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SACRAMENTO STORMWATER QUALITY PARTNERSHIP

November 9, 2017

State Water Resources Control Board
Division of Water Rights
Bay Delta Section
1001 I Street
Sacramento, CA 95814

Submitted via email to: Bay-Delta@waterboards.ca.gov

SUBJECT: PHASE II BAY-DELTA PLAN INPUT

The Sacramento Stormwater Quality Partnership (Partnership) appreciates this opportunity to provide comments on the program of implementation and development of potential changes to the Water Quality Control Plan for the San Francisco Bay/Sacramento - San Joaquin Delta Estuary Bay - Delta (Bay - Delta Plan) prepared by the State Water Resources Control Board (State Water Board). The Partnership's review and comments focus on items that will affect implementation of its stormwater management programs, including those that impact water quality and the science and governance entities that would play an important role in protecting the Sacramento – San Joaquin River Delta (Delta). Some of the proposed changes to the Bay- Delta Plan have the potential to conflict with the Partnership's regulatory requirements, such as those related to low impact development (LID) and hydromodification management, which rely on volume reduction.

The Partnership is the municipal separate storm sewer system (MS4) National Pollutant Discharge Elimination System (NPDES) permittee group for the cities and unincorporated urban areas within Sacramento County. Urban runoff discharges from the Partnership agencies' MS4s occur to a number of urban creeks and the Sacramento and American Rivers.

Our concerns relative to this request for input are related to the adaptive management structure and implementation question posed in the notice of opportunity to provide input (Question No. 7). Primarily, it is unclear if and how non-flow stressors would be incorporated into Bay – Delta Plan amendments. The *Scientific Basis Report in Support of New and Modified Requirements for Inflows from the Sacramento River and its Tributaries and Eastside Tributaries to the Delta, Delta Outflows, Cold Water Habitat, and Interior Delta Flows* (Science Report) does not offer specific justification or specific recommendations for regulation of non-flow stressors, but rather refers to local controls and programs. Nearly all of the contaminant stressors identified are from legally distributed products that are registered or permitted by California or federal programs, not local governments or stormwater agencies. The Science Report makes no mention of the State Water Board's Strategy to Optimize Resource Management of Storm Water (STORMS), which specifically addresses this issue through regulatory, management, and science-based strategies.

Incorporating non-flow stressors into the Bay – Delta Plan would be a significant additional complexity that would impact water quality policy and Central Valley Basin planning and NPDES permit implementation.

ISSUE FOR COMMENT QUESTION NO. 7. "HOW SHOULD THE STATE WATER BOARD STRUCTURE ADAPTIVE MANAGEMENT FOR THE NEW OBJECTIVES?"

Adaptive management should include a robust framework to inform consensus building on reasonable actions. Water (flow) management actions should consider water quality impacts. Any framework should be based on the costs of management actions and the benefits relative to downstream ecology, species recovery, and support of all beneficial uses.

The contaminant evaluation in the Science Report only summarizes work performed by others and does not evaluate reasonable management actions and their specific benefits. The science process to date has not adequately balanced technical input from the range of investigators and relies on the inferences of population effects due to contaminant stressors, which have not been adequately substantiated. A robust adaptive management framework should be based on a "consensus" science process.

Cost Benefit of Water Treatment

The adaptive management plan should consider that the cost to divert water is significantly less than the cost to treat waste streams to remove the trace contaminant concentrations. Historically, actions related to water quality have not been informed by an adaptive management framework but rather have been based on the assumption that lower loads of urban pollutants are preferred over the no-action alternative, with no assessment of the cost, other consequences, or relative benefit compared to other actions. While the historic regulatory approach for load reduction was successful for many "gross" pollutants, the same approach may not be successful for low-level pollutants that are not necessarily removed by traditional urban runoff treatment control measures. The products containing these low-level contaminants can serve vital public health and safety needs and cannot always be eliminated without significant cost. In cases where these costs and benefits are more comprehensively evaluated, such as the Central Valley Drinking Water Policy, solution-oriented management actions have been developed.

