Marine Resources/Water Quality

5. Development shall maintain, enhance and where feasible restore marine resources, including wetlands, submerged aquatic vegetation, or other important aquatic habitat areas as designated by local, state, or federal governments, consistent with Coastal Act Sections 30230 through 30233.

Add: Utilize local stakeholder knowledge and expertise to help identify and protect areas of special biological significance.

6. The LCP should be amended to require that all development that involves disturbance to shallow water marine substrate provide a pre-construction survey to determine the presence of eelgrass (Zostera marina) taken during the active growth period. If eelgrass is present within the project site, the project shall be redesigned to avoid impacts to eelgrass. If nearby eelgrass is impacted it shall be mitigated in conformance with “Southern California Eelgrass Mitigation Policy” Revision 8 adopted by the National Marine Fisheries Service.

Add: Courses of action: Design new development to 1) avoid all disturbance of shallow water marine substrate or 2) Redevelopment projects should be designed in a way to regain or restore as much disturbed eelgrass habitat as is feasible.

7. The LCP should be amended to require that all development that involves disturbance to marine water substrate within the marina and other shallow waters (up to approx. 250 ft. depth) shall provide a survey for the presence of Caulerpa taxifolia (C. taxifolia) consistent with the survey protocol required by the Southern California Caulerpa Action Team, SCCAT. If C. taxifolia is found within or in close proximity to the project site, it shall be eradicated prior to the commencement of the project.

ADD: all new development and substantial redevelopment that involves disturbance to marine water substrate within the marina and other shallow waters should be required to develop a HACCPP (hazard analysis critical control point plan) approved by Santa
Monica Bay Restoration Commission staff or other appropriate County staff person qualified to prevent the spread of invasive species.

8. The LCP should be amended to update the policies, procedures and requirements associated with reducing polluted runoff and water quality impacts resulting from development. The update should revise policies and ordinances to ensure that Sections 30230, 30231, 30232, and 30240 of the Coastal Act, related provisions of the LCP, the County’s National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit and Standard Urban Stormwater Mitigation Plan (SUSMP) requirements, adopted Total Maximum Daily Loads (TMDLs), State Nonpoint Source Control Plan, and Contaminated Sediment Task Force recommendations are integrated.

ADD: Add low impact development and incorporate LID policies and technologies from County of Los Angeles Low Impact Development Standards Manual September 2008 to address existing and future runoff from development, and be required to capture, treat and infiltrate a five year design storm event calculated using the LA County runoff TOC (time of concentration) calculator and hydrology manual. Replace (SUSMPS) above with LID policies and technologies to address existing and future runoff from development, and be required to capture, treat and infiltrate a five year design storm event using the LA County runoff TOC (time of concentration) calculator and hydrology manual. County of Los Angeles Low Impact Development Standards Manual September 2008.

9. The LCP should be updated consistent with the following principles and criteria, and to carry out the following provisions where applicable:

All development must address water quality by incorporating Best Management Practices into the development that are designed to control the volume, velocity and pollutant load of stormwater and dry weather runoff from the site during the construction phase and in the post-development condition. All new development and redevelopment projects shall integrate Low Impact Development principles designed to capture, treat and infiltrate runoff. Specific types of BMPs to be included in all development projects include site design and source control measures. In addition, treatment control BMPs shall be incorporated into all development and redevelopment types categorized as “Priority Development,” under the Regional Water Quality Control Board-issued Los Angeles County
Municipal NPDES Stormwater Permit and related Standard Urban Stormwater Mitigation Plan (SUSMP) requirements, and where otherwise necessary to protect water quality in accordance with LCP marine resource and water quality related policies and provisions. The specific information necessary for an individual project will vary depending upon site characteristics and the kind of development being proposed.

9. The LCP should be updated consistent with the following principles and criteria, and to carry out the following provisions where applicable:

All development must address water quality by incorporating Best Management Practices into the development that are designed to control the volume, velocity and pollutant load of stormwater and dry weather runoff from the site during the construction phase and in the post-development condition. All new development and redevelopment projects shall integrate Low Impact Development principles designed to capture, treat and infiltrate runoff. Specific types of BMPs to be included in all development projects include site design and source control measures. In addition, treatment control BMPs shall be incorporated into all development and redevelopment projects and where otherwise necessary to protect water quality in accordance with LCP marine resource and water quality related policies and provisions. The specific information necessary for an individual project will vary depending upon site characteristics and the kind of development being proposed.

