

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

MINUTES FOR THE DECEMBER 8, 2010 MEETING

SAVE THE DATE: The next in-person meeting is scheduled for

Wednesday March 9, 2011.

Meeting Attendees: Molly Munz and Randy Yates (State Water Resources Control Board); Nan Singhasemanon (Department of Pesticide Regulation); Alan White (Cal Recycles); Dan Garza and Suhasini Patel (Department of Toxic Substances Control); Mara Noelle (CA Coastal Commission), Jonathan Thompson (US Fish and Wildlife Service); Tim Leathers (Clean Marina California Program); Sarah Sugar and Chris Scianni (State Lands Commission); Holly Gellerman and Lisa Corvington (Department of Fish and Game); Kendall Blake (EPaint); Manuel Maqueda (BlooSee and the Plastic Pollution Coalition).

Phone In: Vivian Matuk (CCC/Department of Boating and Waterways); Jack Gregg (CA Coastal Commission); Jenny Newman and Eric Wu (Los Angeles Regional Water Quality Control Board); Ilana Gauss and Virginia St. Jean (San Francisco Department of Public Health); Collin Kelly (Orange County Coast Keeper); Neil Blossom (American Chemet); Robby Dean (Clean Marina California Program); Michelle Bowman (EMAC); Chela Zabin (Smithsonian Institute).

Marina IACC Meeting

1. Announcements

Time and Duration of Meetings Change The Marinas and Recreational Boating Meeting will be from 10 am to noon. The Antifouling Strategy Meeting has expanded and is now from 1 to 3 pm. There will be a lunch break from 12 to 1 pm.

Next Years Schedule The dates of the meetings scheduled in 2011 are March 9, June 8, September 7, and December 7.

Delta and Northern California Clean Boating Network The next meeting of this group headed by Vivian Matuk is tomorrow, December 9, at the Brisbane Marina.

2. Updates

Molly Munz - State Board Activities

Molly Munz is changing jobs within the State Board. She will no longer be attending the meetings; however, she will still be available for questions as needed. The new State Board representative is Randy Yates.

1. The State Board is working with stakeholders to conduct studies by funding a 319h grant of 600 thousand dollars to Shelter Island Marina in San Diego for financial incentives to repaint boats with non-copper based paints.
2. The State Board sent a letter to Assemblyman Silva in response to his request for additional information on the proposed coastal marinas permit.
3. Creek Watch is an iPhone application to monitor the health of a watershed. The Creek Watch application snaps a picture and reports how much water and trash is seen. The data is shared with water control boards to track pollution and manage water resources. The Creek Watch App uses four pieces of data:
 1. The amount of water: empty, some, or full.
 2. The rate of flow: still, moving slowly, or moving fast.
 3. The amount of trash: none, some (a few pieces), or a lot (10 or more pieces).
 4. A picture of the waterway.

This data helps watershed groups, agencies and scientists track pollution, manage water resources, and plan environmental programs. Here is the link: <http://creekwatch.researchlabs.ibm.com>.

Vivian Matuk – Flares Subcommittee

The flares subcommittee has been meeting about every three weeks to address the lack of options for expired marine flare disposal in California. We did a lot of work researching information about flares and companies that produce them, and how flare disposal is managed in other states and countries. The group produced a fact sheet. We determined that Orion was the largest manufacturer of flares for California and contacted the company about options for a take back program or other producer responsibility program.

The subcommittee had a conference call with Bob Defonte from Orion in November and group then met with Mr. Defonte in person on December 6. The group continues to work with Mr. Defonte to create a pilot program to collect expired marine flare and ship them back to Orion or to a disposal company. A small group will meet with the US Department of Transportation in Sacramento on December 13.

Vivian Matuk also reported about a new working group called the San Francisco Bay Area Marinas and Yacht Clubs Oil Spill Preparedness

Working Group. This working group is comprised of representatives from OSPR, the Coast Guard, Cal EMA, the Office of Emergency Services, the Port Captains and Harbormasters Association, Marina Recreation Association, the Clean Marinas Program, Pacific Inter-Yacht Club Association, San Francisco Bay Conservation and Development Commission, Cal Boating and the California Coastal Commission's Boating Clean and Green Program. This working group will help to develop a list of involved agencies and their contact procedures, identify resources available to marinas and yacht clubs and their location, as well as other important resources identified during our meetings. The resources and information developed by the working group will be available to all the marinas and yacht clubs in the Bay Area. A long term goal for this group will be to plan a future oil spill drill for marinas and yacht clubs in the Bay.

