





November 16, 2015

Chair Felicia Marcus and Board Members  
c/o Jeanine Townsend, Clerk to the Board  
State Water Resources Control Board  
1001 I Street, 24<sup>th</sup> Floor  
Sacramento, CA 95814

Sent via electronic mail to: [commentletters@waterboards.ca.gov](mailto:commentletters@waterboards.ca.gov)

**RE: Comment Letter – Storm Water Strategy**

Dear Chair Marcus and Board Members:

On behalf of California Coastkeeper Alliance, which represents 12 California Waterkeeper groups spanning the coast from the Oregon border to San Diego, we appreciate the opportunity to provide comments on the State Water Resources Control Board's ("State Water Board") proposal to develop a strategy to optimize resource management of stormwater ("Storm Water Strategy"). CCKA and our network of California Waterkeepers have been actively involved in ensuring the control of stormwater pollution for twenty years. Many of our groups have reviewed, inspected, negotiated best management practices ("BMPs") and monitored dischargers since the original stormwater permits, and have worked closely with the State Water Board to develop, adopt and implement permits that improve California's water quality.

As the stormwater program has evolved, CCKA is witnessing an exchange of enforceability, either by citizens or the Boards themselves, for the perceived trade-off of discharger participation. This trend is concerning, as we replace enforceable standards for burdensome reporting, planning, and exemptions. For example, the recently affirmed Los Angeles County MS4 Phase I Permit provides an alternative method of compliance to receiving water limitations if dischargers participate in additional stormwater capture strategies. In contrast, an investment of Water Board resources on permit drafting processes to create defensible permits with objective technology and water quality based requirements would generate an "Efficient, Effective Regulatory System".

CCKA is supportive of the Storm Water Strategy, and hopes the State Water Board will invest resources into implementing projects. However, we have reservations that the Strategy is being planned and implemented too late to address the large scale permit changes that are rapidly developing essentially unchecked, and that there are multiple places within the proposed projects that raise concerns that it could become discharger-driven. For those reasons, we provide the following recommendations to the State Water Board with the hope of improving water quality – instead of weakening controls on pollution in the name of perceived costs of compliance or providing safe harbors:

- (1) Conduct an analysis of whether alternative compliance approaches are appropriate under the specific circumstances of each MS4 before allowing alternative compliance (Project 3a);
- (2) Finalize independent, peer reviewed technical guidance for developing Reasonable Assurance Analyses (RAA) (Project 3b), before developing alternative compliance guidance (Project 3a);
- (3) Specify baseline data required to support an RAA, and reference the deviation standards set out in the Los Angeles MS4 RAA guidance document (Project 3b);

- (4) Develop RAA guidance (Project 3b) independent of the discharger community, and require model to be peer reviewed prior to approval;
- (5) Make permit compliance and enforcement (Project 5b) a top priority and invest in QSP/QISP Stormwater Inspectors familiar with stormwater permits;
- (6) Revisit CCKA’s July 24<sup>th</sup> 2015 comment recommendations regarding stormwater as a resource, and incorporate specific actions into Objective 1;
- (7) Require any statewide stormwater policy (Project 3d and 3e) to incorporate the most stringent requirements from each municipal permitting scheme;
- (8) Be explicit that Watershed Asset Management Plans (Project 3g) will not be used as a cost-benefit analysis for complying with stormwater permits or Total Maximum Daily Loads (TMDLs);
- (9) Ensure guidance for determining the cost of compliance (Projects 4c and 4d) is peer-reviewed and independent;
- (10) Ensure Senate Bill 985 Guidelines (Project 4a) include NGO participation, and produce “living” stormwater management plans;
- (11) Commit to an implementation committee that is fair and balanced to provide all stakeholders an equal voice;
- (12) Make increasing stakeholder engagement (Project 2a) a higher priority;
- (13) Ensure sector-specific NELs (Project 5c) will be completed before the next 5-year iteration of the Industrial and Construction General Stormwater Permits; and
- (14) Begin developing a trash hot spot program (Project 6c) within Phase II of the Storm Water Strategy.

**A. PRIORITIZE INDEPENDENT, PEER REVIEWED TECHNICAL GUIDANCE FOR DEVELOPING REASONABLE ASSURANCE ANALYSES (PROJECT 3B) BEFORE DEVELOPING STATEWIDE GUIDANCE ON ALTERNATIVE COMPLIANCE PROGRAMS (PROJECT 3A).**

1. *Before developing statewide guidance on alternative compliance programs (Project 3a), the State Water Board should consider and analyze whether it is even appropriate for other regions to adopt similar programs.*

We strongly support greater oversight and evaluation efforts by the State Water Board with respect to MS4 permit programs, as well as efforts to provide greater guidance for implementation of these programs, including Watershed Management Programs (WMPs) and Enhanced Watershed Management Programs (EWMPs). However, we question whether the State Water Board’s proposed evaluation through Project 3a exemplifies what has become effectively a “shoot first, ask questions later” approach by the Water Boards to developing and implementing alternative compliance mechanisms for MS4 Permits across the state.

While Project 3a, and much of the Objective 3, aims to assess critical questions regarding “the transferability of the alternative compliance approach to other regions/permittees,” (STORMS, Appendix A, at 14), the State Water Board in large part appears to have already presupposed that the alternative compliance approach detailed in State Board Order WQ 2015-0075 is an appropriate, and likely to be implemented, approach to MS4 permitting across the state. Unfortunately, the State Water Board never paused to actually answer a threshold question—whether alternative compliance approaches are actually appropriate under the specific circumstances of each MS4.

Given the rapid turn to adopt the WMP/EWMP approach or some variant of it, it is unclear exactly how the proposed timeframe (2 years for a staff report) for project 3A is intended to inform the “transferability” of the WMP/EWMP approach to other regions or Permittees, as it appears that Los Angeles, San Diego, Orange County, and the San Francisco Bay Region will be well past this decision point years in advance of the guidance being issued. To allow time for review of the Los Angeles Permit and implementation of the WMP/EWMP approach to be at least even initially evaluated, the Board should recommend to additional regions that they stay efforts to implement the alternative compliance pathway.

To the extent that the State Water Board does conduct an analysis and evaluation of alternative compliance approaches in MS4 permitting, we strongly urge the Board to place emphasis on two of the initially stated rationales for developing an alternative compliance process in the 2012 Los Angeles MS4 Permit: stormwater capture for water supply augmentation and coordination of TMDL implementation. Despite the many failings of the 2012 Los Angeles MS4 Permit's alternative compliance approach, the use of WMPS/EWMPs in that permit was at least predicated on the potential (though poorly executed) for using the Permit as a mechanism for meeting these two objectives. Either or both of these justifications are thoroughly lacking for many, if not most other regions throughout the state, which in general do not yet have the need to meet conditions of 42 adopted TMDLs that Los Angeles must contend with, or may not have hydrologic conditions that easily favor capture on a widespread, as opposed to targeted, basis. For example, the San Diego region has only a minimal set of TMDLs to be implemented through the Regional MS4 Permit, and in many areas does not present strong opportunities for groundwater supply augmentation. Moreover, the Los Angeles Permit is already providing evidence that substantial issues exist with WMP/EWMP development, including that permittees are failing to demonstrate compliance with water quality standards, that models used as part of Reasonable Assurance Analyses are not being properly calibrated or even validated in the first instance, and that existing data may not be representative of specific watershed conditions. The State Water Board should move forward with caution on this track, and conduct an analysis of whether alternative compliance approaches are appropriate under the specific circumstances of each MS4 before additional regions are allowed to employ alternative compliance schemes.

2. *Before developing statewide guidance on alternative compliance programs (Project 3a), the State Water Board should finalize independent, peer reviewed technical guidance regarding how to develop appropriate RAAs (Project 3b).*

The move by Regional Boards, under State Water Board Order WQ 2015-0075, to proceed with alternative compliance programs is premature and inappropriate. Order WQ 2015-0075 directs "all regional water boards to consider the WMP/EWMP approach to receiving water limitations compliance when issuing Phase I MS4 permits going forward." (State Board Order WQ 2015-0075.) To this end, Regional Boards throughout California are proceeding apace to reopen permits or adopt the WMP/EWMP approach detailed in Order WQ 2015-15 for new permits,<sup>1</sup> seemingly having interpreted the State Board's directive as a mandate to adopt this approach rather than, as was hopefully intended, as an instruction to assess or "consider" whether the approach is suitable for their MS4s in particular. However, the U.S. EPA has already sent a clear message to the California Water Boards that they should slow this process and carefully consider whether there should be statewide alternative compliance approaches. In a letter submitted by the U.S. EPA January 20, 2015, to the State Water Board regarding Order 2015-0075, the EPA made clear that it believed "it would be premature and inappropriate to require the LA MS4 permit approach throughout the State, especially considering [unresolved] issues we've identified in this letter."<sup>2</sup> The issues identified by the U.S. EPA remain unresolved, and until the Water Boards have answered these threshold issues for alternative compliance approaches, the development of statewide guidance to replicate Los Angeles's program is inappropriate.

California's Water Boards cannot demonstrate that alternative compliance programs will result in achievement of water quality standards (WQSs). In several instances, it appears alternative compliance programs are not a reasonable means of assuring water quality goals will be met for the regions in question. In a December 2012 U.S. EPA letter, the EPA requested the Los Angeles Regional Board identify documents in the administrative record which are the basis for concluding specified retention would result in achieving WLAs.<sup>3</sup> Subsequently, the EPA submitted a second letter to the State Water Board in 2015, stating that based "on the Regional Board's April 11, 2013 response [to our December

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<sup>1</sup> See, e.g., San Diego, Orange County, and San Francisco.

<sup>2</sup> United States Environmental Protection Agency, Comments to A-2236(a)-(kk), (January 20, 2015).

<sup>3</sup> *Id.*

2012 letter], we do not believe that the permit’s record supports the conclusion that this retention will result in achievement of WLAs.”<sup>4</sup> The State Water Board cannot justify promoting the development of statewide guidance to develop alternative compliance programs (Project 3a), when Regional Boards to date cannot demonstrate such programs will result in achievement of water quality standards. Therefore, we request the State Water Board finalize independent, peer reviewed technical guidance regarding how to develop appropriate Reasonable Assurance Analyses (Project 3b) before developing statewide alternative compliance guidance (Project 3a).

3. *Project 3b should be completed independently and be peer reviewed, while specifying the baseline data required to support an RAA.*

We generally support the State Water Board’s efforts to develop strong technical guidance for development of Reasonable Assurance Analyses (“RAAs”). However, any technical guidance in general or analysis of different modeling approaches specifically should be assessed independent of the discharger community, and should require that any model approved for use in a WMP or EWMP be peer reviewed prior to approval.

Of greater concern, however, is that as with Project 3a we question the Board’s proposed timing for this effort. As stated above, multiple Regional Boards have either already approved adoption of an alternative compliance pathway or are now in the process of considering one for adoption. Under the proposed timeline for Project 3b, guidance on information and data needs, modeling, and conducting RAAs or developing watershed based sizing criteria would not be available for a minimum of 9 months for “version 1” and for 2 years for “version 2.” Absent direction from the State Board to the contrary, it is almost certain that permittees for Los Angeles County, the San Diego Region, North Orange County, and San Francisco will be long into work to develop watershed plans and conduct RAAs, potentially committing themselves to programs that may persist for over a decade, well before any guidance is made available or could have effect on their planning processes. While Order No. 2015-0075 will require permittees to “submit an updated Watershed Management Program or EWMP with an updated Reasonable Assurance Analysis by June 30, 2021,” (Order WQ 2015-0075, at 40), this places the use of guidance to control this process beyond the term of any permit adopted at this time. Again, the Board should take action to slow the rush to adopt alternative compliance mechanisms in the different regions, and wait until analysis of the Los Angeles Permit implementation process can be properly conducted.

