

## Meeting Notes

# Marina Interagency Coordinating Committee (MIACC) & Anti-Fouling Strategies Workgroup (AFSWG) Meeting

**Wednesday, March 21, 2018**

**1:00 PM - 4:05 PM**

*Hosted by Los Angeles County Department of Beaches & Harbors*

Los Angeles County Department of Beaches & Harbors

ADMIN HQ, Conference Room

13837 Fiji Way, Marina del Rey, 90292

1. Introductions and Announcements		1:00 – 1:20 pm (20 mins)
<b>Speaker(s):</b>	<i>Michael Hanks – Nonpoint Source Program, State Water Resources Control Board</i>	
<b>Purpose:</b>	<ul style="list-style-type: none"> <li>• Take attendance (please be prepared to introduce yourself and your affiliation)</li> <li>• Announcements and updates from participants</li> </ul>	
<b>Attachments:</b>	<a href="#"><u>Final September 2017 MIACC-AFS meeting notes</u></a>	
<b>ATTENDANCE:</b> (listed in alphabetical order)	<p><i>In Person:</i></p> <ul style="list-style-type: none"> <li>• <i>Aniela Burant, Department of Pesticide Regulation (DPR)</i></li> <li>• <i>Brenda Ponton, LA County Department of Beaches and Harbors (LACDBH)</i></li> <li>• <i>Cara Nager, Amec Foster Wheeler</i></li> <li>• <i>Chris Scianni, State Lands Commission (SLC)</i></li> <li>• <i>Greg Schem, The Boat Yard, Marina del Rey</i></li> <li>• <i>Jeanie Mascia, State Water Resources Control Board (SWRCB)</i></li> <li>• <i>Jim Hayes, Clean Marina</i></li> <li>• <i>Maral Tashjian, LACDBH</i></li> <li>• <i>Michael Hanks, SWRCB</i></li> <li>• <i>Michael Tripp, LACDBH</i></li> <li>• <i>Michael Zlotkin, Innermost Containment Systems</i></li> <li>• <i>Nan Singhasemanon, DPR</i></li> <li>• <i>Rolf Schottle, Amec Foster Wheeler</i></li> <li>• <i>Vicki Gambale, The Bay Foundation</i></li> </ul>	<p><i>On The Phone:</i></p> <ul style="list-style-type: none"> <li>• <i>Colin Anderson, American Chemet</i></li> <li>• <i>Cory Sheredy, Amec Foster Wheeler</i></li> <li>• <i>James Muller, SF Estuary Partnership</i></li> <li>• <i>Jim Haussener, CMANC</i></li> <li>• <i>John Griffith, Southern California Coastal Water Research Project (SCCWRP)</i></li> <li>• <i>Karen Black, SWRCB</i></li> <li>• <i>Karen Holman, Port of San Diego</i></li> <li>• <i>Kelly Tait, Port of San Diego</i></li> <li>• <i>Linda Candelaria, Santa Ana Regional Water Board</i></li> <li>• <i>Matt Peterson, FastBottoms</i></li> <li>• <i>Melissa Vargas, CalRecycle</i></li> <li>• <i>Michael Sandecki, California Coastal Commission (CCC)</i></li> <li>• <i>Michelle Bowman, Amec Foster Wheeler</i></li> <li>• <i>Neil Blossom, American Chemet</i></li> <li>• <i>Paul Maechler, Port of San Diego</i></li> <li>• <i>Peter Von Langen, Central Coast Regional Water Board</i></li> <li>• <i>Ray Hiemstra, Orange County Coastkeeper</i></li> <li>• <i>Shana Rapoport, Los Angeles Regional Water Quality Control Board</i></li> <li>• <i>Stephanie Bauer, Port of San Diego</i></li> <li>• <i>Sue Keydel, US EPA</i></li> <li>• <i>Tamara Doan, CCC</i></li> <li>• <i>Virginia St. Jean, San Francisco Department of Public Health</i></li> <li>• <i>Vivian Matuk, CCC</i></li> </ul>
<b>Notes:</b>	<ul style="list-style-type: none"> <li>• <a href="#"><u>Vivian Matuk: Aquatic Invasive Species Workshops on April 4 in Morgan Hill, April</u></a></li> </ul>	