Kendall Blake – EPaint

A representative from EPaint, Kendall Blake, has joined the group. He is a sailor from the Bay Area that is participating on his own time. EPaint produces copper free hull paints and alternative coatings. Check out their website at: <http://www.epaint.com>

Virginia St. Jean – San Francisco Department of Health

The San Francisco Department of Public Health is partnering with the Coastal Commission and the Department of Toxic Substances Control to produce helpful materials to boaters in adopting alternatives to toxic products. A wallet-size Purchasing Guide is being developed that aims to be informative and user-friendly.

Unknown Speaker

Research is being conducted on boat washing and boat washing areas

3. Presentations

Holly Gellerman – Department of Fish and Game Invasive Species Program

Biography - Holly Gellerman is a Staff Environmental Scientist with California Department of Fish and Game's (CDFG) Invasive Species Program. Holly currently works to prevent and reduce invasive species throughout California with a focus on the San Francisco Bay-Delta ecosystem. Prior to CDFG, Holly worked on several seabird and island conservation projects including eradication of an invasive grass from Laysan Island, Hawaii, and eradication of black rats from Anacapa Island of the California Channel Islands. Holly received her Bachelors degree in Natural History from Prescott College, Arizona and her Masters in Biological Sciences from Cal Poly at San Luis Obispo, California.

Please see the attached PowerPoint program to access the notes from Holly's presentation. Fish and Game's invasive species website can be accessed through this link: <http://www.dfg.ca.gov/invasives>.

Below are additional comments not included specifically in the PowerPoint notes.

Forty percent of species listed as threatened or endangered in the U.S. are at risk in part or due to invasive species.

Sea squirt (*Botryllus schlosseri*) was first found at Mare Island. It attaches to docks, buoys and other structures.

Green crab (*Carcinus maenas*) is moved around as discarded live bait by people. This species is tolerant of low salinity.

Caulerpa seaweed (*Caulerpa taxifolia*) – It is illegal to import, transport, sell, possess, and release this species.

Note from the Coastal Commission: The California Coastal Commission adds conditions to some Southern California coastal development permits requiring the applicant to survey for Caulerpa as part of baseline studies for development in marinas and on docks in southern California. Here is an example:

Pre-construction Caulerpa Taxifolia Survey

A. Not earlier than 90 days nor later than 30 days prior to commencement or recommencement of any development authorized under this NOID, the Harbor Department shall undertake a survey of the project area and a buffer area at least 10 meters beyond the project area to determine the presence of the invasive alga Caulerpa taxifolia or other non-native invasive aquatic species. The survey shall include a visual examination of the substrate.

B. The survey protocol shall be prepared consistent with the survey protocol required by the Southern California Caulerpa Action Team (SCCAT).

C. Within five (5) business days of completion of the survey, the applicant shall submit the survey: (1) for the review and approval of the Executive Director; and (2) to the Surveillance Subcommittee of the Southern California Caulerpa Action Team (SCCAT).

D. If Caulerpa taxifolia or other non-native invasive aquatic species is found within the project site or buffer areas, the applicant shall not proceed with the project until (1) the applicant provides evidence to the Executive Director that all C. taxifolia discovered within the project site and/or buffer area has been eliminated in a manner that complies with all applicable governmental approval requirements, including but not limited to those of the California Coastal Act, or (2) the applicant has revised the project to avoid

any contact with C. taxifolia. No revisions to the project shall occur unless the Executive Director is immediately notified.

Quagga and Zebra mussels have spread to more than 24 water bodies. There are over 23 occurrences of quaggas in Southern CA and one occurrence of zebra mussels at San Justo in Northern CA. One mussel can produce 1 million eggs per spawning season. The species consumes a lot of plankton. One strategy for control is to work with the public to avoid infestation of non-polluted water bodies.

Marine bait worms come packaged with associated invasive hitchhikers such as seaweed and other invertebrates.

Lisa Corvington - Department of Fish and Game Invasive Species Program

Biography - Lisa Corvington is an Environmental Scientist with CDFG's Invasive Species Program. Lisa works with the California Agencies Aquatic Invasive Species Management Team and the Quagga/Zebra Mussel program. Prior to working with the Invasive Species Program, Lisa worked with CDFG's Fisheries Branch on the Central Valley Genetic Tissue Archive. Lisa received her Bachelors in Environmental Studies from California State University, Sacramento.

Lisa provided an overview of the efforts of the Invasive Species Council. The purpose of the Invasive Species Council is to control invasive species and prevent new invasions. Please review her PowerPoint presentation for the entire discussion; however, additional details are provided below.

There is a specific PH and chemistry associated with quagga and zebra muscles.

DFG's Office of Spill Prevention and Response (OSPR) maintains a data base of invasive species called the California Aquatic Non-native Organism Database (CANOD): <ftp://ftp.dfg.ca.gov/MISP/CANOD>.