Moreover, safe harbors based on RAAs are being approved now, without any minimum requirements being articulated in the permits. For example, both the draft San Diego and Bay Area MS4 Permits provide a safe harbor without actually setting out what kind of RAA is required. Under the San Francisco Permit, the San Francisco Estuary Institute, who would likely perform any RAA or green infrastructure planning modeling, has stated that there is inadequate data for San Francisco Bay to do any calibration or verification based on discharge or receiving water sampling. The San Francisco Bay Draft Permit also does not require sampling that would support calibration for the 5-year term of the permit. Thus, any RAA would effectively represent a complete guess as to whether permittees will meet water quality standards—yet these “analyses” would grant permittees a safe harbor during the term of their watershed program development and implementation. The State Water Board should revise Project 3b to, at a minimum, specify the baseline data required to support an RAA, and reference the deviation standards set out in the LA MS4 RAA guidance document.

We further recommend that Project 3b be given higher priority than Project 3a given that programs with existing RAAs should be required to incorporate this technical guidance at the next opportunity. The State Water Board should develop Project 3b independently of the discharger community, and any model approved for use in a WMP or EWMP should be required to be peer reviewed prior to approval.

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<sup>4</sup> *Id.*

**B. EVALUATE AND INCREASE STORM WATER PERMIT COMPLIANCE (PROJECT 5B) SHOULD BE THE PRIORITY.**

Increasing stormwater permit compliance should be a top priority within the Storm Water Strategy, yet Project 5b is vague and underwhelming at best. Project 5b's Objective is to develop recommended focus areas for existing storm water permit compliance evaluation, and identify potential additional resources for conducting focused program audits and compliance inspections to deter noncompliance (through increased Water Board staff field presence). Given the level of detail in other Storm Water Strategy projects, the Objective for Project 5b is insufficient. Throughout the state, stormwater enforcement is dismal, with minimal resources to even conduct audits, let alone bring enforcement actions against polluters. The State Water Board should strongly consider adding greater priority and resources to Project 5b, and we highly recommend a more comprehensive and detailed objective regarding how the State and Regional Water Boards will meet its responsibility of enforcing its regulatory program.

1. *Given the recent trend towards alternative compliance programs, enforcement should become an even greater priority for the State Water Board.*

We support efforts by the State Water Board to improve and expand Regional Board compliance inspections and evaluations, as well as to strengthen enforcement actions taken by Regional Boards. However, we again urge the State Water Board to use caution in allowing additional regions and MS4 permittees to adopt alternative compliance approaches generally, or WMP/EWMP programs specifically, until the implementation of the Los Angeles County Permit can be properly evaluated. The Los Angeles Permit approach has already demonstrated the potential to make compliance review and enforcement actions more cumbersome for the Water Boards than at present, and MS4 program development would benefit from the analysis to be conducted under Project 5b in advance of additional regions adopting a WMP/EWMP approach. Therefore, we strongly encourage the State Water Board to explicitly state that enforcement of its existing stormwater regulatory program is a top priority.

2. *Invest in QSP/QISP Stormwater Inspectors.*

Project 5a's "one year product" is to obtain permission and secure funding for the purchase of 25 field devices for Water Board storm water inspectors. First, we should point-out that this product should be removed from Project 5a and inserted into Project 5b – as the objective should be to increase stormwater enforcement through the use of field devices. Second, while this is a laudable aspiration, 25 field devices for nine Regional Water Boards covering the entire state of California is insufficient.

The State Water Board should invest in more stormwater inspectors, including those at lower pay-grades. For example, in Region One there are three storm water inspectors. One for Construction, one for Industrial, and one for Municipal stormwater permittees. All three of these inspectors are "Water Resource Control Engineers" with relatively high salaries. The Storm Water Strategy notes that "[s]ignificant funds are spent annually on storm water audits, inspections and compliance evaluations". This is because limited resources are being spent for contractors, like Tetra-Tech, to perform stormwater audits, inspections, and compliance evaluations. But the Water Boards do not need advanced engineers, or contracted specialists, to perform audits, inspections, and compliance evaluations. Instead, the State Water Board should invest in QSP/QISP Storm Water Inspectors who are low-level in-house staff familiar with stormwater permits.

3. *Audits should lead to enforcement violations.*

Throughout the state, we continually see audits find egregious permit violations leading to minimal, if any, enforcement. In fact, the only permittee we see consistently enforced against is Caltrans. If the Water Boards are serious about increasing stormwater permit compliance, then audits need to lead to enforcement actions. These are just some of the violations we have witnessed that resulted in little to no enforcement:

- Doggie Day Care Facility along a creek who had piles of dog excrement that were discharging directly to a creek when over irrigation occurred during the summer and when rains came during the winter. Neighbors reported time and time again that this was an ongoing problem and yet no enforcement was done.
- A grease hauler (pumped out grease from grease traps in restaurants) was twice caught in the back of a Costco after hours discharging the grease he had collected directly into the storm drain. Absolutely no enforcement occurred.
- A public park on over an acre of land was inspected twice, once by Tetra Tech and once by the Regional Board, in both instances after a qualifying rain event and with no sediment and erosion control BMPs installed.

The Water Boards need to take enforcement seriously. If the State Water Board is serious about increasing stormwater permit compliance, it will advise Regional Boards to begin issuing enforcement notices for violations uncovered during audit events.

**C. PROVIDE ADDITIONAL DETAILED ACTIONS THE STATE WATER BOARD CAN TAKE TO PROMOTE STORMWATER AS A RESOURCE.**

CCKA supports Objective 1 to optimize use of stormwater as a resource through stormwater capture and use. This objective is especially important in response to the current historic drought and the increasing challenges of meeting water quality and supply goals under the growing impacts of climate change. A previous assessment by the Natural Resources Defense Council and Pacific Institute indicated that stormwater capture in urbanized Southern California and the San Francisco Bay Area could increase annual water supplies by 420,000 to 630,000 acre-feet or more each year,<sup>5</sup> and the State Water Board has set a goal to “[i]ncrease the use of stormwater over use in 2007 by at least one million afy by 2030.”<sup>6</sup>

In our July, 2015 letter, we provided numerous detailed actions the State Water Board can take to promote stormwater a resource. However, it seems that most of – if not all – of our recommendations were not included in the Storm Water Strategy. We recommend the State Water Board revisit our “stormwater as a resource” recommendations, which we are incorporating into this letter as Attachment A. While we appreciate that the Storm Water Strategy is only a planning document, we recommended detailed actions to ensure the objectives are accomplished. Therefore, we recommend the State Water Board revisit our July recommendations regarding stormwater as a resource, and incorporate those specific actions into Objective 1.

Specifically, we request the State Water Board to reconsider our seven detailed actions the Board can undertake to treat stormwater as a resource:

- (1) A comprehensive, regional or watershed-based analysis of the potential for stormwater capture for water supply;
- (2) A technical review of stormwater capture barriers that includes a comprehensive review of groundwater quality and pollution issues for aquifers;
- (3) A methodology for prioritizing groundwater cleanup efforts to maximize potential for groundwater recharge through stormwater capture;
- (4) A review of barriers that may exist as a result of credit systems for groundwater recharge in adjudicated basins;
- (5) Identification of urban or hydrologic regions, watersheds, sub-watersheds, or other geographic areas where availability of open space or soil and geologic conditions may serve as a limitation on the potential for infiltrating stormwater for groundwater recharge;

<sup>5</sup> NRDC and Pacific Institute (2014) The Untapped Potential of California’s Water Supply: Efficiency, Reuse, and Stormwater; available at <http://www.nrdc.org/water/ca-water-supply-solutions.asp>.

<sup>6</sup> State Water Board (2009, amended 203) Recycled Water Policy, Resolution 2009-0011 (amended by Resolution 2013-0003).

- (6) An assessment of the potential for use of alternate stormwater capture methods for beneficial use, including use of site-based or regional capture and onsite use projects;
- (7) Regulatory requirements for retrofit of the existing built environment, for both public and private space.

**D. PROCEED WITH CAUTION WHEN ESTABLISHING PERMIT PATHWAYS TO MEET WATER QUALITY REQUIREMENTS.**

The Storm Water Strategy identifies numerous projects with laudable intent, but the State Water Board should develop these projects carefully to ensure proper implementation.

1. *In developing a statewide stormwater policy, attain the MEP standard by incorporating the most stringent municipal stormwater requirements available (Projects 3d and 3e).*

We generally support efforts to establish a statewide regulatory framework for municipal stormwater permits (Projects 3d and 3e), but recommend making it a lower priority, and instead concentrate on projects that improve stormwater permit efficiency and effectiveness.

A statewide stormwater policy would be beneficial if done properly; however, we have little confidence that this effort would not be overrun by the discharger community resulting in policy requirements that achieve the lowest common denominator in stormwater regulations. Municipal stormwater permittees, “shall require controls to reduce the discharge of pollutants to the maximum extent practicable (MEP).”<sup>7</sup> The State Water Resources Control Board has described MEP to mean:

[T]he fullest degree technologically feasible for the protection of water quality, except where costs are wholly disproportionate to the potential benefits.... This standard requires more of permittees than mere compliance with water quality standards or numeric effluent limitations designed to meet such standards.... The term “maximum extent practicable” in the stormwater context implies that the mitigation measures in a stormwater permit must be more than simply adopting standard practices. This definition applies particularly in areas where standard practices are already failing to protect water quality....<sup>8</sup>

Instead of creating a “race to the bottom” stormwater policy, the Storm Water Strategy should require any statewide stormwater policy to incorporate the most stringent requirements from each municipal permitting scheme in order to meet the MEP standard.

2. *Watershed Asset Management Plans (Project 3g) should not become a cost-benefit analyses for complying with Permits or TMDLs.*

Again, we generally support the concept of Watershed Asset Management Plans (WAMPs), but they need to be done carefully with strict guidance. The purpose of a WAMP is to document the current state of assets (e.g., asset inventory, valuation, condition, risk) and to project the long-range asset renewal requirements for a permittee. An asset management plan is a long-range planning document used to provide a rational framework for understanding and planning the asset portfolio. Each WAMP should identify the assets owned and managed by the permittee, provide an understanding of critical assets required to deliver the services, records the strategies that will be used to manage the assets, and documents the future investments required to deliver the committed services. WAMPs should serve as a road map to ensure that actions and activities that address flood risk management and water quality. These plans will provide a vehicle to identify and prioritize potential water quality and flood risk

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<sup>7</sup> 33 U.S.C. § 1342(p)(3)(B)(iii).

<sup>8</sup> North Carolina Wildlife Fed. Central Piedmont Group of the NC Sierra Club v. N.C. Division of Water Quality (N.C.O.A.H. October 13, 2006) 2006 WL 3890348, Conclusions of Law 21-22 (internal citations omitted).

management challenges, evaluate opportunities for integrating water quality and flood risk management into permittee projects and operations and maintenance activities within the watershed.

While in theory WAMPs are sound resource investment tools, they should not be used to justify either spending, or not spending, in a specific area of permit compliance. Any statewide guidance should build in flexibility – requiring updates and amendments – for stormwater management implementation and adaptation. Finally, the State Water Board should be explicit that statewide guidance for developing WAMPs will not be used as a cost-benefit analysis for complying with stormwater permits or TMDLs.

3. *Assessing cost of compliance (Projects 4c and 4d) should be done independently.*

There has been a lot of discussion over the years regarding cost of compliance. We appreciate the State Water Board’s concerns with the unsupported claims of cost of compliance. We therefore generally support the attempt to rein in outrageous cost estimates used by the discharger community. However, we remain concerned that stakeholder engagement may lead to unsubstantiated outcomes. Therefore, we recommend revising the Storm Water Strategy to ensure any guidance for determining the cost of compliance (Projects 4c and 4d) is peer-reviewed and independent of the discharger community.