	<p>12 in Sacramento, June 13 in Sausalito, please see <a href="https://www.parks.ca.gov/NewsRelease/792">https://www.parks.ca.gov/NewsRelease/792</a> for details.</p> <ul style="list-style-type: none"> <li>• Free Oil Spill Response Communication Seminars for Marinas and Yacht Club Operators in Vallejo on May 8 and McClellan on May 17, see <a href="http://www.parks.ca.gov/NewsRelease/793">http://www.parks.ca.gov/NewsRelease/793</a> for details.</li> <li>• Michelle Bowman: Port of LA/San Pedro Clean Boat Expo on June 23.</li> <li>• Tamara Doan will no longer be facilitating these meetings; thank you for all your hard work, you'll be missed!</li> </ul>
<b>Action Items:</b>	All finalized minutes, meeting presentations and materials, and a <a href="#">video</a> of the meeting are posted in the <a href="#">Coastal Commission's MIACC Archives</a> for future access, at <a href="https://www.coastal.ca.gov/water-quality/marina-boating/">https://www.coastal.ca.gov/water-quality/marina-boating/</a> .

<b>2. Copper Anti-Fouling Paint Regulations Update</b>		<b>1:20 – 1:35 pm (15 mins)</b>
<b>Speaker(s):</b>	<b>Aniela Burant</b> – Environmental Scientist, CA Department of Pesticide Regulation	
<b>Purpose:</b>	To update the MIACC/AFSWG of DPR's copper antifouling paint mitigation efforts and activities.	
<b>Background:</b>	On June 1, 2010, the Department of Pesticide Regulation (DPR) placed into reevaluation copper antifouling paint (AFP) pesticides based on dissolved copper concentrations in California marinas. Under the reevaluation, DPR required certain data including leach rate data and an under-water hull cleaning study. In October 2013, the Governor signed Assembly Bill (AB) 425 into law which required DPR to set a leach rate and make mitigation recommendations by February 1, 2014. On November 18, 2016, DPR proposed copper AFP regulations to establish a single maximum allowable leach rate for use on recreational vessels.	
<b>Attachments:</b>	<ul style="list-style-type: none"> <li>• <a href="#">Copper Antifouling Paint Regulations: What You Need to Know (PPT)</a></li> <li>• <a href="#">List of Copper-Based Antifoulant Paints by Leach Rate Category (Updated July 2017)</a></li> </ul>	
<b>Notes:</b>	<ul style="list-style-type: none"> <li>• 2 sites for every marina area</li> <li>• LRS = Local reference site, outside of the marina</li> <li>• DPR has authority to protect California's surface water from pesticide pollution</li> <li>• Regional Board has the authority to regulate discharges of copper <ul style="list-style-type: none"> <li>- Michelle Bowman: Are there any regulations coming down the list?</li> <li>- Linda Candelaria: Emphasize DPR that chronic criterion is 3.1; it has nothing to do with toxicity. Exceedance of CTR [California Toxics Rule] criterion alone is enough to list the waterbody.</li> </ul> </li> </ul>	
<b>Action Items:</b>	Please review the DPR efforts, regulations, and reevaluation notices for <a href="#">Antifouling Paint</a> , at <a href="http://www.cdpr.ca.gov/docs/emon/surfwttr/regulatory.htm">http://www.cdpr.ca.gov/docs/emon/surfwttr/regulatory.htm</a>	

<b>3. State Water Board's Bacterial Objectives</b>		<b>1:35 – 1:50 pm (15 mins)</b>
<b>Speaker(s):</b>	<b>Karen Black</b> – Environmental Scientist, State Water Resources Control Board	
<b>Purpose:</b>	To discuss the State Water Board's proposal to update water quality objectives associated with recreational exposure to water containing fecal bacteria.	
<b>Background:</b>	The State Water Resources Control Board is proposing a statewide bacteria water quality objectives and implementation options to protect recreational users from the effects of pathogens in California water bodies. The objectives and implementation options are proposed as a new part 3 of the Water Quality Control Plan for the Inland Surface Waters, Enclosed Bays, and Estuaries of California, and as an amendment to the Water Quality Control Plan for Ocean Waters of California.	

