



**Comments - Resolution for a Comprehensive Response to Climate Change** 2-16-2017

Thanks for the opportunity to comment.

1. *General comment* - An overall review of this resolution to ensure it will also address stormwater in addition to drinking water and wastewater would make it more inclusive.
2. *Design storm* - One possible issue for NPDES permittees is the likely impact of climate change on the "design storm" which is an integral part of some TMDLs, ASBS controls, and stormwater management plans. Dischargers need to comply with specified water quality standards, effluent limitation, or implement certain controls for wet weather flows up to the design storm. However, the design storm is based on historic rainfall for a specific location. This historic rainfall is not likely to reflect future rainfall patterns, however, because of climate change. This lack of statistical "stationarity" means that planners, system designers, and regulators will need to take this into account when preparing plans and permits. Design standards may also have to change.
3. *Funding* - Item I.E.5 (page 4) mentions funding needs for drinking water and wastewater but not for stormwater.
4. *Permit modifications* - Suggested additions:

*15. Division of Water Quality shall work with the Regional Water Boards to evaluate and by July 1, 2018 make recommendations to the State Water Board on the need to modify permits and other regulatory requirements to reduce water, stormwater and wastewater collection, treatment, and discharge or infiltration infrastructure vulnerability to flooding, storm surge, and sea level rise.*

*[or similar changes to make this item more inclusive]*

5. *Dialogue with EPA* (Item II.7; page 5) – More frequent and more intense storms mean increased scouring and erosion resulting in runoff with elevated levels of natural soil constituents (Al, Mg, Mn, Fe, turbidity) which are common compliance problems. For example, Mg, has a very low *Benchmark Monitoring Concentration* (0.064 mg/L) in EPA's Multisector General Permit (MSGP). This value is also used in the CA IGP as a numeric action level (NAL) for discharges. However, Mg is present in CA soils at approximately 1% on average so that even very low concentrations of natural soils mobilized due to major storms results in exceedances. Another example is iron which in California soils averages approximately 3.7%. Consequently low levels of natural soils in runoff can result in the exceedance of EPA's benchmark of 1.0 mg/L.

The same concern applies to EPA's recommended water quality criteria developed under Section 304(a) of the Clean Water Act. For example, the acute exposure criterion for aluminum is 0.75 mg/L; total recoverable). Al is the third most common element in the earth's surface and is present in California soils at an average concentration of 7.3%. Therefore even 20 mg/l of natural soils present in a waterway could exceed the WQS.

EPA could help by reviewing its benchmarks and criteria recommendations with the understanding that they will be applied to stormwater and possibly wastewater containing natural soil constituents. This is particularly critical for effluent dependent waterways where dilution is limited and dischargers must comply with WQS at the point of discharge.

6. *V. Funding (#20)* – SRF procedures appear to preclude loans (and loan forgiveness) for stormwater projects which, in the procedures, are considered a subset of *wastewater* projects. These procedures are directed specifically at POTWs. A review of these procedures with the intent of opening the SRF to stormwater agencies would be very beneficial.

I hope these comments are helpful.

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Resolution ([draft](#))