**E. SENATE BILL 985 GUIDELINES (PROJECT 4A) SHOULD BE INCLUSIVE OF NGOS AND PRODUCE “LIVING” STORMWATER MANAGEMENT PLANS THAT EVOLVE AS CALIFORNIA’S STORMWATER PROGRAM IMPROVES.**

1. *Provide mechanisms to ensure Stormwater Resource Plans identify, plan, and implement future stormwater projects identified by all stakeholders.*

Stormwater Resource Plans (SWRPs) should be built around specific criteria, benefits, and metrics which enable “yet to be designed” projects to be eligible for Proposition 1 funds. The State Water Board has specified that Stormwater Grant Program funds will be dispersed in 2016 and 2018. While this short timeframe would appear to favor “shovel ready” or already designed projects, we note that the lifespan of an SWRP will likely extend beyond the Prop 1 funding timeframe; indeed the Draft Guidelines specify that a SWRP is a “condition for receiving funds from *any* bond approved by the voters after January 2014” (*Emphasis added.*) As a result, the Guidelines must express clear requirements for procedures to update SWRPs, and for projects that are not identified in the original SWRP to obtain funding in the future, as long as they comport with the priorities and metrics identified in the SWRP, or its amendments. In short, the SWRP must be a living document, one which allows agencies and non-agency partners to identify, plan, and implement projects with stormwater funding, now and in the future.

2. *Reference other resource management tools to develop metrics to assess multi-benefit stormwater projects.*

We are strong supporters of objective metrics and quantitative methods for evaluating project performance and prioritizing investments. We support the Board’s efforts to develop these tools for SWRP developers. In particular, we recommend that:

1. Water quality metrics be expanded to include other units of measurement. MeHg, pesticide and pathogenic pollutants are measured in units considerably smaller than lbs/day;
2. Water supply metrics be expanded to include metrics that reflect supply security and reliability, including diminished risk and avoided cost of expanded or alternate supply;
3. Flood management metrics be expanded to include acreage or linear feet of expanded floodplain or flood channel;
4. Environmental metrics be reviewed for consistency with other state agency Proposition 1 grant programs, to ensure complementarity and adequacy; and
5. Community metrics be expanded based upon community input.

The point about consistency with other Proposition 1 grant programs is worth repeating. There may be opportunities for SWRPs to leverage these other sources of funding, which in turn are tied to objective, metric based evaluation criteria. There is considerable interest in ensuring that, where appropriate, individual projects can meet overall state objectives while satisfying the multiple criteria of these other programs. We also encourage staff to look to other metrics that have been developed for multi-benefit stormwater projects as models [See Attachment B]. One example may be the matrix approach developed through the Los Angeles Clean Beaches project, a copy of which can be found in Attachment B.

SB 985 should include a robust stakeholder process to ensure NGO projects are not precluded from Prop 1 funding. We have two fundamental concerns with the draft Guidelines: the uncertainty and inconsistency in the role afforded to NGOs in the implementation of SWRPs, and the apparent necessity that all projects must be included in the SWRP in order to be supported by current and future water bond funds.

3. *Stormwater Resource Plans should include a role for NGOs.*

SB 985 should include a robust stakeholder process to ensure NGO projects are not precluded from Prop 1 funding. We have two fundamental concerns with the draft Guidelines: the uncertainty and inconsistency in the role afforded to NGOs in the implementation of SWRPs, and the apparent necessity that all projects must be included in the SWRP in order to be supported by current and future water bond funds.

We appreciate and support the Board's recognition that non-governmental environmental and community organizations have an important role to play in the development and implementation of SWRPs. Across all Prop 1 grant programs, NGOs have been and will continue to be leaders in applying for funding and implementing multi-benefit water quality and conservation projects. The SWRP structure must include a role for NGOs as partners, and ensure that projects which NGOs identify, design and plan will be eligible for Stormwater Grant Program funding.

**F. IMPLEMENTATION OF PROJECTS SHOULD BE DONE EQUITABLY TO SERVE ALL STAKEHOLDERS, WITH ATTENTION TO A MORE EFFICIENT AND EFFECTIVE STORMWATER PROGRAM.**

1. *If an implementation committee goes forward it should be a balanced representation of stakeholders.*

On August 19, 2015, the State Water Board held a workshop to receive input on the proposed Stormwater Strategic Initiative. During that meeting, the discharger community requested the State Water Board create a joint implementation committee for the dischargers to help implement the Storm Water Strategy. While we found this bold request to be inappropriate, we appreciate the State Water Board's characterization of such a committee: "A Storm Water Strategy Implementation Committee (Implementation Committee) will provide a forum for stakeholders from other state agencies, the regulated community, and nonprofit organizations to continue the evaluation and guidance of the Storm Water Strategy with the State Water Board serving as lead."

We are uncertain whether an implementation committee – requested by the discharger community – is proper. However, we do see the value in a committee that includes other state agencies – as their participation in promoting stormwater as a resource will be invaluable. If the State Water Board decides to move forward, we request that the implementation committee be fair and balanced to provide all stakeholders an equal voice.

2. *Increasing stakeholder engagement (Objective 2) should be a higher priority.*

Let no good emergency go to waste. Over the years, integrated water management has attempted to break down the silos of various public agencies to manage water as one. However, those attempts traditionally ran up against entrenched independent-minded government agencies unwilling to realize the value of collaboration and multi-benefit projects. However, the drought has provided California with an opportunity to breakdown existing barriers for stakeholder collaboration. Increasing stakeholder collaboration (Objective 2) is extremely timely given the drought crisis and the accelerating pace in which key water resource decisions are being made.

Objective 2 should be considered a higher priority by the State Water Board than currently indicated. As California makes increasingly complex and challenging decisions regarding water supply and resource allocation, it is important that the State Water Board engage not only with stakeholders in the water quality sphere, but with water supply, open space and park, public health, and other agencies and stakeholder groups. Many of the approaches and strategies that may be developed by the State Water Board will require multi-agency, multi-stakeholder coordination to maximize benefits and available funding, and these opportunities should be considered from the outset. Therefore, we request the State Water Board *make increasing stakeholder engagement (Project 2a) a higher priority*.

3. *Ensure that sector-specific Numeric Effluent Limitations (Project 5c) are developed before the next five-year adoption of the Construction and Industrial General Permits.*

As we've made clear, CCKA strongly supports establishing sector-specific technology based numeric effluent limitations (NELs) for the Industrial and Construction General Permits. NELs are the most efficient and effective tool the State Water Board can use in its stormwater program, and staff now acknowledges that there is sufficient data – for certain sector-specific technologies – to develop legally sound NELs. NELs are a critical step towards providing clarity and certainty that the impacts of industrial and construction activities on water quality are controlled. NELs provide a simple and transparent regulatory scheme that dischargers can readily comply with and that State and Regional Board staff and the public can easily enforce.

The Storm Water Strategy sets an unreasonable time schedule for Project 5c to be completed in 2027. The California Waterkeepers have been pressing the State and Regional Boards to include NELs in stormwater permits for over a decade. Current permits include only narrative limits, usually linked to subjective determinations relating to Best Management Practices implementation, or whether the discharge is “contributing” to exceedances of Water Quality Standards in receiving waters. This scheme is opaque at best, requires intensive investigation by either Regional Board staff or citizen enforcers, and therefore undermines enforcement efforts. The vast majority of enforcement undertaken by the Regional Boards relates only to failures to file documents.

In 2006, the State Board convened a panel of stormwater experts to evaluate the feasibility of NELs, resulting in an NEL feasibility report concluding that “Numeric Limits are feasible for some industrial categories.”<sup>9</sup> This conclusion was made 21 years before the State Water Board anticipates development of sector-specific NELs. Furthermore, the IGP concluded that “the State Water Board expects that this [Permit’s data collection] and assessment process will provide information necessary to determine the feasibility of numeric effluent limitations for industrial dischargers in the next reissuance of this General Permit, consistent with the State Water Board Storm Water Panel of Experts’ June 2006 Recommendations.”

The State Water Board acknowledges that “the Water Boards likely can identify some specific sectors and pollutants for which to develop NEL.”<sup>10</sup> The Board goes on to acknowledge that “Water Boards can

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<sup>9</sup> Stormwater Panel on Numeric Limits, The Feasibility of Numeric Effluent Limits Applicable to Discharges of Storm Water Associated with Municipal, Industrial and Construction Activities, Report to the State Water Resources Control Board, pg. 19 (June 2006), available at [http://www.waterboards.ca.gov/water\\_issues/programs/stormwater/numeric.shtml](http://www.waterboards.ca.gov/water_issues/programs/stormwater/numeric.shtml).

<sup>10</sup> *Id.*

improve efficiency and water quality by evaluating opportunities where the NELs also address TMDL requirements.” We strongly agree, and since NELs are the best way to improve efficiency and water quality, we strongly recommend the State Water Board revise Project 5c’s priority to “high” and revise the implementation schedule accordingly. At a minimum, the Storm Water Strategy should ensure sector-specific NELs will be completed before the next 5-year iteration of the Industrial and Construction General Stormwater Permits.

4. *Develop a Trash Hot Spot Program within Phase II of the Strategy.*

We strongly support the State Water Board’s efforts to develop and implement a trash hot spot program (Project 6c). We also appreciate the necessity of implementing the Trash Amendments before developing additional trash control programs. However, the Storm Water Strategy does not intend to begin developing a trash hot spot program until 2022. The Trash Amendments will be implemented in the next five years, at which point, all municipal stormwater permittees should have the Trash Amendments’ requirements incorporated into their permits. At this point, it seems reasonable to begin developing a statewide trash hot spot program. Therefore, we request the State Water Board begin developing a trash hot spot program within Phase II of the Storm Water Strategy.

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Our organization looks forward to working with you to ensure the Storm Water Strategy is implemented in an equitable and balanced manner. Our hope is that the focus of the Strategy will be to improve water quality – and not reduce the cost of compliance in a manner that shields dischargers from their Clean Water Act obligations.

Sincerely,

Sean Bothwell  
Program Director  
California Coastkeeper Alliance

Becky Hyatt  
Staff Attorney  
Natural Resources Defense Council

Rita Kampalath  
Science and Policy Director  
Heal the Bay

# ATTACHMENT A



July 24, 2015

Chair Felicia Marcus and Board Members  
c/o Jeanine Townsend, Clerk to the Board  
State Water Resources Control Board  
1001 I Street, 24<sup>th</sup> Floor  
Sacramento, CA 95814

Sent via electronic mail to: [commentletters@waterboards.ca.gov](mailto:commentletters@waterboards.ca.gov)

**RE: Comment Letter – Proposal to Develop a Storm Water Program Work Plan and Implementation Strategy**

Dear Chair Marcus and Board Members:

On behalf of California Coastkeeper Alliance, which represents 12 California Waterkeeper groups spanning the coast from the Oregon border to San Diego, we appreciate the opportunity to provide comments on the State Water Resources Control Board's ("State Water Board") proposal to develop a Storm Water Program Work Plan and Implementation Strategy ("Stormwater Strategic Initiative" or "SWSI"). CCKA and our network of California Waterkeepers have been actively involved in ensuring the control of stormwater pollution for twenty years. Many of our groups have reviewed, inspected, negotiated best management practices ("BMPs") and monitored dischargers since the original stormwater permits, and have worked closely with the State Water Board to develop, adopt and implement permits that improve California's water quality.

As the stormwater program has evolved, CCKA is witnessing an exchange of enforceability, either by citizens or the Boards themselves, for the perceived trade-off of discharger participation. This trend is concerning, as we replace enforceable standards for burdensome reporting, planning, and exemptions. For example, the recently affirmed Los Angeles County MS4 Phase I Permit provides an alternative method of compliance to receiving water limitations if dischargers participate in additional stormwater capture strategies. The regulated community, the water boards, and most importantly, water quality and the public would all benefit from stormwater permits that move away from the current overreliance on processes for compliance, off-ramps and safe harbors. Such aspects of stormwater permits move away from the SWSI's Guiding Principle #3 (Efficient, Effective Regulatory Systems).

In contrast, an investment of Water Board resources on permit drafting processes to create defensible permits with objective technology and water quality based requirements would generate an "Efficient, Effective Regulatory System". There needs to be a cultural shift to consider enforcement throughout the SWSI, its projects, and with each stormwater permit. The State Water Board's Water Quality Unit should work closely with the Enforcement Unit to ensure enforcement is a guiding principle throughout the Work Plan, and more importantly, is a focus of each project undertaken in the SWSI. Furthermore, the Water Quality Unit should develop robust adaptive monitoring for each project to ensure success and accountability.