3. State Water Board's Bacterial Objectives	1:35 – 1:50 pm (15 mins)
<b>Attachments:</b>	<ul style="list-style-type: none"> <li>• <a href="#"><u>Update on the Proposed Bacteria Provisions (PPT)</u></a></li> </ul>
<b>Notes:</b>	<p>Karen Black of the State Water Resources Control Board's Ocean Unit provided an update of bacteria provisions to the group remotely, from her office in Sacramento. She introduced the topic of Quantitative Microbial Risk Assessment (QMRA) modeling – a new approach to quantify the health risk posed by microbial pathogens, which has previously been used to assess drinking water safety. The QMRA method can be applied to beaches with chronic water quality exceedances linked to non-human <i>Enterococcus</i> contamination. The QMRA method may be used to revise numerical TMDL targets for beaches with non-human pathogen sources.</p> <ul style="list-style-type: none"> <li>• Title 17 still apply – outside of State Board's jurisdiction</li> <li>• Use attainability analysis required for limited REC-1 beneficial use</li> <li>• Objectives reduce risk, not just risk more responsibility on discharger</li> <li>• Consistency between regions – reduces the need for regional Basin Plan objectives</li> <li>• Allowance of natural source exclusion</li> <li>• <i>E. coli</i> indicators only need for fresh water</li> <li>• Statistical threshold value allows 10% exceedance rate, measured over 30 day period.</li> <li>• New Recreation use – less stringent. Examples: fenced-off areas, channelized streams, streams with little to no flow. Areas where ingestion chance is low.</li> <li>• Allowance – used within TMDL, no need to treat wastewater if background bacteria are present.</li> <li>• No date for adoption. Schedule will be set up by the end of April, contract website (below) for updates. Unit is currently considering fecal coliform requirements change.</li> </ul> <p><b>Q&amp;A</b></p> <p><b>Q:</b> Rolf: Using method detection unit?  <b>A:</b> Karen: Methodology has been defined for proposed objectives  ~~</p> <p><b>Q:</b> What is a 'narrative' objective?  <b>A:</b> Jeanie: A narrative water quality objective is descriptive (example, no toxic amount), as opposed to a numerical objective (example, no more than 30 milligrams per liter).  From Karen: Narrative objectives are used where it is difficult to assign one specific number (example Lake Tahoe). Also Basin Plans demonstrate where narrative objectives of numeric objectives are assigned.  ~~</p> <p><b>Q:</b> Jim Haussener: California is the only state that measures both total coliform and fecal coliform, maybe you can elaborate on that. Also, harbors have had cleanup issues because of birds, are we moving away from that with this new protocol?  <b>A:</b> Karen: The focus on the human health risk will help to distinguish human fecal from bird fecal matter instead of it not mattering what the source was and will help address this issue. Not sure why both total and fecal measurement was originally required in the past.  ~~</p> <p><b>Q:</b> Paul Maechler: Wanted to confirm Karen was not revising the ISWBB.  <b>A:</b> Karen: The ISWBB changes posted in January are the final changes. Ocean Water Provision is being revised from January until now.  ~~</p> <p><b>Q:</b> Paul Maechler: Are human health risk assessment being revised or is it still going to</p>

<b>3. State Water Board's Bacterial Objectives</b>		<b>1:35 – 1:50 pm (15 mins)</b>
	be the epidemiological approach? <b>A:</b> Karen: It is still the epidemiological approach and that is being used for reference material.	
<b>Action Items:</b>	Please review the <a href="http://www.waterboards.ca.gov/bacterialobjectives">State Water Board's Bacterial Objectives website</a> , at <a href="http://www.waterboards.ca.gov/bacterialobjectives">www.waterboards.ca.gov/bacterialobjectives</a> .	