The Invasive Species Council of California is chaired by the secretary of the California Department of Food and Agriculture, and vice-chaired by the secretary of the California Natural Resources Agency. The Council appointed a California Invasive Species Advisory Committee which prepared a Strategic Framework document that was solicited for public comment from September 23 to October 22, 2010. The Strategic Framework can be viewed through this link: <http://www.iscc.ca.gov/cisac-strategic-framework.html>.

Chela Zabin - Smithsonian Environmental Research Center and UC Davis

Biography - Chela is a marine ecologist working for the Smithsonian Environmental Research Center and UC Davis, based out of the Romberg Tiburon Center in Marin County. Research focuses on marine invasive species, in particular vectors for invasive species transport and spread; and on impacts and population dynamics of invasive species. They are also involved in native oyster research and restoration. She has an undergraduate degree from UC Santa Cruz and a PhD from the University of Hawaii. Currently, she is working on a marine invasive species risk analysis and biosecurity plan for Micronesia, a restoration plan for native oysters in San Francisco Bay, and a management plan for the invasive Asian kelp, *Undaria pinnatifida*.

Undaria is native to Asia. It is a substrate generalist attaching to boats, docks, floats, ropes, maritime and aquaculture structures, as well as other organisms like mussels and other algae.

It appears to occur only in the subtidal zone in California, although it occurs in the intertidal zone in colder regions. It has a high tolerance for urban environments and for temperature variation, and could spread to Alaska. Part of the life cycle is microscopic.

To detect *Undaria*, focus on surveying the best suitable habitat, especially harbor structures and marinas. *Undaria* can grow on abandoned boats. It needs a hard substrate – not sand or mud. It does not grow in open water.

Undaria was first detected in CA at LA-Long Beach probably arriving attached to a large yacht or commercial vessel. It is believed the vector is small boat traffic and equipment because it shows up in small craft harbors and on recreational and fishing vessels. The one population growing outside of a marina in California to date is in a kelp forest near a mooring at Santa Catalina Island. *Undaria* had spread to Monterey Harbor and then jumped north in 2009 to Pillar Point Harbor in Half Moon Bay and in two locations in San Francisco Bay. It has now been found in Baja California. (Note: not found at Moss Landing or Santa Cruz harbors to date, these are the harbors between Monterey and Pillar Point.)

Sixty marinas in the San Francisco Bay and the islands were checked, but no additional populations of *Undaria* were located. To date, this kelp appears to be found only in marinas and on the wharfs and pilings along the SF waterfront from San Francisco Marina to South Beach Harbor. If a population becomes widely established in the San Francisco Bay, a concern is the potential for this invasive species to spread because many boats travel from San Francisco to other areas along the coast.

The strategy for control includes public outreach and education. A network of people up and down the coast could be developed for early detection of *Undaria* and to conduct rapid response removal projects while populations are still small. The current goal in San Francisco is to reduce

the number of individuals, to slow the spread, and to understand the life history in order to develop a science-based eradication plan. Wakame can be removed by hand. It does not grow from fragments. Hand removal appears to be successful in reducing the number and size of individuals and lowering reproductive output, but needs to be done frequently and thoroughly. It is not a good long-term solution for a large population area.

Researchers also searched for Undaria in Tomales Bay by walking and from kayaks. Undaria, which could potential become a problem for oyster growers, has not been found there. Undaria has also not been found on oyster-restoration substrate at the Marin Rod and Gun Club in San Rafael or the Berkeley Marina.

Find out more about invasive species and Undaria control through this website: http://www.serc.si.edu/labs/marine_invasions/index.aspx.

Eric Wu – Regional Water Quality Control Board – LA County Trash TMDL implementation

Biography – Dr. Eric Wu has a PhD in environmental engineering. He is a senior engineer at the Regional Water Quality Control Board in Los Angeles, and the Unit Chief of a Total Maximum Daily Load (TMDL) program. Dr. Wu developed and implemented the trash TMDLs for Los Angeles and Ventura Counties. His primary responsibility is to develop policies and regulations by working with California EPA and USEPA. He was involved in the issuance of Municipal Separate Storm Sewer System (MS4) Permits.

The Regional Water Quality Control Board established a Total Maximum Daily Load (TMDL) for trash in the Los Angeles County. The city responded by installing trash collectors for the storm drains. Dr. Wu's presentation outlines the efforts he undertook to implement this unique TMDL. Please refer to the PowerPoint presentation for the detailed notes.

The areas with the trash TMDLs contain lakes, estuaries and national parks; however, the numeric target is zero trash. For point sources, zero trash means no discharge of trash. For non-point sources such as open space, harbors, beaches and parks that are not covered by the MS4 permits, zero trash means no trash on the shoreline or waterbodies immediately following each assessment and collection event. There is increasing concern with trash in water bodies and along shorelines.