While CCKA is supportive of the SWSI, and hopes project implementation will not be delayed, we have reservations that the SWSI will largely become discharger-driven. For those reasons, we provide the following recommendations to the State Water Board in hopes that projects will be prioritized based on

improving water quality – and not based on reducing cost of compliance or providing additional safe harbors:

- The State Water Board should maximize the potential benefits of stormwater capture by developing comprehensive watershed-based analyses of the potential for stormwater capture;
- Stakeholder collaboration, monetizing stormwater, and funding for stormwater projects should remain a high priority for the State Water Board given the drought crisis;
- Post-construction requirements for watershed health should remain a high priority in the Initiative;
- Technical guidance for alternative compliance for receiving water limitations should be prioritized only if reasonable assurance analyses ensure water quality standards are being met; and
- Sector-specific technology-based numeric effluent limitations for industrial and construction storm water permits should be a “high” priority for the State Water Board.

**I. THE STATE WATER BOARD SHOULD MAXIMIZE THE POTENTIAL BENEFITS OF STORMWATER CAPTURE BY DEVELOPING COMPREHENSIVE WATERSHED-BASED ANALYSES OF THE POTENTIAL FOR STORMWATER CAPTURE.**

*A. Project 1a – Stormwater Capture and Use Goal*

CCKA strongly supports the State Water Board’s SWSI Project 1 to optimize use of stormwater as a resource through stormwater capture and use. This measure, as with several of the SWSI projects discussed below, is especially important in response to the current historic drought and the increasing challenges of meeting water quality and supply goals under the growing impacts of climate change. A previous assessment by the Natural Resources Defense Council and Pacific Institute indicated that stormwater capture in urbanized Southern California and the San Francisco Bay Area could increase annual water supplies by 420,000 to 630,000 acre-feet or more each year,<sup>1</sup> and the State Water Board has set a goal to “[i]ncrease the use of stormwater over use in 2007 by at least one million afy by 2030.”<sup>2</sup>

In order to maximize the potential resource benefits of stormwater capture, however, a comprehensive, regional or watershed-based analysis of the potential for stormwater capture for water supply is critical and should remain a very high priority for the State Water Board. This is already being done by entities like the Central Coast Regional Water Board and the San Francisco Estuary Institute, and the State Water Board should build upon these analyses already being conducted. This analysis should examine aggressive use of existing practices such as infiltration and groundwater recharge, onsite capture for reuse, use of green streets and public space or public right of way, green infrastructure based approaches, and other strategies at both distributed or site specific and regional scales. In particular, the analysis should prioritize opportunities to increase groundwater supplies, including identifying the location, infiltration potential, and potential resulting yield of groundwater supplies from stormwater capture for groundwater basins or aquifers currently used for water supply. The analysis should additionally assess the availability and potential infiltration or capture for reuse capacity of public property and open space, or, where potential for public/private partnerships may exist, private spaces suitable for stormwater capture in urbanized environments. This assessment should be coupled with mapping and analysis of existing MS4 systems to identify potential locations where stormwater flowing in an MS4 system could be diverted for capture.

Finally, any analysis of stormwater capture potential for beneficial use should be undertaken in coordination with additional State Water Board and Regional Board efforts under SWSI Project 7, to identify watershed-specific processes that are critical to watershed health, and a broader overall analysis

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<sup>1</sup> NRDC and Pacific Institute (2014) The Untapped Potential of California’s Water Supply: Efficiency, Reuse, and Stormwater; available at <http://www.nrdc.org/water/ca-water-supply-solutions.asp>.

<sup>2</sup> State Water Board (2009, amended 2013) Recycled Water Policy, Resolution 2009-0011 (amended by Resolution 2013-0003).

of existing or proposed methods for demonstrating compliance with water quality requirements in MS4 permits based on capture. In this regard, while CCKA strongly supports robust efforts to increase stormwater capture for beneficial use, we note that ultimate compliance with water quality requirements in MS4 permits must be based on monitoring in the receiving water. (See our comments on Project 5, below, for a full discussion of this issue.)

*B. Project 1b – Barriers to Stormwater Capture and Use*

Just as, if not more, critical as assessing the potential for stormwater capture and establishing goals for stormwater capture and use will be the State Water Board's effort to eliminate existing barriers to capture and beneficial use of stormwater. CCKA supports the Board's proposed approach to consider and analyze not just technical, but legal, and political or logistical barriers to stormwater capture as well. For the proposed project, any technical review of stormwater capture barriers should include a comprehensive review of groundwater quality and pollution issues for aquifers either used for water supply or with the potential to be used for water supply, or should include a methodology for prioritizing groundwater cleanup efforts to maximize potential for groundwater recharge through stormwater capture. The analysis should further consider current land use or development patterns that pose a potential threat to groundwater quality, such as from industrial and construction stormwater runoff sources. CCKA supports development of numeric limits based on BAT/BCT for these types of discharge sources as a means of addressing this barrier—Orange County Coastkeeper has previously used data from the Santa Ana Sector-Specific Permit for Scrap Facilities to develop numeric limits representing BAT/BCT.

Further, the analysis should review barriers that may exist as a result of credit systems for groundwater recharge in adjudicated basins, and engage with water rights holders to assess potential for establishing a quantitative methodology for assessing groundwater supply yield from stormwater capture. (See our comments on SWSI Project 3, below.) Finally, any technical analysis should identify urban or hydrologic regions, watersheds, sub-watersheds, or other geographic areas where availability of open space or soil and geologic conditions may serve as a limitation on the potential for infiltrating stormwater for groundwater recharge. In any area where groundwater recharge is not feasible, the State Water Board should assess the potential for use of alternate stormwater capture methods for beneficial use, including use of site-based or regional capture and onsite use projects.

*C. Project 1c – Increase Storm Water Capture and Use through Regulatory Approaches*

CCKA strongly support efforts to increase water supply through stormwater capture, including through regulatory and permitting approaches. Given the lengthy process of Project 1a and 1b, a regulatory approach, coupled with available Prop 1 funding, is the best near-term solution for increasing stormwater capture. However, where the Board may propose permitting approaches that allow compliance to be determined through watershed-based capture programs, we note that, among a number of considerations, ultimate compliance with water quality requirements must be remain the paramount consideration and be determined in the receiving water. Further, any permitting scheme based on watershed planning must require dischargers to consider and prioritize potential for meeting water supply goals, where feasible, when identifying potential projects. As Los Angeles Waterkeeper has commented with regard to implementation of the 2012 Los Angeles County MS4 permit, many dischargers have failed to adhere to capture and water supply based permit provisions, and for many other municipalities performing alternative compliance the Permit never actually placed a requirement on them to consider water supply or even use of stormwater capture at all. Finally, the State Water Board should consider establishing regulatory requirements for retrofit of the existing built environment, for both public and private space, as a means of increasing stormwater capture in our urban and suburban areas.

Overall, Project 1 is a laudable objective and should be pursued as a high priority by the State Water Board. However, the Work Plan itself – particularly Appendix A – needs more detail to the product outcomes. Just saying we should treat stormwater as a resource does not capture the opportunity before

us. Therefore, as described above, CCKA offers the following “product outcomes” to be included in the SWSI’s Appendix A:

- (1) A comprehensive, regional or watershed-based analysis of the potential for stormwater capture for water supply;
- (2) A technical review of stormwater capture barriers that includes a comprehensive review of groundwater quality and pollution issues for aquifers;
- (3) A methodology for prioritizing groundwater cleanup efforts to maximize potential for groundwater recharge through stormwater capture;
- (4) A review of barriers that may exist as a result of credit systems for groundwater recharge in adjudicated basins;
- (5) Identification of urban or hydrologic regions, watersheds, sub-watersheds, or other geographic areas where availability of open space or soil and geologic conditions may serve as a limitation on the potential for infiltrating stormwater for groundwater recharge;
- (6) An assessment of the potential for use of alternate stormwater capture methods for beneficial use, including use of site-based or regional capture and onsite use projects;
- (7) Regulatory requirements for retrofit of the existing built environment, for both public and private space.

**II. STAKEHOLDER COLLABORATION (PROJECT 2), MONETIZING STORMWATER (PROJECT 3), AND FUNDING FOR STORMWATER PROJECTS (PROJECT 4) SHOULD REMAIN A HIGH PRIORITY FOR THE STATE WATER BOARD GIVEN THE DROUGHT CRISIS.**

Project 2 (Stakeholder Collaboration to Promote Stormwater as a Resource), Project 3 (Monetary Value of Stormwater), and Project 8 (Funding for Stormwater Programs), are all critical independent efforts for the State Water Board to undertake, as well as critical to the success of any efforts that may follow from the successful completion of Project 1. These projects should all be considered a high priority by the Board and are extremely timely given the drought crisis and the accelerating pace in which key water resource decisions are being made.

*A. Project 2 – Stakeholder Collaboration*

SWSI Project 2 should be considered a higher priority by the State Water Board than currently indicated. As California makes increasingly complex and challenging decisions regarding water supply and resource allocation, it is important that the State Water Board engage not only with stakeholders in the water quality sphere, but with water supply, open space and park, public health, and other agencies and stakeholder groups. Many of the approaches and strategies that may be developed by the State Water Board will require multi-agency, multi-stakeholder coordination to maximize benefits and available funding, and these opportunities should be considered from the outset.

*B. Project 3 – Monetary Value of Stormwater*

The success of any long-term effort to increase stormwater capture for use will require development of accurate methodologies for assessing the monetary value of stormwater capture—too often the alleged costs of stormwater control practices are raised or taken into account by the State Water Board and other parties without proper consideration of the monetary *benefits* presented by, among other aspects, increased water supply, decreased pollution, improved or increased open space, habitat, and recreation opportunities, and improved air quality that may attend stormwater projects. Proper assessment of the monetary value of stormwater capture for this wide range of potential benefits will ultimately allow for greater development of multi-agency or stakeholder projects. Critically, to engage with water supply stakeholders, any effort to assess the monetary value of stormwater for groundwater recharge purposes must address not only cost and volume of infiltration, but include development of a methodology for assessing the potential production yield of captured stormwater for water supply.

### C. Project 8 – Funding for Stormwater Projects

CCKA fully supports the State Water Board’s effort to eliminate barriers to funding local storm water programs and to increase availability of grant and loan funding of storm water capture and use projects. In addition to the potential approaches identified by the State Water Board, we encourage the Board to assess opportunities for obtaining or managing funding through multi-agency partnerships, where such an approach might leverage the resources of multiple partners and funding sources, and to explore the potential for developing or promoting public/private partnerships for stormwater capture or leveraging investment of private capital in stormwater projects.

### III. PROJECT 7 (POST-CONSTRUCTION REQUIREMENTS FOR WATERSHED HEALTH) SHOULD REMAIN A HIGH PRIORITY IN THE STORMWATER INITIATIVE.

The objective of Project 7 is to develop technical guidance and permitting tools to promote implementation of post-construction requirements based on watershed processes, statewide. Post-construction stormwater management in areas undergoing new development or redevelopment is critical because runoff from these areas has been shown to significantly affect receiving waterbodies.<sup>3</sup> Many studies indicate that prior planning and design for the minimization of pollutants in post-construction stormwater discharges is the most *cost-effective approach* to stormwater quality management.<sup>4</sup> We strongly support Project 7, and request that it remain a high priority project.