<b>4. SCCWRP - Determining QMRA Eligibility at Urban Beaches</b>		<b>1:50 – 2:20 pm (30 mins)</b>
<b>Speaker(s):</b>	<b>John Griffith</b> – Head of the Microbiology Department and Coordinator of Molecular Technology, Southern California Coastal Water Research Project (SCCWRP)	
<b>Purpose:</b>	To discuss SCCWRP's efforts to determine Quantitative Microbial Risk Assessment eligibility at urban beaches.	
<b>Background:</b>	Quantitative Microbial Risk Assessment (QMRA) is a modeling approach used to quantify health risk from microbial pathogens that's widely used to estimate health risk from pathogens in drinking water. EPA has opened the door to using QMRA to revise numerical standards for Enterococcus at non-human impacted beaches.	
<b>Attachments:</b>	<ul style="list-style-type: none"> <li>• <a href="#"><u>Determining QMRA Eligibility at Urban Beaches (PPT)</u></a></li> </ul>	
<b>Notes:</b>	<p>John F. Griffith from the Southern California Coastal Water Research Project (SCCWRP) gave his talk remotely. The topic was a study he completed with Ventura County and the Los Angeles Regional Water Board at Hobie Beach and Kiddie Beach (Channel Island Harbor) in Ventura County. The study focused on how to apply QMRAs to an urban beach setting and how it potentially can be used to set appropriate bacteria TMDLs. He ran through the procedures involved to evaluate the various potential human and non-human sources of Enterococcus, and summarized how the QMRA was applied to the specific conditions identified.</p> <p><b>Q&amp;A</b></p> <p><b>Q:</b> Greg Schem: A power plant that has been operating pumps using the water for circulation, NRG now owns the facility and they are considering shutting the pumps down. Did you consider this during the dry weather study and what effect might this have going forward?</p> <p><b>A:</b> John: Yes, the pumps were operating during the dry weather study and they worked with the Public Works folks, probably don't have capacity to capture and divert the wet weather volume. The FIB shows with the rain the beach is contaminated, but there is not yet enough data to attribute the contamination to the local storm drains or to the harbor.</p> <p>~~</p> <p><b>Q:</b> Michael Tripp: When talking about bacteria from birds or from humans, if the human bacteria were eliminated would there still be a danger to swimmers?</p> <p><b>A:</b> John: That's why you do the pathogen loading in the birds. Birds don't carry the human viruses that are in sewage and that is the main thing that contaminates the water and the thing we worry about when there is sewage. Bird bacteria tend to be campylobacter or salmonella and tests on local populations the pathogenic strains of those bacteria are pretty low, so low in fact you would probably have to catch bird poops in your mouth to get an infective dose. But you still have to measure them and you would also measure the enterococcus in the droppings and when you have a lower health risk you can plug that into the model and you can adjust the allowable amount of enterococcus to meet the 30 illnesses per thousand set by the current EPA benchmark.</p> <p>~~</p> <p><b>Q:</b> Michael Tripp: We're seeing more sea lion at Channel Islands Harbor and even in Marina del Rey, is that taken into account as all?</p>	

4. SCCWRP - Determining QMRA Eligibility at Urban Beaches	1:50 – 2:20 pm (30 mins)
	<p><b>A:</b> John: Its site specific, hence the site-specific objective, if there are sea lions and they're a source you'd have to find out what the loading of the fecal bacteria and the ratio between fecal bacteria and pathogen, if any, from that source are. I just talked about one source, there are people that are finding marking for marine mammals, we have markers for the birds, and as this goes on we are going to get better at teasing out what the sources are. When we did our QMRA in San Diego we measure all the cloaca coming out of the mouth of the San Diego River and that was our source. It's all about what the sources are and the concentrations in the water. All those things go into the model to identify a risk.</p> <p>~~</p> <p><b>Q:</b> Jeanie: Why can't you use QMRA for human-impacted beaches?</p> <p><b>A:</b> John: You can, but if there's very little or dilute human contamination, you run the risk of over or understating the risk. If you have a lot of human contamination, you might as well use EPA standards because that's what they are based on. For QMRA there's no criteria, it's just a decision based on the data of what you should do. On this particular beach when you had 60% of the samples that had a human marker, the advisory committee identified a chronic contamination problem. After that pipe was fixed, the County might do a QMRA but they are already in compliance with their TDML enterococcus standard, so no reason to change the standard if the objective has already been met.</p> <p>~~</p> <p><b>Q:</b> Rolf Schottle: If the results of those markers were pretty consistent, maybe it was indicative of a bay-wide source. I was just thinking for the group that maybe it came from boaters.</p> <p><b>A:</b> John: We actually did do some sampling around the area for human marker and it was consistent on coming from ground water; this was right at the beach.</p> <p>~~</p> <p><b>Q:</b> Paul: If you use the QMRA to establish you risk objectives, under what circumstances would that no longer be applicable, e.g., your site conditions change and you stop seeing the birds but the exceedances continued. Maybe this is more a question for the Water Board. Would that be factored in to revise the objective downward?</p> <p><b>A:</b> John: You're right, that's a policy question, but the science question is should we be sampling for human markers there to see if something doesn't change. <i>Enterococcus</i> is a one-way marker of fecal contamination – when you have sewage you always have enterococcus. It's possible you could have higher levels of <i>enterococcus</i> but below your objective and they might be from a sewage source because something has changed – a leaking pipe or illicit discharge- from a science perspective you would want to keep sampling for a human marker, especially if you had addressed a source prior to doing you QMRA.</p> <p>~~</p> <p><b>Q:</b> Maral Tashjian: Do you test the beach sands for bacteria?</p> <p><b>A:</b> John: Yes we have and sometimes we find them. Usually in lower of similar levels to what we see in the water. The way to look at the beach sand and ground water is to drill a groundwater monitoring well up-beach from there and monitor the ground water back and forth. Where the waves are swashing we see it dilute, just like we see it in the beach water. We do see higher levels of <i>enterococcus</i> when there are birds on the beach and also the bird marker in the sand – the birds are right there depositing the poop on the beach.</p>
<b>Action Items:</b>	Please review the <a href="http://www.sccwrp.org/ResearchAreas/BeachWaterQuality.aspx">SCCWRP Beach Water Quality website</a> , at <a href="http://www.sccwrp.org/ResearchAreas/BeachWaterQuality.aspx">http://www.sccwrp.org/ResearchAreas/BeachWaterQuality.aspx</a>