The program asked responsible municipalities to clean up routinely and after special events. Adaptive management is built into the program. The goal is to document trash quantity collected from each collection event. The trash accumulated between collection events on the nonpoint source areas should show a decreasing trend. If the amount of trash increases,

the frequency of clean up events should increase and additional BMPs should be established.

There are specific schedules provided in trash TMDLs to achieve the zero trash goal from point and non-point sources.

Owners and operators of marinas could be considered a responsible party for trash on the water and shorelines of the water body.

Information on trash TMDLs in the Los Angeles region are provided at this link:

http://www.waterboards.ca.gov/losangeles/water_issues/programs/tmdl/tmdl_list.shtml.

Tim Leathers – Clean Marina Program (CMP)

The group is changing the name to the Clean Marina Program since it includes western states and Mexico. The group is applying for a 501 (c) (3) tax exempt status.

The CMP adopted the 153 revisions suggested by marina IACC state agency reviewers since 2007 and incorporated those comments into the program's handbook. The Clean Marina Handbook is available online, and the changes can be viewed from the website. The new Clean Marina Program Handbook can be downloaded at:
<http://www.cleanmarinasocalifornia.org>.

They also decided to incorporate an idea provide verbally last spring from the Coastal Commission. How does the CMP quantify a successful clean marina program? This can be done by documenting the before and after conditions. During the pre-inspection period when the marina is first evaluated, a score sheet will be kept to document the condition of the marina prior to mentoring and certification. The score sheets will be retained. The purpose is to maintain a record of baseline conditions and the added improvements to facilities and, subsequently, water quality. They now have a score sheet and a checklist. The checklist is used when inspecting the facility to verify whether the items and facilities required to become a certified clean marina are actually in place and are operating correctly.

The Clean Marina's Program has an elected Board of Directors. The group represents salt and fresh water marinas, lakes, other states and yacht clubs. There are now 100 certified clean marinas in the western states and Mexico.

Manuel Maqueda - BlooSee.com

Biography - Manuel Maqueda is an environmental strategist and an internet technology executive. Manuel is the VP of community and strategy of BlooSee, an ocean mapping site and mobile app where sailors, surfers, divers, and other ocean lovers find, share and geolocate information and knowledge about the ocean. Manuel co-founded the Plastic Pollution Coalition, a worldwide alliance of organizations, businesses and individuals who share the mission to stop plastic pollution worldwide. Members include Greenpeace, Surfrider, Conservation International, Sailors for the Sea, NOAA's Monterey Bay Marine Sanctuary, and more than 100 organizations worldwide. Advisors and supporters include Sylvia Earle, Fabien Cousteau, Kelly Slater, Jack Johnson, and many others.

Bloosee.com is a free interactive mapping website and social network for ocean resources. It is a technical tool developed to connect all ocean mapping information.

Users can input their information, like ocean mapping Wiki-style. It uses Google Earth as a base map. Here is a description from the website:

BlooSee is an ocean mapping site, a social network, and a mobile app where sailors, divers, surfers, kayakers, and other sea lovers geotag, find and share information and knowledge about the oceans. BlooSee is a platform.

BlooSee is synched with Twitter and Facebook, allowing Twitter followers and Facebook friends to experience a user's activity on BlooSee. It aggregates user generated and third party data. All bits of information on the BlooSee network are assigned unique URLs for easy sharing anywhere on the Web. A map embed tool allows sharing entire maps on social networks, blogs, and any place that's HTML editable. So, now it's possible to post a discussion about an anchorage, hazardous rock, sea life sighting, a dive site, surf spot or sailing route which do not come with a street address.

There are three purposes for the Bloosee website:

1. People love the ocean and want to share their local knowledge and information, and provide up-to-date data on ocean resources, such as surfers, sailors, kayakers, the coast guard
2. Support an economy based on ocean resources (monetize the ocean), and
3. Ocean resource protection and conservation.

One of the benefits of this program is the nesting feature that allows many sources of data to be input for one location.

There is an I-phone application that will connect to Bloosee so the data will be readily available on mobile devices.

Mr. Maqueda demonstrated how the mapping site works by taking the group through various features of the program. A user can register for free and input information. Data input by organizations can be protected. A person could imbed a video or map into Bloosee. Please click on <http://www.bloosee.com> to access the site and sign up.

As a follow-up, Mr. Mr. Maqueda provided this information about new developments for BlooSee.com:

We are quickly incorporating more functionalities. If you visit BlooSee now you'll notice that we added a "weather" button over the map in the explore section. Click it to see live wind vectors and 6 hours predictions going 24 hours into the future.

We are finishing a white label iPhone app for mapping ocean resources that can be customized to the needs of any organization. So CCC or any of its programs and departments could easily use it to crowd-source data, help people find certain resources based on their location, or become aware of concerns in their location (Marine Protected Areas, fishing regulations, invasive species, etc etc).