#### A. *The State Water Board should uphold its commitment to develop Watershed Management Zones statewide.*

Throughout the development of the Phase II MS4, State Water Board staff intended on developing Watershed Management Zones (WMZs) as a key tool to improve post-construction standards. However, before the Phase II Permit was adopted, the State Water Board determined WMZs were not ripe for adoption. Instead, the State Water Board stated in the Phase II Permit that it “will incorporate runoff retention and hydromodification control criteria in the next permit term that will be keyed to specific watershed processes as identified by the State Water Board within specific WMZs.”<sup>5</sup> The State Water Board goes on to find that “WMZs will be used to identify applicable areas and appropriate criteria for runoff retention and hydromodification control.”<sup>6</sup>

While CCKA regretted seeing the WMZs removed, we supported the State Water Board’s decision and worked with staff to craft language to ensure the Central Coast Regional Water Board could move forward with its WMZs as a “pilot-project” for the rest of the state. CCKA and its Central Coast Waterkeepers, along with the Natural Resources Defense Council, spent additional resources to ensure the Central Coast Regional Water Board re-adopted its WMZs without any weakening or delay. We now expect the State Water Board to hold to its Phase II promise that WMZs will be developed statewide, and *we applaud the State Water Board for making Project 7 a high priority.*

#### B. *The State Water Board should work closely with the Central Coast Regional Water Board’s staff to develop statewide WMZs.*

The Central Coast Regional Board’s Runoff Retention requirements are critical to the State Water Board effort to develop similar requirements statewide. Regional Board staff, in fact, coordinated with the State Water Board to develop hydromodification control methodology, criteria, policy, and other permit requirements contained in the Phase II Permit. The Regional Board’s methodology to determine

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<sup>3</sup> <http://www.epa.gov/npdes/pubs/fact2-7.pdf>

<sup>4</sup> <http://www.epa.gov/npdes/pubs/fact2-7.pdf>

<sup>5</sup> State Water Resources Control Board, MS4 Phase II Fact Sheet, pg. 19; available at [http://www.waterboards.ca.gov/water\\_issues/programs/stormwater/docs/phsii2012\\_5th/fs\\_final\\_sidenote.pdf](http://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/phsii2012_5th/fs_final_sidenote.pdf).

<sup>6</sup> *Id.*

hydromodification control criteria overall will assist the State and Regional Boards in directing permittees to successfully develop scientifically sound and understandable criteria elsewhere. Like the Regional Board, the State Board believes that “[t]hrough the development of hydromodification measures based on watershed management zones, key watershed processes will be protected, and where degraded, restored. As a result of restored and maintained watersheds, key relationships between hydrology, channel geomorphology and biological health will be created and maintained and water quality/beneficial uses protected.”<sup>7</sup>

Over the past ten years, the Central Coast Regional Board collaborated with regional stakeholders to identify 10 WMZs that reflect the variations in watershed processes in the region. In certain WMZs, the Post-Construction Requirements would require municipalities to meet Runoff Retention requirements at new development and redevelopment projects, where feasible, to retain the 95th percentile storm event. This Runoff Retention volume must be infiltrated, evaporated/transpired, and/or harvested for later use. Retention objectives are now recognized as a superior way to address both the treatment of polluted runoff, as required by the Clean Water Act, and the recharge of groundwater basins critical to California’s water supply portfolio.<sup>8</sup> Requiring that this volume of runoff be retained will advance these critical goals.

Under Section 438 of the Energy Independence Security Act of 2007 (“EISA”), all new and redeveloped United States federal facilities over 5,000 square feet are directed to meet stormwater runoff requirements that, under guidance developed by the U.S. EPA, include as the default compliance option retention of the 95th percentile storm event onsite.<sup>9</sup> In setting this default 95th percentile standard, EPA relied on a detailed technical analysis, including assessment of multiple case studies, to demonstrate that retention of the 95th percentile storm event is technically feasible for a range of site conditions and building designs throughout the country.<sup>10</sup>

Similarly, through analyzing geology, landforms, hydrologic features, and vegetation in the region, the Central Coast Regional Board determined that retention of the 95th percentile storm is technically feasible in certain WMZs, and as a result determined to require this standard—in part “because ‘it employs natural treatment and flow attenuation methods that are presumed to have existed on the site before construction of infrastructure (e.g., building, roads, parking lots, driveways,).’”<sup>11</sup> Notably, this strategy correlates the Runoff Retention standard with local hydrology; retention of the 95th percentile storm is not required in all areas covered by the Post-Construction Requirements, only in areas where infiltration is highly dominant and will facilitate retention. Since the retention of the 95th percentile storm has been demonstrated to be achievable in these areas, the Regional Board’s decision to include them in the Post-Construction Requirements properly meets the requirements of the Clean Water Act’s “maximum extent practicable” standard under 33 U.S.C. 1342(p)(3)(B)(iii), rather than exceeding it.

The Central Coast’s Runoff Retention requirements<sup>12</sup> are designed to address the full suite of watershed processes affected by urban stormwater, including surface runoff, groundwater recharge, and the chemical

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<sup>7</sup> State Water Resources Control Board, Fact Sheet for NPDES General Permit and Waste Discharge Requirements for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems; pg. 35 (Feb. 2013), available at [http://www.waterboards.ca.gov/water\\_issues/programs/stormwater/docs/phsii2012\\_5th/fs\\_final\\_sidenote.pdf](http://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/phsii2012_5th/fs_final_sidenote.pdf).

<sup>8</sup> National Research Council, Urban Stormwater Management in the United States, pg. 376 (Oct. 2008), available at <http://www.cacoastkeeper.org/document/urban-stormwater-management-in-the-united-states.pdf>.

<sup>9</sup> See United States Environmental Protection Agency, Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act, pg. 12 (Dec. 2009), available at <http://water.epa.gov/polwaste/nps/upload/eisa-438.pdf>.

<sup>10</sup> See *Id.* at 25-54.

<sup>11</sup> Central Coast Regional Water Quality Control Board, Staff Report for Resolution No. R3-2012-0025, pg. 6 (Sept. 2012); citing United States Environmental Protection Agency, Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act, pg. 12 – 13 (Dec. 2009).

<sup>12</sup> We note that the Post-Construction Requirements overall emphasize protection of areas that are less disturbed over urban areas with existing impacts, and apply requirements more rigorously to new development as compared with redevelopment in existing urban areas. While we support rigorous post-construction requirements for new development, redevelopment and even retrofits to existing buildings could and should be required to meet the 95th percentile standard.

and biological role of soil and vegetation in filtering runoff. Moreover, the requirement to retain the 95<sup>th</sup> percentile standard will help promote continued positive watershed processes—thereby advancing water quality and supply goals for the region. The Central Coast’s WMZs are considered the model for post-construction standards, and the State Water Board should work closely with the Central Coast Water Board staff to ensure a similar effort is developed statewide – including a 95<sup>th</sup> percentile storm retention standard where feasible.

**IV. PROJECT 5 (TECHNICAL GUIDANCE FOR ALTERNATIVE COMPLIANCE FOR RECEIVING WATER LIMITATIONS) SHOULD BE PRIORITIZED ONLY IF REASONABLE ASSURANCE ANALYSES ENSURE WATER QUALITY STANDARDS ARE BEING MET.**

The State Water Board’s SWSI Project 5 is to assess alternatives compliance approaches for MS4 Permit Receiving Water Limitations. As stated above, CCKA supports the State Water Board’s desire to promote stormwater capture to augment local water supplies and address water quality concerns in response to the current historic drought and the increasing challenges of climate change. However, current efforts to-date have failed to properly implement a true multi-benefit approach to stormwater management that achieves compliance with water quality standards (“WQSs”). While CCKA believes current attempts to implement alternative compliance approaches for MS4 receiving water limitations has been illegal, we support the SWSI’s Project 5 as an important tool for providing guidance to assure Reasonable Assurance Analysis (“RAA”) are properly implemented and WQSs are being met.

As discussed in detail in our written and oral comments on the October 10, 2012 Issue Paper regarding Municipal Storm Water Permit Receiving Water Limitations, we feel that the current receiving water limitation (“RWL”) provisions contain clear, appropriate, and enforceable language that complies with the Clean Water Act and has stood the test of administrative, judicial, and enforcement challenges.<sup>13</sup> Municipal dischargers, however, repeatedly raised concerns about the alleged uncertainty of compliance with water quality-based RWLs in NPDES permits and have argued for unenforceable vague permit limits and/or “safe harbors.” Proposals to incorporate “safe harbor” provisions or otherwise weaken the RWL language of MS4 Permits in California would fail to meet minimum federal requirements, and would constitute a violation of the Clean Water Act’s anti-backsliding provisions for any permit previously incorporating the required language of State Water Board Order 99-05. Any attempt to shield permittees from enforceable requirements meant to ensure water quality standard compliance would move the state backwards in terms of water quality and discharger accountability and thus represents poor public policy. Furthermore, alternative compliance approaches are resource intensive due to the complicated nature of watershed management plans. By encouraging alternative compliance approaches to move forward, the State Water Board is only further draining its already limited staff resources.

To avoid this result, the State Water Board must provide statewide guidance as part of Project 5 that all purported “safe harbors” should be removed from alternative compliance approaches, and instead require implementation of watershed management programs as one way to achieve, rather than demonstrate, compliance with RWLs and WQSs.

Furthermore, Project 5 is found under the SWSI’s Guiding Principle 2, which states that Water Boards’ “Storm Water Programs Preserve Watershed Processes to *Achieve* Desired Water Quality Outcomes.”<sup>14</sup> To-date, however, CCKA does not know of an existing alternative compliance approach that *achieves desired water quality outcomes in actual outcome*. Rather than require MS4 Permittees to efficiently and effectively achieve the multiple benefits desired by the State Board, alternative compliance approaches provide so-called “safe harbors” for Permittees that in Los Angeles have already demonstrated a departure

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<sup>13</sup> “[T]he plain meaning of these provisions is clear: they prohibit discharges that cause or contribute to a ‘violation of Water Quality Standards’ [or water quality objectives].” Brief of Amicus Curiae California Regional Water Quality Control Board, Los Angeles Region, in *Santa Monica Baykeeper v. City of Malibu* No. CV 08 - 1465 - AHM (PLAx) (C.D. Cal.) (filed Feb. 5, 2010), at 4. See also, *In re L.A. County Mun. Storm Water Permit Litigation*, No. BS 080548 at 4 -7 (L.A. Super. Ct. Mar. 24, 2005).

<sup>14</sup> State Water Resources Control Board, Storm Water Program Work Plan and Implementation Strategy, pg. 9.

from meaningful stormwater capture and water quality standard compliance. For example, Los Angeles's Phase I MS4 Permit condones a process mired in delay and uncertainties that fail to ensure the protection and restoration of Los Angeles waterways.

The SWSI goes on to lay out the underlying issue for Principle 2 as “storm water permits should provide accountability and support water quality outcomes.” As currently being implemented in permits like the LA MS4 Permit, we do not agree that alternative compliance approaches are providing accountability, nor are they meeting WQSs. In fact, the recent “conditional” approvals of nine deficient Watershed Management Programs (“WMPs”), which were illegally issued by the Regional Board’s Executive Officer, demonstrate that the Permit’s alternative compliance approach is already failing to ensure compliance with Receiving Water Limitations (“RWLs”). Moreover, the LA MS4 Permit further weakens the alternative compliance approach by extending the deadline to update the RAAs to eight and a half years. If the State Water Board wants to ensure accountability to meet WQSs, then it is critical that Project 5 be prioritized in the SWSI to ensure RAAs are being developed timely and properly to ensure WQSs are being met.

The purpose of Project 5 is to establish technical guidance and supporting documentation for Water Board staff to incorporate alternative compliance approaches into storm water permits, while ensuring water quality outcomes are achieved. While we do not support alternative compliance approaches that provide safe harbors, we do support prioritization of Project 5 – if the technical guidance truly ensures water quality outcomes are achieved. Importantly, Project 5 should focus on how permittees will develop RAAs that require verification and recalibration of relied upon models. However, guidance can often favor those with the most money and resources to lobby the State Water Board and offer their own “expertise”. Therefore, we request that the State Water Board develop an expert panel of unbiased technical expertise to help develop the technical guidance on how RAAs will ensure WQSs are being met.