Regulatory requirements to reduce pollutant loads, such as urban runoff treatment controls and LID requirements, and cost of traditional urban runoff treatment control measures have encouraged the use of infiltration technologies. Widespread use of these infiltration measures over time may reduce surface water volumes and flow availability in local creeks and rivers. The potential cost of the loss of surface water due to these regulatory programs has not been comprehensively evaluated or optimized in a structured framework for the Delta watershed.

Local Control Limitations

The adaptive management program should consider programs such as STORMS, which is developing a management framework for pesticides that acknowledges pesticide use as a statewide issue. Adaptive management by the State Water Board for low-level contaminants (e.g., pesticides, flame retardants, plasticizers, etc.) will not be highly successful without mechanisms to evaluate replacement products technically, economically, and from the perspective of market interactions.

Local Agency Inclusion

Several agencies that will be consulted to ensure that the adaptive management monitoring and assessment programs are "sufficiently rigorous" are listed on Page 1-11 of the Science Report. Groups included for adaptive management participation do not specify local agencies or the Delta Regional Monitoring Program (RMP) to ensure that the adaptive management and monitoring programs are "sufficiently robust." It is not clear how local considerations will be incorporated into this process.

While local agencies may not have the resources to participate financially, some accommodation should be made to allow local input on water quality and non-flow issues that could affect local water resources, beneficial uses, and operation of local municipal facilities.

Regulatory and Management Framework

The adaptive management program should have a robust regulatory and management framework that fundamentally ties management actions to measureable and well-understood benefits for beneficial use protection and ecological recovery. This is applicable to both flow and non-flow measures that are implemented.

Reliance on the Delta Regional Ecosystem Restoration Implementation Plan (DRERIP) may not be sufficient unless management actions can be tied to measureable outcomes. Without measureable goals, DRERIP becomes a means to identify additional study and project optimization tools rather than an adaptive management tool for large scale beneficial use protection.

The Science Report includes discussion of non-flow stressors, but does not provide specific recommended management actions, which are primarily deferred to voluntary tributary or regional actions. In isolation, these regional venues do not have the authority to affect the availability of many products that contribute to low-level contamination. For example, diazinon and chlorpyrifos concentrations in urban runoff were not readily controlled until the products were banned by the United States Environmental Protection Agency (USEPA) for urban uses.

The emphasis on "weight of evidence" stressors may be helpful in identifying the types, sources, and magnitude of effects at different biological levels (exposure, molecular, organ, organism, etc.), however, the lack of a well understood framework significantly weakens the ability to directly connect a particular low-level effect to larger scale population declines. Without strong and understandable frameworks to evaluate the strength of evidence demonstrating linkages between levels, management decision making will be hindered by the inability to quantify management action benefits. While weight of evidence may be an indicator of a problem, the collective error in summing low-level effects to infer population effects could overemphasize the role of one factor and overstate the benefit of corrective actions.

In summary, for the Bay- Delta Plan implementation program to successfully include an adaptive management evaluation framework, the following factors should be considered:

- Cost/benefit analysis for management actions;
- Unintended consequences (e.g., pesticide replacement by a more toxic and persistent pesticide) avoidance;
- Adequate evaluation of the reliability of the relationship between low-level and population level effects;
- Establishment of a process to interpret results through well-understood mechanisms, thresholds and analytical techniques that do not rely on anecdotal or correlational assessments;
- Adequate allowance for a complex and adaptable system; and
- Identification of controllable and uncontrollable sources and system controls and quantification of the relative importance of these factors.

Thank you for considering our comments. Please contact Dave Tamayo (916-874-8024), County of Sacramento, or Dalia Fadl (916-808-1449), City of Sacramento, with questions on these comments.

Yours truly,

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