2001 Japan earthquake was one of the largest on record. Twenty thousand people are missing or killed, and one person in the US was killed. People in Japan are still displaced from the tsunami and as a result of the damage to the nuclear reactor.

The nuclear reactor dropped a meter in elevation from the earthquake.

The mechanisms that caused the Tohoku Oki earthquake are similar to that of the Cascadian Subduction Zone along the west coast. The Cascadian Subduction Zone is thought to experience an earthquake every 400 years, and the last earthquake was in the 1700's.

California is closer to Japan after the earthquake because Japan has moved east. There was about 1 meter of subduction along the coast of Japan, and areas that used to be dry are now underwater. Japan's coast is very much like California's north coast with trees growing along the steep cliffs, and people residing in the valleys and low bottom lands, like the floodplains near Oxnard.

The 10 meter high seawall in Noda Japan was overtopped during the tsunami. The community behind the seawall was inundated. Scour occurred on beaches, banks, and along foundations of structures. The tsunami impacted the breakwaters by either undermining the structure or overtopping.

When concrete is submerged, it can float. A large breakwater that was only 2 – 3 years old was damaged from rotating off its foundation and moving inland. It will cost 1.5 billion dollars to reconstruct this seawall. The tsunami hit 26 minutes after the earthquake. The breakwater made a difference between the water hitting the town in 13 minutes or 20 minutes. The seawall gave people an extra 8 minutes to get to a higher location. So, it may be worth the cost to repair the breakwater.

The port lost power. Cranes moving containers between ships and port suddenly stopped. Ships moved out to sea before the tsunami came ashore. One ship ripped out the arm of the crane to move as fast as possible. Cranes were damaged and became obstructions to shipping.

Twenty-four million tons of debris was generated from the tsunami. The Japanese are sorting the trash and are removing items such as pharmaceuticals. It is estimated that 20 million tons of trash are in the ocean.

In Crescent City Harbor, the damage was increased in the inner boat basin, not from high water surges, but from extreme currents. A gyre was created in the harbor.

The repair work from the 2006 tsunami damage to the Crescent City Harbor was scheduled to begin in about two weeks after the tsunami occurred. The boats in the Harbor had 10 hours of warning to move to sea. At sea, the tsunami is more like a big wave, the surge and increased velocity of the wave is triggered when the wave hits land. The boats could not return to Crescent City Harbor and most were able to move to Eureka docks. If a tsunami hit the entire California coast at one time, the boats may not have a harbor for safe mooring.

The Crescent city tsunami came ashore during low tide; therefore, there was very little overland flooding. The damage resulted from powerful currents. Debris was line-up on each end of the inner boat basin.

An emergency command center was established. A sheen from fuel and oil was visible on the water surface. Boats were raised during the emergency response to remove the oil and gasoline, and were sunk again for the harbor or owner to remove later.

The harbor is designed for a 50 year tsunami event. The breakwater became the standard for the design of the harbor structures. This breakwater functions well, but cannot alleviate the extreme currents and fast moving water within the harbor basin.

A day after the tsunami, an attempt was made to install a boom along the mouth of a creek to protect the creek from trash, oil and fuel from the harbor. The currents from the tsunami were so strong, the boom broke 4 times.

In California, an estimated 50 million dollars of damage occurred from the tsunami from Santa Cruz to Crescent City. The Santa Cruz Harbor had oil spilled during the event.

For contingency planning, events may exceed design standards, however, efforts will be made to avoid catastrophic failures. This will reduce long term consequences. Breakwaters are still considered effective.

Antifouling Strategies Workgroup Related Updates **Nan Singhasemanon, Department of Pesticide Regulation**

Next meeting is Nan said that not much appeared to have transpired in terms of developments associated with the Antifouling Strategies Workgroup since the previous meeting. Also, he had trouble scheduling key speakers for this meeting so Nan is providing an update after checking with many of the usual participants.

SB 623 Update – This is now a 2-year Senate bill. The Department of Pesticide Regulation (DPR) is getting questions and inquiries from the legislature. So, it would appear that some conversations are taking place behind the scene and we can probably expect to see activity on the bill in the early part of 2012.

Katy Wolf from The Institute for Research and Technical Assistance (IRTA) held a meeting in San Francisco sponsored by the environmental Protection Agency (EPA) in October. The purpose of the meeting was to generate interest and funding for a local experiment to test alternatives to copper hull paint in the San Francisco Bay. IRTA is looking for partners and a funding source. Nan added that there may be grant funding available from DPR's Alliance Program. Nan would work with Katy to discuss this as a potential resource.

The US Navy SPAWAR office and The University of San Diego developed a scientific poster that was presented at the National SETAC (Society of Environmental Toxicology and Chemistry) in Baltimore. The poster highlighted work to develop a water effects ratio and also use the Biotic Ligand Model (BLM) for the Shelter Island Yacht Basin. Nan will send the poster to the group.

The University of San Diego has data and has worked on a paper, but a paper has not yet been submitted for publication into a peer-reviewed journal. Ignacio Rivera from the US Navy or a USD researcher will present this work in March.

There is activity relating to the salt water BLM and Nan said to not be surprised if it appears as an item in the Federal Register. Note that the BLM for freshwater has already been completed. A scientific peer-review process is happening, Nan and Linda Candelaria are two of several reviewers involved.

Linda Candelaria reported that the 319 H grant is being used in Balboa Yacht Club in Lower Newport Bay to convert boats to alternative non-copper paints. Three more boats are interested in the hull paint conversion program. The paint manufactures are trying to come up with a non-copper paint that can be rolled on instead of spraying. Other options include a sealer to go over the copper paint. At this time, alternative coatings cannot be painted over copper paints.

So far, boatyards don't want to cooperate. Coastkeepers are working with boatyards to convert boat hulls to alternative paints. They now have a boatyard to work with them on this project.

Karen Holman – Port of San Diego

The Port of San Diego is providing financial assistance, through a 319h grant awarded by the State Water Resources Control Board, for boat owners who will convert their boats to non-copper hull paint. The Port conducted a large kick-off event in August and has received a lot of interest since that time. However, no boats have been converted yet. It is anticipated that most of the conversions will occur in the spring in preparation for summer boating.

The Port has also developed regulations for in-water hull cleaning activities which require the use of Best Management Practices during hull cleaning and require that businesses obtain permits from the Port. The new regulations became effective November 1, 2011. Since that time, approximately 50 companies have obtained permits. The Port is also responsible for enforcing the regulations and is using an administrative process to educate hull cleaners and provide enforcement when necessary.