**V. PROJECT 18 (SECTOR-SPECIFIC TECHNOLOGY-BASED NUMERIC EFFLUENT LIMITATIONS FOR INDUSTRIAL AND CONSTRUCTION STORM WATER PERMITS) SHOULD BE A “HIGH” PRIORITY WITHIN THE STORMWATER INITIATIVE.**

The SWSI’s Project 18 is to adopt sector-specific technology-based numeric effluent limitations (NELs), as appropriate, for industrial and construction storm water permits that provide for the greatest pollutant reductions that are economically achievable for the industry. Project 18 fits perfectly under Guiding Principle 3, to implement efficient and effective regulatory programs. CCKA strongly supports the prioritization of developing NELs, and requests that the State Water Board revise the Workplan to change Project 18 from a low priority to high. NELs are not only the most efficient and effective tool the State Water Board can use in its stormwater program, but State Water Board staff now acknowledges that there is sufficient data – for certain sector-specific technologies – to develop legally sound NELs.

The California Waterkeepers have been pressing the State and Regional Boards to include NELs in stormwater permits for over a decade. Current permits include only narrative limits, usually linked to subjective determinations relating to Best Management Practices implementation, or whether the discharge is “contributing” to exceedances of Water Quality Standards in receiving waters. This scheme is opaque at best, requires intensive investigation by either Regional Board staff or citizen enforcers, and therefore undermines enforcement efforts. The vast majority of enforcement undertaken by the Regional Boards relates only to failures to file documents.

NELs are a critical step towards providing clarity and certainty that the impacts of industrial and construction activities on water quality are controlled. NELs provide a simple and transparent regulatory scheme that dischargers can readily comply with and that State and Regional Board staff and the public can easily enforce.

A. *The 2006 Blue Ribbon Panel concluded that NELs are feasible for some industrial categories.*

In 2003, the State Water Board undertook work to renew the Industrial General Permit (IGP) consistent with the five-year cycle; however, permittee concerns regarding the incorporation of NELs in the permit halted the effort. In 2006, the State Board convened a panel of stormwater experts to evaluate the feasibility of NELs, resulting in an NEL feasibility report concluding that “Numeric Limits are feasible for some industrial categories.”<sup>15</sup> Regardless of the panel’s conclusion that NELs are feasible for certain industrial sectors, the Board subsequently removed the NELs from the IGP and released subsequent weaker draft permits in July 2012 and July 2013.

The Final Draft Permit states that “the State Water Board expects that this [Permit’s data collection] and assessment process will provide information necessary to determine the feasibility of numeric effluent limitations for industrial dischargers in the next reissuance of this General Permit, consistent with the State Water Board Storm Water Panel of Experts’ June 2006 Recommendations.” During the timeframe between the adoption of the Final Draft Permit and the implementation date of July 2015, we believe that the Board should develop a framework for assessing industrial data to ensure the Board will achieve the ability to determine the feasibility of numeric limits. Unfortunately, the Response to Comments does not provide a timeframe for assessing data, and only states that the Board “anticipates developing a plan to assess the sampling data at *some point*.” We again assert that during this time, the Board should make it a priority that data collection informs future numeric limits, and put in place a framework for assessing the adequacy of data collection and monitoring parallel to permit implementation. This should include consideration of using the Permit’s reopener clause to make revisions to the monitoring and reporting requirements as deemed necessary.

B. *The State Water Board recognized the utility of Numeric Effluent Limitation in the Construction Stormwater Permit.*

The Construction Stormwater Permit, coupled with the Water Board’s expressed intent to move away from NELs, reflects a huge missed opportunity to strengthen statewide and regional stormwater permits and regulations. The State Water Board’s removal of NELs, following the *BIA* decision, was a step in the wrong direction for stormwater program efficiency. In Response to Comments to the re-adoption of the Construction Permit, the State Water Board recognized the utility of NELs, but deferred their adoption to a *future permit process* because a “lack of data and staff resources”. Instead of committing to undertake the analysis required to support numeric limits, the Board decided that numeric limits should be stricken from the permit.

The old system used in the 1999 Construction Stormwater Permit wasn’t working. The Blue Ribbon Panel concluded that the existing system for managing construction stormwater pollution is not working, “specifically recognizing in the construction context that “...traditional erosion and sediment controls are highly variable in performance, resulting in highly variable turbidity levels in the site discharge.”<sup>16</sup> It is critical to recognize that the BMP solution to storm water problems has been inadequate, based on 15+ years of experience with construction, industrial, and Phase 1 MS4 storm water permits. Along with finding NELs feasible for industrial stormwater, the Panel of stormwater experts also reached a consensus that “active treatment technologies make Numeric Limits technically feasible for pollutants commonly associated with stormwater discharges from construction sites for larger construction sites.”<sup>17</sup>

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<sup>15</sup> Stormwater Panel on Numeric Limits, *The Feasibility of Numeric Effluent Limits Applicable to Discharges of Storm Water Associated with Municipal, Industrial and Construction Activities*, Report to the State Water Resources Control Board, pg. 19 (June 2006), available at [http://www.waterboards.ca.gov/water\\_issues/programs/stormwater/numeric.shtml](http://www.waterboards.ca.gov/water_issues/programs/stormwater/numeric.shtml).

<sup>16</sup> Report on the Feasibility of Numeric Effluent Limitations Applicable to Discharges of Storm Water Associated with Municipal, Industrial and Construction Activities (“Blue Ribbon Panel Report”).

<sup>17</sup> Report on the Feasibility of Numeric Effluent Limitations Applicable to Discharges of Storm Water Associated with Municipal, Industrial and Construction Activities (“Blue Ribbon Panel Report”).

- C. *State Water Board staff now acknowledges that it can develop NELs for some specific sectors, and that doing so will improve efficiency and water quality.*

Previously, the State Water Board believed that data to support the development of technology based NELs for the majority of sectors permitted and pollutants of concerns did not exist. However, the State Water Board now acknowledges in the SWSI Workplan that “the Water Boards likely can identify some specific sectors and pollutants for which to develop NEL.”<sup>18</sup> The SWSI goes on to acknowledge that “Water Boards can improve efficiency and water quality by evaluating opportunities where the NELs also address TMDL requirements.” We strongly agree, and since NELs are the best way to improve efficiency and water quality – as intended by Principle 3 – we strongly recommend the State Water Board revise Project 18’s priority to “high”.

Since the Storm Water Panel on Numeric Limits was convened in 2006, California’s Storm Water Multiple Application and Report Tracking System (SMARTS) database has matured into a robust dataset and a number of stormwater control manufacturers have released numeric performance data to the public. Information available from the database may be used to inform determinations of feasibility, regarding inclusion of numeric effluent limits in California’s industrial permit, as well as evaluations of BAT/BCT technology(ies). However, the Board decided to refer to the IGP as a “bridge permit” meant to collect quality storm water discharge data. With the IGP adopted and being implemented, the time is now for the State Water Board to begin assessing NELs as a high priority in the SWSI.

NELs can facilitate more effective permit implementation for both dischargers and Board staff. NELs provide a clear and simple method for evaluating compliance with the permit. Rather than having to spend countless hours reviewing SWPPPs and conducting site visits to assess whether the BMPs chosen will in fact achieve the pollutant reductions required, NELs set a pollutant concentration level and leave it up to the discharger to determine how it will meet these limits.

Generally, NELs are necessary to effectively reduce stormwater pollution. Numeric effluent limitations are the most effective method available to the State Board to ensure that the permits will meet the dual requirements of the Clean Water Act to force technology-based solutions to reduce pollutants and to ensure that water quality standards are met. The level of restriction and degree of water quality protection afforded by narrative effluent limitations and numeric effluent limitations is intended to be the same under the Clean Water Act. Yet the precision, clarity, and enforceability of a numeric effluent limitation is greater than that of a narrative effluent limitation. NELs provide a simple and transparent regulatory scheme that dischargers can readily comply with and that regulators can easily enforce when necessary. With NELs, determining compliance will be simple, and dischargers will still have the quantitative information to help determine what additional steps are necessary to achieve compliance.

Simply put, NELs are a tool for the State Water Board to work smarter, not harder. It has been almost a decade since the Blue Ribbon Panel found NELs are feasible for certain industrial and construction sectors. Now, the State Water Board staff acknowledges they are similarly feasible. The data has been, and is being currently, collected to make NELs legally defensible. And NELs are the best tool the State Water Board has to improve efficiency and water quality within the stormwater program. We request the State Water Board *set Project 18 as a “high” priority within the SWSI.*

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<sup>18</sup> Supra note 14, at 25.

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Our organization looks forward to working with you to ensure the SWSI is implemented in an equitable and balanced manner. Our hope is that the focus of the Initiative will be to improve water quality – and not reduce the cost of compliance in a manner that shields dischargers from their Clean Water Act obligations.

Sincerely,

A handwritten signature in black ink, appearing to read "Sean Bothwell", with a stylized flourish at the end.

Sean Bothwell  
Staff Attorney  
California Coastkeeper Alliance

# ATTACHMENT B

## Clean Water, Clean Beaches Project Selection Criteria\*

The purpose of this document is to establish criteria to be employed by Watershed Area Groups (WAG) when selecting which projects to fund.

The document is organized in the following parts:

- Introduction
- Part I: Overarching Criteria and Goals from Ordinance
- Part II: Project Selection Criteria Guidelines
- Part III: Infrastructure Guidelines
  - Project Criteria Scoring Framework
  - Project Selection Process Schedule
- Part IV: Community Education Program Criteria Guidelines

**\*NOTE: These are draft criteria guidelines; they have not yet been approved**

## **Introduction**

The Clean Water, Clean Beaches Project Selection Criteria Committee (PSCC) met to provide input into the quantitative and qualitative criteria that will be used to select projects funded in whole or in part with Clean Water fee revenues. The specific charge to this group was to:

- Advise Los Angeles County Flood Control District (District) staff on how to determine the types of projects and programs that can best achieve the ultimate goal of the Clean Water, Clean Beaches Ordinance, which is to improve and protect water quality in the lakes, rivers, creeks, coastal waters and the ocean within the District, as well as to provide other beneficial uses of water, including enhancing local supplies of drinking water.
- Establish criteria that will be used to determine the funding eligibility of proposed water quality improvement projects and their potential to achieve the goals of the Ordinance.
- Serve as a communication link between the District and organizations and municipalities that have stakeholder interest in the Ordinance and the implementation of the Clean Water, Clean Beaches Program

The group reviewed existing criteria used by other funding entities, met six times in person, and conducted online meetings to review and revise these Draft Project Selection Criteria. The resulting Criteria reflect the consensus of the committee, although not every decision was unanimous.

## **Project Committee**

Committee members represent a diverse group of cities geographically and in size, and community stakeholders with a proven interest and expertise in developing multi-objective projects to manage stormwater. The following municipalities and organizations comprised the Project Selection Criteria Committee:

- Angela George, County of Los Angeles
- Sharam Kharaghani, City of Los Angeles
- Tom Modica, City of Long Beach
- Ken Farfsing, City of Signal Hill
- Neal Shapiro, City of Santa Monica
- Heather Maloney, City of Monrovia
- Joe Bellomo, City of Westlake Village
- Kirsten James, Heal the Bay
- Rebecca Drayse, TreePeople
- Shelley Luce, Santa Monica Bay Restoration Commission
- Claire Robinson, Amigos de los Rios
- Belinda Faustinos, Rivers and Mountains Conservancy (formerly)

## **Part I: Overarching Criteria and Goals from Ordinance**

The draft Clean Water/Clean Beaches Ordinance outlines overarching criteria and goals:

### 1. Required Water Quality Project Criteria.

- a. All water quality projects funded in whole or in part with Water Quality Fee revenues will be required to comply with the following criteria:
  - (1) That the water quality project demonstrates the ability to provide and sustain long-term water quality benefits.
  - (2) That the water quality project is based on generally accepted scientific and engineering principles and the best available information.
  - (3) Pursuant to the Los Angeles County Flood Control Act, only the costs of the water quality benefit(s) provided by a water quality project can be funded with revenues from the Water Quality Fee. Other costs of water quality projects are not eligible to be funded with revenues from the Water Quality Fee.
- b. All regional projects funded under this chapter are required to be included in an approved WQIP that is prepared in accordance with the Implementation Manual.