ADD: Low impact development and incorporate LID policies and technologies from County of Los Angeles Low Impact Development Standards Manual September 2008. to address existing and future runoff from development, and be required to capture, treat and infiltrate a five year design storm event calculated using the LA County runoff TOC (time of concentration) calculator and hydrology manual. Replace (SUSMPS) above with LID policies and technologies to address existing and future runoff from development, and be required to capture, treat and infiltrate a five year design storm event calculated using the LA County runoff TOC (time of concentration) calculator and hydrology manual. County of Los Angeles Low Impact Development Standards Manual September 2008.

10. LCP policies should be revised to assure that at the time of application, development proposals will be reviewed for conformance with the requirements contained in the Los Angeles County Municipal NPDES Stormwater permit and SUSMP requirements, any adopted TMDLs, applicable provisions of the Santa Monica Bay Restoration Plan, State Nonpoint Source Control Plan, Contaminated Sediment Task Force recommendations, and applicable standards and requirements contained in the Marina Del Rey LCP.

10. LCP policies should be revised to assure that at the time of application, development proposals will be reviewed for conformance with the requirements contained in the Los Angeles County Municipal NPDES Stormwater permit and, and LID
standards. (see below) any adopted TMDLs, applicable provisions of the Santa Monica Bay Restoration Plan, State Nonpoint Source Control Plan, Contaminated Sediment Task Force recommendations, and applicable standards and requirements contained in the Marina Del Rey LCP.

ADD: Low impact development and incorporate LID policies and technologies from County of Los Angeles Low Impact Development Standards Manual September 2008. To address existing and future runoff from development, and be required to capture, treat and infiltrate a five year design storm event calculated using the LA County runoff TOC (time of concentration) calculator and hydrology manual. Replace (SUSMPS) above with LID policies and technologies to address existing and future runoff from development, and be required to capture, treat and infiltrate a five year design storm event calculated using the LA County runoff TOC (time of concentration) calculator and hydrology manual. County of Los Angeles Low Impact Development Standards Manual September 2008.

11. LCP policies should be revised to ensure that as part of the development review process:

A. All developments that require a Coastal Development Permit (CDP) are required to document site design and/or source control BMPs within drainage, landscaping or other site plans, and include sufficient detail for a determination that those are the appropriate BMPs for the project, are located in the appropriate areas of the project and have adequate mechanisms in place to assure that the BMPs are effective for the life of the project.

Development or reconstruction of impervious surfaces, where a CDP is required, shall include source control or treatment control BMPs, such as permeable pavement, bioinfiltration or drainage to landscaping to eliminate or minimize to the extent feasible dry weather flow to storm drains or bay. Development or reconstruction of landscaping, where a CDP is required, shall use site design, source control and treatment control BMPs, such as “smart” irrigation systems and bioinfiltration to eliminate or minimize to the extent feasible dry weather flow to storm drains or bay. Plans that include infiltration BMPs should be reviewed by a geotechnical engineer if site stability issues are a concern.

B. All developments that require a CDP and are categorized as “Priority Development” pursuant to the County SUSMPS shall incorporate site design, source control, and treatment control BMPs, which are designed to eliminate dry weather runoff except those exempt under the Los Angeles County Municipal Stormwater permit and to treat runoff from the 85th percentile storm event. Such features and BMPs shall be documented in a Water Quality Management Plan (WQMP) or equivalent technical plan designed by a licensed water quality professional or civil engineer. The plan shall be
sufficiently detailed for evaluation purposes, and shall include all necessary supporting calculations, descriptive text as well as graphics depicting amount, location of BMPs, as well as design and maintenance details associated with the BMPs or suite of BMPs.

C. All BMPs implemented should be monitored to ensure that the performance achieved is at least the 75 percentile for BMP performance on the United States Environmental Protection Agency (EPA) and American Society of Civil Engineers (ASCE) National BMP database.