**2:20 – 2:30 BREAK (10 mins)**

<b>5. Pumpout Nav App</b>		<b>2:30 – 3:00 (30 mins)</b>
<b>Speaker(s):</b>	<i>Victoria Gambale – Water Quality Programs Manager, The Bay Foundation</i>	
<b>Purpose:</b>	To discuss the San Francisco Estuary Partnership and The Bay Foundation’s Pumpout Nav smartphone app that is meant to revolutionize how we provide boaters with sewage disposal information.	
<b>Background:</b>	San Francisco Estuary Partnership and The Bay Foundation have worked with the State of California, through a CVA Outreach and Education grant, to build Pumpout Nav, a free smartphone app meant to revolutionize how we provide boaters with sewage disposal information. Using a map interface, boaters can find the nearest pumpouts from their location, report non-operable pumpouts, and access information about pollution prevention and sewage management. The app is also designed to be used by CVA staff for monitoring pumpout stations as well as generating reports on monitoring results. The Partnership (specify who the Partnership is since it isn’t mentioned before) is excited to begin working with state CVA programs to include their information in the app. Attendees will learn about the App itself and how they can participate in expanding service to their regions	
<b>Attachments:</b>	<ul style="list-style-type: none"> <li>• <a href="#"><u>Pumpout Nav: Revolutionizing CVA’s Outreach &amp; Monitoring Abilities (PPT)</u></a></li> </ul>	
<b>Notes:</b>	<p>Victoria Gambale of the (Santa Monica) Bay Foundation was on hand to introduce the new vessel pump-out navigation app, whose development has been managed through a partnership that includes the Bay Foundation, the San Francisco Estuary partnership, and US Fish and Wildlife’s Sport Fish Restoration Program. Grant funds for the app were provided by the Clean Vessel Act administered by California State Park’s Division of Boating and Waterway’s Education and Outreach program. The app allows boaters to locate pump out services on the fly using an app on their cell-phone. The app also allows users to report on the condition of the pump out stations. The app is free and available for download from Google Play or the App Store.</p> <p><b>Q&amp;A</b></p> <p><b>Q:</b> Mike Hanks: Do we know how many of the boaters are downloading the app?</p> <p><b>A:</b> James Muller: So far we have 411 downloads. We thought we were going to have a website platform then we were able to get native apps for the Android and the iPhone so they are tracked separately. Actually, it’s more than that. We’re getting quite a bit of traffic on this and DBW (Department of Boating and Waterways) is working with a marketing firm to make boaters aware of this. We launched this in April and expect the numbers to increase.</p> <p><b>A:</b> Vivian Matuk: I received data from the grantees, Vicki and the SRA partnership, and both apps have been downloaded over 1500 times and wanted to mention California is the first state to develop this type of application and California is the only state to monitor pump outs. We are glad to see the grantees working closely with the marinas and keeping their pump out facilities in working condition, especially those funded by our division.</p> <p><b>A:</b> Victoria: We hope to expand the number of public pump out units on the app that we monitor.</p> <p>~~</p> <p><b>Q:</b> Greg: Do you keep hours of operating time in the survey? You could use that data to see if the boaters in the harbor are using the pump out facilities as they should. From the boatyard perspective he sees boats that don’t have Y-valves [that enable hookup to a pump out facility], so it would be good to have a more comprehensive inventory to determine actual use.</p> <p><b>A:</b> Victoria: We do collect that data, but it is not used in the report. There are also private</p>	