### 2. Water Quality Project Goals.

In determining the water quality projects to be funded with revenues from the Water Quality Fee, Municipalities, Watershed Authority Groups, and the District will be required to consider, where applicable, the following water quality project goals:

- a. That the water quality project be designed and located to maximize the water quality benefits.
- b. That the water quality project not conflict with the Basin Plan adopted by the California Regional Water Quality Control Board for the Los Angeles Region, applicable MS4 Permit, or other related regulatory programs.
- c. That the water quality project be coordinated with a State approved Integrated Regional Water Management Plan, and/or other regional water quality-focused and related planning efforts for the watershed area.
- d. That the water quality project be coordinated with other water quality projects implemented pursuant to the Program.
- e. That the water quality project contribute to achievement of the water quality elements of plans to restore or revitalize rivers, lakes, creeks, streams, ponds, channels, bays, beaches, and coastal

waters within the District, such as the Los Angeles River Revitalization Plan, the Los Angeles River Master Plan, the Sun Valley Watershed Management Plan, the San Gabriel River Master Plan, the Rio Hondo Watershed Management Plan and the Emerald Necklace Vision Plan.

- f. That the water quality project maximize the effective use of Water Quality Fee revenues by leveraging other private, local, State, and Federal funds for water quality and other project elements.
- h. That the water quality project promotes the creation of jobs.
- g. That the water quality project be designed to directly contribute to or support through public education, monitoring and other programs, and management of stormwater and urban runoff to achieve multiple benefits and sustainable solutions, and allow for maximum beneficial use of water resources including:
  - (1) Protecting and enhancing available sources of drinking water supply via water conservation/use efforts such as rainwater harvesting, groundwater recharge, and pretreatment recharge.
  - (2) Protecting drinking water from contamination.
  - (3) Providing flood protection and control.
  - (4) Protecting and improving public health and safety.
  - (5) Protecting and improving open space and natural areas.
  - (6) Providing places for active and passive recreation, such as parks and ball fields.
  - (7) Creating, restoring, or improving wetlands, riparian, upland and coastal habitats.
  - (8) Providing other public benefits (such as urban blight removal, corollary air quality improvements, celebration of cultural and natural heritage, walkable streets and safe routes to school, outdoor education opportunities, heat island reduction, green house gas uptake, climate action, creation and enhancement of regional green infrastructure networks).

In addition to these criteria and goals, the Project Selection Criteria Committee established by the County developed the following criteria to be employed when selecting specific projects and programs for funding.

## **Part II: Project and Program Selection Guidelines**

The purpose of the criteria described in this document is to provide guidance for selecting the projects and programs best suited to achieve the water quality priorities and targets identified in the Water Quality Improvement Plans (WQIPs) developed by the Watershed Authority Groups (WAGs) for each watershed.

The primary purpose of each project element funded by this Fee must be to improve water quality by reducing pollutant loads to impaired waters within the Los Angeles County Flood Control District. Wherever feasible, projects are to be designed to achieve multiple objectives and purposes, including increasing water supply, improving flood management, creating or enhancing habitat and recreation benefits, and increasing public awareness. Where possible, projects should also be designed to address source control, leverage funds, promote collaboration between other agencies, organizations and community stakeholders, and utilize a strategic adaptive management approach.

In order to address the challenges we face as a region, some projects may be large-scale, high-volume solutions. However, the District's current hydrological modeling of over 2,000 sub-watersheds suggests that many projects funded will be small, distributed solutions, employing multi-objective, community-scale strategies. Additionally, as part of their WQIPs, WAGs will utilize Distributed Water Quality Projects maps that show pollution loads, overlaid with maps of park-poor neighborhoods and disadvantaged communities (as mapped by census tracts) to help determine potential locations for water quality improvement projects.

### **Eligible Expenditures**

Funds may be used for projects and programs, including program design, management and implementation; research and development projects and programs to develop new BMPs or other new technology to address water quality priorities; community engagement, education and outreach programs; capital project design bid and award; project construction and management; operations and inspection; monitoring; and operations and maintenance.

### **Eligible Funding Recipients**

Project proposal applicants include public agencies, municipalities, non-profit organizations and other entities as determined by the WAGs.

### **Eligible Project Types**

Eligible projects and programs shall include, but are not limited to:

- Urban runoff reduction, cleanup, control and diversion (including bacterial and pathogen control, and trash reduction and capture).
- Distributed and regional stormwater capture/conservation/use facilities

- Projects that employ low impact development (LID), and natural solutions including wetlands, constructed wetlands, bioswales and coastal, upland and other habitat restoration
- Programs that support achievement of WQIP water quality targets and objectives including, but not limited to, public education, K-12 curriculum development, and training of local workers to implement and maintain projects
- Public/private partnerships to support pollution reduction
- Retrofits, including the installation of rain barrels, cisterns and larger tanks; permeable pavement; downspout disconnects; and rain gardens
- Research and development
- Projects that employ native plant landscaping, urban forestry and other “green” water quality solutions
- Park development, improvement and retrofits (including multi-objective micro parks, street-end parks, municipal park retrofits – with bioswales, constructed wetlands, LID elements, urban forestry)
- Public building and school projects
- Green street and parking lot projects to improve permeability and stormwater capture
- Coastal habitat restoration
- Incentive programs for private property BMP projects
- Maintenance and monitoring of stormwater improvements
- Maintenance of projects constructed prior to passage of this measure, or funded by sources other than the Water Quality Fee may be considered for funding if it is determined that such funding is necessary to meet WQIP priorities and targets.
- Community education programs that support water quality improvement goals

In order to be eligible:

- No project shall lead to a net loss of habitat, hardening of creeks or rivers or net loss of recreation access.
- No project shall exacerbate any existing environmental problems in the vicinity or downstream of the project.
- Large scale and regional projects shall be monitored for effectiveness pre- and post-construction.
- Project shall incorporate operation and maintenance components and the associated costs shall be included in the proposal.

### **Part III: Infrastructure Criteria**

This narrative provides additional information about the criteria for the purpose of reducing subjectivity when applied to specific proposed projects. The criteria used to score infrastructure projects are described below and should be used in conjunction with the scoring framework that follows. The primary criteria are divided into five categories (A through E), with the criteria in category “A” being mandatory. Within each category there are several sub-criteria that will help to determine the overall ranking of each proposed project. Partial points may be given for any category in B through E, on a sliding scale.

The infrastructure criteria shall be applied in the following manner:

- Small projects (those that manage runoff from up to 10 acres, which may be an aggregation of several non-contiguous projects in a linked system serving a total of 10 acres or less) and large projects (>10 acres) shall be evaluated against like-sized projects. WAGs shall allocate some minimum level of funding to small projects.

#### **A. The Proposed Project Improves Water Quality**

To be eligible for funding, projects must achieve all of the sub-criteria in this category. These sub-criteria are mandatory. Projects that do not initially meet all the sub-criteria in category A will be given feedback about what is missing or inadequate and a 60-day time period in which to resubmit a revised application. Projects that do successfully meet all A sub-criteria move onto the scoring phase beginning with Category B.

**A1.** Project addresses TMDLs from current 303(d) lists and/or anticipated future pollutants of concern, providing sustainable water quality benefits.

- A1-1. Application describes the pollution problem and the current loads for the drainage area served, lists and quantifies pollutants to be reduced, describes dry and wet weather current loads and load reductions separately.
- A1-2. Project is located in a high priority catchment area as identified by water quality modeling and/or monitoring.
- A1-3. Application describes the magnitude and percent of overall load reduction predicted by the implementation of BMP.
- A1-4. Project helps to achieve water quality standards compliance for the impaired waters.

**A2.** The project addresses priorities and targets for water quality improvement established in the WQIP.

- A2-1. An assessment of conditions in the watershed determines that the project helps meet water quality goals, given existing research, study findings and other relevant information.
- A2-2. The project addresses pollutants affecting the watershed area as identified in the WQIP.
- A2-3. The project is consistent with potential water quality project concepts outlined in the WQIP.
- A2-4. The project does not increase other pollutants of concern or reduces them.

**A3.** The requested funds are directed only to activities necessary to provide the water quality benefit(s) that will be provided by the project.

A3-1. The application breaks down all costs, assigning costs for aspects not associated with water quality-related project elements to other funding sources.

**A4.** Project is based on best available scientific and engineering principles.

A4-1. BMPs have been demonstrated to be effective in similar settings (i.e. soil conditions, weather conditions, geography).

A4-2. The BMP is a proven BMP for pollutant removal of the types described, based on performance data (ASCE, USEPA, or site-specific BMP performance data). An exception will be made for projects specifically designed to test new technologies and expand the body of performance data.

**A5.** The proposal describes how the proposing organization has or will acquire the technical ability to implement, operate and maintain the project over its life time. Costs for maintenance, operations and monitoring of WAG projects shall be included in each infrastructure proposal.

**A6.** Verification of performance is incorporated into the project.

A6-1. Baseline levels of the pollutant(s) the project is designed to reduce have been determined.

A6-2. A plan explaining how performance of the project will be verified has been submitted.

A6-3. Large-scale and regional projects include monitoring for water quality benefits pre- and post-construction.

A6-4. Small-scale projects, at a minimum, incorporate collective monitoring and performance data.

## **B. The Proposed Project Provides Multiple Benefits**

Depending on either the type or number of additional benefits, projects can receive up to 30 points for achieving other benefits. First, projects that demonstrate a water supply benefit will receive an additional 1-6 points. Second, projects can receive up to another 24 points (1-3 points each for B2 through B9, on a sliding scale), based on how many of the other benefits and the magnitude of the benefits they are also able to achieve.

In all cases, projects must describe and document the magnitude of the additional benefit. Projects that claim to have multiple benefits but do not initially receive points will be given feedback about what is missing or inadequate and a 60-day time period in which to resubmit a revised application.

### **B1. Water supply (up to 6 points)**

B1-1. The project augments, remediates or protects water supply, documented through modeling, engineering or technical studies. Scoring is related to the magnitude of water supply benefit to be achieved.

**B2. Flood control (up to 3 points)**

- B2-1. The project reduces regional or local flood risk through increased stormwater conveyance or retention capability or other means of flood reduction

**B3. Public health and recreation (up to 3 points)**

- B3-1. The project creates or enhances recreational opportunities that promote physical activity in outdoor settings at the project site and/or will link up with a connected recreational system, e.g. regional bike or hiking trail; enhanced school sites.
- B3-2. The recreational opportunities address an environmental justice issue or environmental inequity issue. For example, it is in an area underserved for parks as shown in the Distributed Water Quality Projects maps.
- B3-3. Project contributes to a multi-objective park or school site demonstration project
- B3-4. Project is designed to provide other public health benefits, e.g. improves walkability by creating better pedestrian pathways, or provides a tree canopy to reduce heat islands and improve air quality.

**B4. Disadvantaged communities (up to 3 points)**

- B4-1. Project benefits a Disadvantaged Community (DAC). For example, a community (based on census tracts) where the median household income is below 80% of the statewide median household income level (additional points awarded for communities where the median household income level is below 70% and below 60% of the statewide median household income level), as shown in the Distributed Water Quality Projects maps.

**B5. Economic development/job creation (up to 3 points)**

- B5-1. The project demonstrates how many local or youth corps jobs will be created during planning, construction, operations and ongoing maintenance
- B5-2. The project includes an outreach program designed to involve local, minority- or women-owned businesses and contractors
- B5-3. The project describes and, where possible, quantifies how the area addressed will be enhanced economically
- B5-4. The project is part of a training program for local youth
- B5-5. The project is a public/private partnership

**B6. Habitat protection and/or restoration (up to 3 points)**

- B6-1. The project protects, enhances or creates open space and/or habitat value at the project site, including, but not limited to:
- Removal of invasive, non-native species
  - Recovery of native habitat and species diversity appropriate to the site

- Protection, enhancement, restoration and/or creation of wetlands, riparian, upland or coastal habitats
- Provides adequate buffers along aquatic systems
- Creates wildlife linkages using riparian corridors.
- Project converts grass and high water use plantings to native and habitat friendly low water use plantings
- Protects open space

**B7. Public education (up to 3 points)**

- B7-1. Educational elements of project extend beyond basic labels or stencils on storm drains.
- B7-2. Site-specific educational and interpretive materials to be available and/or displayed on site or on line that describe BMPs, pollutants mitigated by project, etc.
- B7-3. The educational materials are culturally and linguistically relevant to local community members.
- B7-4. The project allows local students to actively engage in learning about water pollution reduction.
- B7-5. Provides habitat discovery or nature education areas.
- B7-6. Project boosts awareness of ways community can proactively protect water quality.