11. LCP policies should be revised to ensure that as part of the development review process:

A. All developments that require a Coastal Development Permit (CDP) are required to use LID technologies, document site design and/or source control BMPs within drainage, landscaping or other site plans, and include sufficient detail for a determination that those are the appropriate BMPs for the project, are located in the appropriate areas of the project and have adequate mechanisms in place to assure that the BMPs are effective for the life of the project. BMPs utilizing LID technology to address existing and future runoff from development, and be required to capture, treat and infiltrate a five year design storm event calculated using the LA County runoff TOC (time of concentration) calculator and hydrology manual. Development or reconstruction of impervious surfaces, where a CDP is required, utilizing LID technology to address existing and future runoff from development, and be required to capture, treat and infiltrate a five year design storm event calculated using the LA County runoff TOC (time of concentration) calculator and hydrology manual including source control or treatment control BMPs, such as permeable pavement, bioinfiltration or drainage to landscaping to eliminate dry weather flow and runoff events up to a five year design storm event to storm drains or the bay.

Development or reconstruction of landscaping, where a CDP is required, utilizing LID technology to address existing and future runoff from development, and be required to capture, treat and infiltrate a five year design storm event calculated using the LA County runoff TOC (time of concentration) calculator and hydrology manual including site design, source control and treatment control BMPs, such as "smart" irrigation systems and bioinfiltration to eliminate runoff events up to a five year design storm event flow to storm drains or the bay. Plans that include infiltration BMPs should be reviewed by a geotechnical engineer if site stability issues are a concern.

B. All developments that require a CDP must utilize LID technology to address existing and future runoff from development, and be required to capture, treat and infiltrate a five year design storm event calculated using the LA County runoff TOC (time of concentration) calculator and hydrology manual and will incorporate site design, source control, and treatment control BMPs, which are designed to eliminate dry weather runoff and runoff events up to a five year design storm event. Such features and BMPs shall
be documented in a Water Quality Management Plan (WQMP) or equivalent technical plan designed by a licensed water quality professional or civil engineer. The plan shall be sufficiently detailed for evaluation purposes, and shall include all necessary supporting calculations, descriptive text as well as graphics depicting amount, location of BMPs, as well as design and maintenance details associated with the BMPs or suite of BMPs required to capture, treat and infiltrate a five year design storm event calculated using the LA County runoff TOC (time of concentration) calculator and hydrology manual.

C. All BMPs implemented should be monitored to ensure that the performance achieved is at least the 75 percentile for BMP performance on the United States Environmental Protection Agency (EPA) and American Society of Civil Engineers (ASCE) National BMP database over the life of the project.

12. The LCP should be revised to ensure that development projects will be designed in accordance with the following principles and guidelines. All projects should be designed to:

A. Prohibit the discharge of pollutants that may result in receiving water impairment or exceedance of state water quality standards. Projects should be designed to reduce post-development peak runoff rates and average volumes over pre-development levels or to maintain such rates and volumes at similar levels to pre-development conditions, through such measures as infiltration, evapotranspiration, and storage/reuse.

B. Maintain natural drainage courses and hydrologic patterns.

C. Preserve and where possible, create or restore areas that provide important water quality benefits.

D. Reduce the amount of directly connected impervious area, and total area of impervious surface from traditional approaches; consider and implement alternatives to impervious material for hardscaping plans, such as porous pavement, crushed gravel, and/or concrete grid designs.

E. Minimize irrigation and the use of fertilizers and other landscaping chemicals. Water conservation measures, such as smart irrigation systems, shall be required, and water recycling and reuse should be encouraged.

F. Where site constraints allow, incorporate on-site retention and infiltration measures to slow and reduce the amount of runoff discharged from the site.

G. Properly design outdoor material storage areas (including the use of roof or awning covers) to minimize the opportunity for toxic compounds, oil and grease, heavy metals, nutrients, suspended solids and other pollutants from entering the stormwater conveyance system.
H. Incorporate roof or awning covers over trash storage areas and implement other trash-control devices, such as full capture BMPs1, to prevent off-site transport of trash and related pollutants from entering the stormwater conveyance system. Where appropriate, include cigarette butt receptacles to reduce this common source of beach and ocean pollution.

I. Design streets and circulation systems to reduce pollutants associated with vehicles and traffic resulting from development.

J. Incorporate those BMPs that are the most effective at mitigating pollutants of concern associated with the development type or use.