5. Pumpout Nav App		2:30 – 3:00 (30 mins)
	<p>and mobile pump out facilities that we don't track. That is something we are going to be looking at this year.</p> <p><b>A:</b> Vivian Matuk: Updated the group to report that the app had been downloaded over 1601 times from April to December 31 [2017]. Uploading data after that date is not yet available as it is reported quarterly.</p> <p><b>A:</b> James Muller: Foresees future reporting to specify volume of sewage whereas the only parameter to access that is hours of operation and the offload rate capacity differs between boats. We are working to resolve this with other states and federal representatives.</p> <p>~~</p> <p><b>Q:</b> Jeanie: Who maintains the pump out facilities? Is it the marina managers?</p> <p><b>A:</b> Victoria: It varies.</p> <p>~~</p> <p><b>Q:</b> Jeanie: You mentioned there is grant fund support? For all, or just for some?</p> <p><b>A:</b> Victoria: There are operation and installation grants and they last for 7 years. Some facilities have been replaced after 7 years without grant funding.</p> <p>~~</p> <p><b>Q:</b> ?(unintelligible)</p> <p>~~</p> <p><b>Q:</b> Michael Tripp: How do you keep track of new pump out facilities?</p> <p><b>A:</b> Victoria: DBW knows about new facilities built with grant funds. If not build using grant funding, it would be great if they would tell us. When the program started 15 years ago we did a physical inventory of each marina. Some facilities don't want us to monitor them.</p> <p><b>A:</b> James Muller: An inventory is planned for this year. Bay Foundation and SFEP (San Francisco Estuary Partnership) are going to contact all the marinas and boating facilities in the state to find out if they have pump-outs. Right now the app is focused on 5 Southern California Counties and San Francisco and we want to expand the app to include inland and the remaining coastal areas.</p> <p>~~</p> <p><b>Q:</b> Michelle Bowman: If you were a full service pump-out, would you have a contact for mobile pump-outs for boats that aren't as seaworthy?</p> <p><b>A:</b> Victoria: The app has information on mobile pump-outs. There is signage at the units at some marinas that show all the pump-out locations and the mobile pump out services.</p>	
<b>Action Items:</b>	Please review the <a href="http://www.sfestuary.org/clean-vessel-act-grant-program/#cvapumpoutnav">Pumpout Nav Smartphone App website</a> , at <a href="http://www.sfestuary.org/clean-vessel-act-grant-program/#cvapumpoutnav">http://www.sfestuary.org/clean-vessel-act-grant-program/#cvapumpoutnav</a>	

6. MEETING WRAP-UP		3:00 – 3:15 (15 mins)
<b>Speaker(s):</b>	<i>Mike Hanks – Nonpoint Source Program, State Water Resources Control Board</i>	
<b>Purpose:</b>	To review follow-up actions from this meeting and to solicit ideas for future meeting topics.	
<b>Background:</b>	N/A	
<b>Notes:</b>	Support given for future onsite meetings outside of Sacramento. The group voices support for alternating meetings between Sacramento and onsite meetings.	
<b>Action Items:</b>	<i>Please solicit future agenda items and presentation for future meetings.</i>	

<b>7. Marina del Rey Site Tour</b>		<b>3:15 – 4:05 pm (50 mins)</b>
<b>Speaker(s):</b>	<b>Michael Tripp</b> – Chief of Planning, Los Angeles County Department of Beaches and Harbors	
<b>Purpose:</b>	To tour projects at Marina del Rey that address water quality pollution	
<b>Background:</b>	Attendees will tour the Oxford Basin Multiuse Enhancement Project and Parking Lot 9. The Oxford Basin Multiuse Enhancement Project is designed to enhance flood protection and reduce stormwater pollution while significantly improving the quality of the ecosystem within the facility. The project introduces new public recreational and safety amenities, including an illuminated walking path, observation areas and educational signage. Parking lot 9 uses bioswales and modular wetlands to reduce pollution runoff to Marina del Rey.	
<b>Attachments:</b>	None	
<b>Notes:</b>	Michael Tripp is Chief of Planning with the Los Angeles County Department of Beaches and Harbors (DBH). Prior to joining DBH late last year, he worked for 10 years with Los Angeles County’s Department of Regional Planning (DRP). He has spent his entire career with the County working in the coastal areas of the Santa Monica Mountains and Marina del Rey. Michael Tripp can be reached at: <a href="mailto:MTripp@bh.lacounty.gov">MTripp@bh.lacounty.gov</a>	
<b>Action Items:</b>	Please bring an umbrella and rain appropriate clothing for Wednesday. Please review the <a href="http://beaches.lacounty.gov/toxics-tmdl/">County of Los Angeles Dept. of Beaches &amp; Harbors Toxics TMDL</a> efforts website, at <a href="http://beaches.lacounty.gov/toxics-tmdl/">http://beaches.lacounty.gov/toxics-tmdl/</a>	

~ End ~