**B8. Demonstration projects (up to 3 points)**

- B8-1. The project is a replicable demonstration project.
- B8-2. The project is scalable so as to be replicable at different scales in different situations.
- B8-3. The project demonstrates BMP effectiveness.
- B8-4. The project adapts BMPs and stormwater programs that were successfully implemented in other regions.
- B8-5. The project provides data to improve the WQIPs of one or more WAGs.

**B9. Additional resources from other sources (up to 3 points)**

- B9-1. The project leverages funds from other private, local, state or federal sources that increase available funds by 10% or more.
- B9-2. The proposing entity has partnered with other agencies, cities, non-profit organizations or private donors to leverage additional funds or other resources, including in-kind
- B9-3. Additional funds or other resources, including in-kind, are documented as either already obtained or as having a strong likelihood of being obtained.

**C. Magnitude of Water Quality Improvements**

Projects can receive a maximum of 40 points, depending on whether they effectively target TMDLs, the degree of load reduction, the magnitude of impact, and consistency with watershed management and/or other water quality improvement plans.

**C1. Consistency with TMDL or other watershed management plans and requirements, including approved TMDLs or other anticipated TMDLs on the 303(d) list, and other pollutants of concern (up to 10 points)**

- C1-1. The project has a high level of alignment with TMDL implementation plans and/or compliance schedules, including pollution problems identified by an adopted TMDL and specific strategies selected to target those pollutants.
- C1-2. The project has a high level of alignment with watershed management plans for the area in which the project is located or will benefit, including pollution problems or the sources of those pollutants as identified by the watershed management plan and specific strategies selected to target those pollutants.
- C1-3. The project has a high level and/or multiple areas of alignment with, and links to, specific strategies or requirements in the adopted Basin Plan, MS4 Permit, approved IRWMP, California Ocean Plan, California Toxics Rule and other regional water quality planning efforts or regulations.

**C2. Magnitude of Impact (up to 30 points)**

- C2-1 Degree of targeted TMDL/pollutant load reduction and/or resulting concentration reduction in receiving waters. Based upon the expected pollutant load or concentration reductions, project maximizes reduction in impact within the receiving waters.
- C2-2 Project results in reduction of more than one impairing pollutant.
- C2-3 Project results in large volume of water treated or diverted relative to project size and cost.

**D. The Proposed Project Is Cost-Effective**

Projects can receive up to 20 points by demonstrating how the project will maximize the impact of allotted funds. (Additional resources—funds or in-kind services—may be considered insofar as they reduce total cost of project.)

- D1.** The total cost per unit over the life of the project (i.e., cost per volume, cost per acre, cost per gallon) of pollutant reduction is below average compared to other projects being considered by the WAG for similar pollutants (up to 10 points).
- D2.** The total cost of operations and maintenance over the life of the project is below average compared to other projects being considered by the WAG for similar pollutants (up to 10 points).

**E. The Proposed Project Presents a High-Level of Readiness for Implementation**

Projects can receive up to 10 points (up to 2 points for each sub-bullet) if the proposing organization can demonstrate it has undertaken actions required for effectively translating the project from concept to reality, or has developed a project management plan detailing how those steps will be carried out at each stage in its development.

- E1.** The project has strong support of the WAG Stakeholder Advisory Panel

- E2.** The project has demonstrable, strong community-based support from stakeholder groups
- E3.** There is a site available for the project; if it needs to be purchased, there is a plan and a process underway for acquiring the site.
- E4.** CEQA requirements have been satisfied; CEQA is ready, well underway or expected to be completed within a year.
- E5.** The project is ready for construction and can be completed reasonably quickly; or is in the concept design phase and will be ready for construction within a reasonable period of time; or a well-conceived multi-year plan is in place for a project with an extended timeframe necessary to move successfully through each phase of its development.

DRAFT

## Infrastructure Project Scoring Criteria Framework

Framework Component	Score Range	Scoring Standards	Score
<b>A.</b> The proposed project improves water quality	<b>MANDATORY</b>	<b>Projects must incorporate all five elements (A1 to A6) to be eligible for funding consideration:</b>	Yes/No
		<b>A1.</b> Project addresses TMDLs or impairments from current 303(d) lists or anticipated future pollutants of concern, providing sustainable water quality benefits	
		<b>A2.</b> Project is consistent with the priorities and targets for improvement established in the WQIP.	
		<b>A3.</b> The requested funds are directed only to achieving the water quality benefit(s) that will be provided by the project	
		<b>A4.</b> Project is based on best available scientific and engineering principles	
		<b>A5.</b> The proposal describes how the proposing organization has or will acquire the technical ability to implement, operate and maintain the project.	
		<b>A6.</b> Verification of performance is incorporated into the project	
		<b>Pass or Fail Section A</b>	
<b>B.</b> The proposed project provides multiple benefits	<b>30 points maximum</b>	<b>The project delivers additional benefits beyond water quality.</b>	Yes/No
	6 points	<b>B1.</b> Water supply	
	3 points	<b>B2.</b> Flood control	
	3 points	<b>B3.</b> Public health and recreation	
	3 points	<b>B4.</b> Disadvantaged communities	
	3 points	<b>B5.</b> Economic development/job creation	
	3 points	<b>B6.</b> Habitat protection and/or restoration	
	3 points	<b>B7.</b> Public education	
	3 points	<b>B8.</b> Demonstration project with replicability	
	3 points	<b>B9.</b> Leverages additional funds	
	<b>Total Points Section B</b>		

<b>C.</b> The proposed project can achieve significant water quality benefits	<b>40 points maximum</b>	<b>The project achieves one or more of the following:</b>	Yes/No
	10 points	<b>C1.</b> Consistency with plans and requirements	
	30 points	<b>C2.</b> Magnitude of impact	
		<b>Total Points Section C</b>	
<b>D.</b> The proposed project is cost-effective	<b>20 points maximum</b>	<b>The project achieves one or more of the following:</b>	Yes/No
	10 points	<b>D1.</b> The total cost per unit of pollutant reduction is below average	
	10 points	<b>D2.</b> The total cost of operations and maintenance of the project is below average	
		<b>Total Points Section D</b>	
<b>E.</b> The proposed project presents a high level of readiness for implementation	<b>10 points maximum</b>	<b>The project achieves one or more of the following:</b>	Yes/No
	2 points	<b>E1.</b> The project has strong support of the WAG Stakeholder Advisory Panel	
	2 points	<b>E2.</b> The project has strong local community-based support	
	2 points	<b>E3.</b> There is a site available for the project or a plan and a process underway for acquiring the site.	
	2 points	<b>E4.</b> CEQA requirements have been satisfied; CEQA is ready, well underway or expected to be completed within a year.	
	2 points	<b>E5.</b> Project is ready for implementation within a reasonable time, or there is a plan demonstrating how it will develop over a more extended time	
		<b>Total Points Section E</b>	
<b>TOTAL POINTS</b>			

## Project Selection Process Schedule Guideline

### Proposal Submittal

Applications must contain all information described above. Applications shall include detailed project descriptions, attachments with supplemental materials such as feasibility studies, pilot projects, maps, diagrams, examples of application of technology in other locations, and associated monitoring data on project performance, letters of support, copies of agreements, or any other applicable materials.

Step		Time Frame
1.	WAG call for proposals	90 days
2.	Review Process: WAG convenes scoring committee; Reviews Framework Component A only. Projects that pass will move on. Projects that fail will receive notification and a request to prepare re-submittal.	60 days
3.	Projects that passed reviewed for Categories B-E; projects that failed Category A analysis, resubmit.	60 days
4.	Review continues for projects that passed initially. Resubmitted projects reviewed; if pass move on, if not, sent back for future submittal.	15 days
5.	Proposers notified of total points received and ranking for funding.	5 days
6.	WAG includes highest-ranking projects in next Water Quality Improvement Plan (WQIP)	45 days
7.	Flood Control District review WQIPs	60 days
8.	Oversight Board reviews WQIPs	45 days
9.	Board of Supervisors approves WQIPs	<??>
10.	Flood Control District disburses funds	<??>

## Part IV: Community Education Program Criteria

### Program Goals

The purpose of the criteria described in this document is to provide guidance for selecting the programs best suited to achieve the water quality priorities and targets identified in the Water Quality Improvement Plans (WQIPs) developed by the Watershed Authority Groups (WAGs) for each watershed and/or those identified in water quality improvement plans developed by municipalities.

This narrative provides information about the criteria for the purpose of reducing subjectivity when applied to specific proposed projects. The criteria used to score infrastructure projects are described below and should be used in conjunction with the scoring sheet that follows. The primary criteria are divided into seven categories (A through G), with the criteria in category “A” being mandatory. Within each category there are several sub-criteria that will help to determine the overall ranking of each proposed project. Points will be awarded in categories B through G on a sliding scale of 0 to 7 points each, for a maximum possible total of 42 points.

### Score Range

**0 Points:** Information is lacking/missing, poorly described/written

**1-2 Points:** Minimal information/description; many questions remain

**3-4 Points:** Enough information included to describe the concept, but a few questions remain

**5-6 Points:** All information provided, well described

**7 Points:** All information provided, well described, well written, includes supporting information

### A. Application Contents (check for completion only; pass/fail)

- A1. The application contains all of the appropriate documents, sections and signatures
- A2. The program adheres to all the Water Quality Improvement Program Guidelines described in Part II of this document

### B. Program Analysis (0-7 points)

- B1. The need for the program is clearly established
- B2. The target audience is clearly identified
- B3. The program is relevant to the audience
- B4. The proposal describes how many people will be reached and the number of individual impressions
- B5. The proposal demonstrates how the program will influence changes in behavior

### C. Program Design (0-7 points)

- C1. The overall purpose and goal(s) of the program are clearly defined
- C2. There are written behavior change goals and measurable objectives consistent with WQIPs.
- C3. The objectives are reasonable and appropriate in scope and number

C4. There is an overarching message/theme/big idea identified for the program

**D. Program Development (0-7 points)**

- D1. The program well defined and explained
- D2. The materials and methods chosen to deliver the program are appropriate
- D3. The content supports the goal(s)
- D4. The needed resources are described and included (budget, staffing, time)
- D5. The program has been successfully undertaken previously elsewhere and the proposal describes the proven results

**E. Program Implementation (0-7 points)**

- E1. The program's implementation and delivery are feasible and well explained
- E2. The implementation plan includes any necessary staff training, addresses any safety issues, and provides for contingency issues (weather, failure of equipment, etc.)
- E3. The program leverages other private, local, State, and Federal funds or in-kind services

**F. Significance/Value (0-7 points)**

- F1. The program is of significant value to water quality education
- F2. The program advances the field of water quality education
- F3. The program is compatible with school-based standards and existing curricula (the program reinforces and/or complements what is being taught in local schools)
- F4. The program encourages or creates partnerships between schools and the proposed program
- F5. The implementation plan describes how other organization can replicate/adapt or build on this program
- F6. The program will have a significant impact, shown in the numbers of people reached and/or the number of individual impressions

**G. Program Evaluation (0-7 points)**

- G1. There is an evaluation plan that includes front-end, formative, summative and remedial evaluation.
- G2. The evaluation methods are appropriate
- G3. The evaluation methods are fully explained and/or materials are included
- G4. The implementation plan describes how adjustments will be made to the program based on evaluation results if available, or includes considerations for potential adjustments

### Education Program Scoring Criteria Framework

Component	Score Range	Score
A. Application Contents	Mandatory Pass/Fail	
B. Program Analysis	0-7	
C. Program Design	0-7	
D. Program Development	0-7	
E. Program Implementation	0-7	
F. Significance/Value	0-7	
G. Program Evaluation	0-7	
<b>TOTAL SCORE</b>		

DRAFT