K. Include requirements consistent with other recommendations contained herein, to inspect, maintain and repair as necessary the BMPs associated with the project to ensure proper and effective functioning for the life of the development. All approved Coastal Development Permit applications which involve the use of BMPs shall include such requirements.

L. For development that requires major mitigation to protect aquatic resources from stormwater and/or nonpoint source pollution, and that will involve the use of experimental features or practices to achieve such requirements, include measures for monitoring and reporting the success of the mitigation in protecting or enhancing the aquatic resources.

12. The LCP should be revised to ensure that development projects will be designed in accordance with the following principles and guidelines. All projects should be designed to:

A. Prohibit the discharge of pollutants that may cause or contribute and/or result in receiving water impairment or exceedance of water quality standards. Projects shall be designed to reduce post-development peak runoff rates and average volumes over pre-development levels by using LID technologies to capture, treat and infiltrate a five year design storm event calculated using the LA County runoff TOC (time of concentration) calculator and hydrology manual.

B. Protect and Maintain natural drainage courses and hydrologic patterns, riparian buffer zones defined as 100 feet from outside edge of historic riparian canopy

C. Preserve and where possible, create or restore areas that provide important water quality benefits, and require areas to be set aside to enhance water quality by implementing LID technologies in areas known to cause or contribute to degraded water quality.

D. Use LID technologies to reduce the amount of directly connected impervious area, and total area of impervious surface from traditional approaches and also capture, treat
and infiltrate a five year design storm event calculated using the LA County runoff TOC (time of concentration) calculator and hydrology manual LID designs must consider and implement alternatives to impervious material for landscaping plans, such as porous pavement, crushed gravel, and/or concrete grid designs.

E. Minimize irrigation and the use of fertilizers and other landscaping chemicals. Water conservation measures, such as smart irrigation systems, encourage LID technology such as rain gardens, and minimize irrigation demand by requiring automatic rain shutoff valves, water recycling and reuse (including grey water recycling).

F. Incorporate on-site retention and infiltration measures, utilizing LID technology to capture, treat and infiltrate a five year design storm event using the LA County runoff TOC (time of concentration) calculator and hydrology manual to reduce the amount and velocity of runoff discharged from the site.

G. Require properly designed outdoor material storage areas (including the use of roof or awning covers) to minimize the opportunity for toxic compounds, oil and grease, heavy metals, nutrients, suspended solids and other pollutants from entering the stormwater conveyance system.

H. Incorporate roof or awning covers over trash storage areas and implement other trash-control devices, such as full capture BMPs, avian proof lids, to prevent off-site transport of trash and related pollutants from entering the stormwater conveyance system. Where appropriate, include cigarette butt receptacles to reduce this common source of beach and ocean pollution. Implement compostable dog disposal systems.

**ADD:** where appropriate needs to be specified. Is it per population? How do we get a number? Use local stakeholders knowledge and expertise to help specify proper locations for cigarette butt receptacles and compostable dog disposal systems.

I. Design streets and circulation systems to reduce pollutants associated with vehicles and traffic resulting from development through efficient flows of traffic and integrating LID technologies such as impervious pavement and rain garden median strips.

J. Incorporate those BMPs that are the most effective at mitigating pollutants of concern associated with the development type or use.

K. Include requirements consistent with other recommendations contained herein, to inspect, maintain and repair as necessary the BMPs associated with the project to ensure proper and effective functioning for the life of the development. All approved Coastal Development Permit applications which involve the use of BMPs shall include such requirements.
13. The LCP should be revised to incorporate updated guidelines for marina development/redevelopment projects, containing a list of BMPs, management measures and standards appropriate for marina development, to aid the County in its review and permitting of marina development projects. In doing so, the County should utilize resources containing the most updated information and recommendations concerning environmentally sound marina development and operation practices, including but not limited to, the California Clean Marina Toolkit (California Coastal Commission, 2004), a publication of the California Coastal Commission’s Boating Clean and Green Campaign.

13. No changes recommended.

14. The LCP should be revised to require that in the development or redevelopment of individual marinas or launch facilities, Best Management Practices (BMPs) for marinas and recreational boating activities shall be implemented to reduce, to the maximum extent practical, the release of pollutants to surface waters. Any coastal development application for reconstruction, modification or redevelopment of marina or launch facilities shall include a Marina Water Quality Management Plan (MWQMP) that includes BMPs to control water quality impacts at each marina or launch. The MWQMP shall include the following components, as applicable, and shall be reviewed for conformance with the set of guidelines for marina related development/use to be developed by the County pursuant to recommendation No. 13, and the following criteria, as applicable:

A. Measures to control stormwater and dry-weather runoff from development during the construction phase and in the post-development condition, consistent with all applicable provisions outlined in Recommendations 5- through 14 of this report [Marine Resources/Water Quality section], and consistent with State and Regional Water Quality Control Board NPDES requirements.

B. A MWQMP component that includes provisions to adequately control impacts from boating sewage, vessel cleaning and maintenance, oil and fuel discharges, fish cleaning and trash generation/disposal. Vessel sewage disposal shall be controlled by: 1) installing a fixed point dockside pumpout facility; or 2) installing slipside pumpouts; or 3) for smaller marina operators, evidence of a cooperative agreement with an adjacent marina to provide joint waste management facilities or services. The MWQMP shall also provide that adequate restrooms and portable toilet dump stations for marinas with slips for smaller boats are installed. In addition, adequate trash, recycling and cigarette butt receptacles shall be placed in convenient locations around the Marina, and should be covered and frequently serviced. The operations and maintenance component shall provide measures for marina operators to regularly inspect and maintain facilities.

C. A component for implementing boater education measures, including signage.
D. A component for protection against the spillage of crude oil, gas, petroleum products or hazardous substances in relation to any development or transportation of such materials.

E. A monitoring and assessment component to evaluate the effectiveness of the MWQMP.

F. Material used for construction of piers, pilings, docks, dolphins, or slips shall not include timber preserved with creosote, (or similar petroleum-derived products.) Pilings treated with Ammoniacal Copper Arsenate (ACA), Ammoniacal Zinc Arsenate (ACZA) or Chromated Copper Arsenate (CCA) shall be used only if wrapped or coated prior to installation with a water tight plastic sleeve, or similar sealant. To prevent the introduction of toxins and debris into the marine environment, the use of plastic wrapped pilings (e.g. PVC Pilewrap) and reinforced plastic for pilings (e.g. high density polyethylene (HDPE) pile armor), shall conform to the following requirements:

i. The material used shall be durable and a minimum of one-tenth of an inch thick.
ii. All joints shall be sealed to prevent leakage.
iii. Measures shall be taken to prevent ACA, CCA and/or ACZA from dripping over the top of plastic wrapping into State Waters. These measures may include wrapping pilings to the top or installing collars to prevent dripping.
iv. The plastic sleeves shall extend a minimum of 18 inches below the mudline.
v. Plastics used to protect concrete or timber piers and docks or for flotation shall be subject to regular inspection to prevent sloughing of plastics into the waterway. A comprehensive inspection and maintenance plan shall be a requirement of any approval for projects involving plastic/or similar material wrapped piles.
vi. The lessee shall be made responsible for removal of failed docks or materials.
vii. If federal or state regulatory agencies, through new or better scientific information, determine that environmentally less damaging materials or methods are available for new piles or piling replacement, the least environmentally damaging materials and/or methods should be required for such projects, where feasible.

14. The LCP should be revised to require that in the development or redevelopment of individual marinas or launch facilities, Best Management Practices (BMPs) for marinas and recreational boating activities shall be implemented to reduce, to the maximum extent practical, the release of pollutants to surface waters. Any coastal development application for reconstruction, modification or redevelopment of marina or launch facilities shall include a Marina Water Quality Management Plan (MWQMP) that
includes BMPs to control water quality impacts at each marina or launch. The MWQMP shall include the following components, as applicable, and shall be reviewed for conformance with the set of guidelines for marina related development/use to be developed by the County pursuant to recommendation No. 13, and the following criteria, as applicable:

Notes: invasive species
Pier 44 public boat launch needs signage, inspection program, and steam cleaning of boats and trailers. Install a power wash car wash High pressure/steam cleaning system to prevent the spread of invasive species from other waterways. The system must be designed with a filtered/recirculated drain system to avoid runoff water with invasive species.

A. Measures to control stormwater and dry-weather runoff from development during the construction phase and in the post-development condition, consistent with all applicable provisions outlined in Recommendations 5 through 14 of this report [Marine Resources/Water Quality section], and consistent with State and Regional Water Quality Control Board NPDES requirements.

B. A MWQMP component that includes provisions to adequately control impacts from boating sewage, vessel cleaning and maintenance, oil and fuel discharges, fish cleaning and trash generation/disposal. Vessel sewage disposal shall be controlled by: 1) installing a fixed point dockside pumpout facility; or 2) installing slipside pumpouts; or 3) for smaller marina operators, evidence of a cooperative agreement with an adjacent marina to provide joint waste management facilities or services. The MWQMP shall also provide that adequate restrooms and portable toilet dump stations for marinas with slips for smaller boats are installed. In addition, adequate trash, recycling and cigarette butt receptacles shall be placed in convenient locations around the Marina, and should be covered and frequently serviced. The operations and maintenance component shall provide measures including educational pamphlets and signs for marina operators vendors, captains, maintenance persons to regularly inspect and maintain facilities. And to be aware of disposal practices, fines, and laws.

Require marina operators contract with a mobile head & bilge pumping and monitoring company to ensure proper disposal of head tank and bilge wastes. Require all boats deploy dye tabs and other preventative measures to ensure proper disposal and assist in the detection of spills and enforcement to protect public health.

Notes: Does not address solvent oil, gasses, greases, fuel etc. recommend addressing these issues in this section.

Notes: Prohibit the use of copper based paints and require green alternatives for resurfaced and new boats that enter the Marina. This information can be included with the lease agreement for new tenants. Boat yards can provide the tenant with a certificate stating the paint is copper free, paint brand… to ensure compliance.
C. A component for implementing boater education measures, including signage. There should be pamphlets in English and Spanish targeted at operators, captains, maintenance, and other personnel.

D. A component for protection against the spillage of crude oil, gas, petroleum products or hazardous substances in relation to any development or transportation of such materials.

Require each marina operator should have a trained staff person that can rapidly respond to reported spills. Marina operators, pump-out facility operators, should be required to carry large clean up pads to immediately respond to spills at each marina. A spill response hotline number should be included in the above referenced pamphlets and website. This should include reaching the individual Marina operator to respond to spills.

E. A monitoring and assessment component to evaluate the effectiveness of the MWQMP.

Notes on C,D,E: Require Marina operators to have new tenants at time of signing a lease, also sign papers agreeing with and understanding proper disposal of all items and consequences for mishandling hazardous materials. Tenants must be educated on appropriate techniques for the storage and disposal of hazardous waste, sewage, and fines associated with violating the policies and that they will be held financially negligent for violations.

Marina operators should hand educational and informational pamphlets to all users: These pamphlets should include and clearly denote disposal locations where to bring hazardous waste, fines for illegal dumping, invasive species concerns and precautions, and emergency contact phone numbers for reporting spills or for necessary services i.e. pump-out facilities. It is recommended that the County help create and finance these materials.

The County should utilize existing local facilities i.e. Sheriff stations, Harbor patrol, Fiji, fire dept., two sheriff areas, fire stations, beaches and harbor facilities to create nearby hazardous waste recycling drop-off locations with easy access for Marina users. The fuel dock takes dirty bilge pads and recyclable oil and gives out free bilge pads, recycle center off Fiji must be more frequently serviced. All county facilities should be a drop-off facility for hazardous waste. These locations included on pamphlet and website.

F. Material used for construction of piers, pilings, docks, dolphins, or slips shall not include timber preserved with creosote, (or similar petroleum-derived products.) Pilings treated with Ammoniacal Copper Arsenate (ACA), Ammoniacal Zinc Arsenate (ACZA) or Chromated Copper Arsenate (CCA) shall be prohibited to prevent the introduction of toxins and debris into the marine environment, the use of plastic wrapped pilings (e.g. PVC Pilewrap) and reinforced plastic for pilings (e.g. high density polyethylene (HDPE) pile armor), shall be prohibited. Non toxic recycled material
alternatives (concrete piers, treks,) shall be mandated for all new and redevelopment projects.

vi. The lessee shall be made responsible for removal of failed docks or materials.

vii. If federal or state regulatory agencies, through new or better scientific information, determine that environmentally less damaging materials or methods are available for new piles or piling replacement, the least environmentally damaging materials and/or methods should be required for such projects,