



TO: Jeanine Townsend, SWRCB Clerk
FROM: Nina Danza, Sierra Club Los Padres Chapter
RE: Comments on 11/2/15 DRAFT Strategy to Optimize
Resource Management of Storm Water (Strategy)
DATE: 11/7/15

I am very supportive of the current draft Strategy but suggest the following comments be used in the near future for the Strategy update and revision.

The Strategy refers to ten points of the state Water Action Plan, one of which is to: 'Increase flood protection'. As part of the Strategy, this phrase sends a VERY mixed message and is absolutely going to be misinterpreted. To achieve the Strategy's vision, including the future scenarios described on p. 13, it is critical to include a description of acceptable ways to obtain the desired increased flood protection.

Now and for the near future, flood control still means channelizing, paving, and confining surface water courses in practically every situation around the state. For local situations engineers continually rely on past practices and 'standardized' designs such as; underground storm water pipes that collect and convey drainage quickly away from its setting, constructing paved swales and gutters along roads and developments, and other structural methods. For larger situations, regional agencies are tasked with providing flood protection which usually means increasing flow capacity within existing storm drain infrastructure. Regional agencies rarely consider non-structural flood techniques. Finally, and for the largest of projects, the Army Corp of Engineers is involved and their only solutions include pavement and confinement of water courses. It has been an extremely difficult and lengthy process educating the ACOE about non-structural flood control protection and very few modern, multi-beneficial flood control projects have been provided by the Corps.

Changing the way flood control is planned, designed and built is without doubt the most important way the strategy's vision will be achieved. Therefore, passages might be developed addressing:

- Planning for Local Flood Protection. The Strategy might discuss the disconnect between regional agency flood control responsibility and local land use decisions. For example, County agencies typically have little authority over development locations and types, but must provide flood protection after structures are approved and completed. Although there now are LID and technical guidance requirements in regional (County MS4) permits, these permit conditions are only a small start in capturing storm water as a resource. The Strategy might include goals and objectives for intercepting local land use development decisions with respect to increased storm water retention and especially flood plain preservation.

The strategy might also discuss FEMA issues. FEMA routinely issues new flood insurance rate maps such as when increased urbanization results in higher peak flows which in turn makes existing storm water infrastructure capacity inadequate. FEMA also imposes new flood insurance rates when higher storm water flows are recomputed due to climate change, new models, etc. New maps mean higher flood insurance costs until the required flood protection is provided. And typically, the flood protection almost always must be provided within existing storm drain infrastructure. Non-structural techniques for increasing existing flood protection are rarely considered. The past problematic

methods are almost always employed such as additional or larger underground pipe conveyance, or raising open channel levees. Therefore, flood protection planning goals and objectives incorporated in the Strategy which address the root of increased flood insurance might mean the same past mistakes would not be repeated.

- **Designing for Increased Flood Protection.** The Strategy might contain specific conceptual design elements for increased flood protection that fulfill the program's vision. Those design elements involve non-structural engineering which preserve or restore vital watershed processes such as infiltration, groundwater recharge, floodplain preservation, riparian plant expansion or restoration, and wildlife biodiversity. Green flood control methods are readily available in technical guidance manuals already developed and include: dry detention basins, vegetative bank stabilization, ungrouted rip rap for erosion control, bioswales, green streets and permeable pavement, groundwater recharge spreading ground, and more.

The Strategy might include goals or objectives to make green flood control methods a mandatory first alternative for any project.

- **Building for Increased Flood Protection.** The Strategy might contain specific existing examples of green flood control projects in California and other States. A few outstanding examples include:
 - **South Platte River (Denver, CO).** Transformed from an ignored blighted paved flood control channel, the watercourse has fully revitalized the environment, the economy and the community.

"The story of the Platte is also a story of the unassailable logic of long-term investment in an important ecological and community asset...And the marketplace is responding...Mayor Michael Hancock has declared the river one of the city's greatest opportunities for future economic growth and development." American Planning Association June 2015

"The story of the South Platte, then, is partly a lesson in the power of passionate advocacy, political leadership, and collaboration. It is also a story of the value of taking the long view and recognizing that urban river conservation and restoration represent ongoing and long-term commitments." American Planning Association June 2015

- **The Greater New Orleans Urban Water Plan.** Released in 2013, the plan won the National Planning Excellence Award for Environmental Planning. Covering more than 224 square miles, it incorporates 3 hydrologic basins, 70 square miles of which are protected wetlands. Digitally available at www.livingwithwater.com

"The plan proposes removing functionally obsolete floodwalls and reshaping New Orleans's three primary outfall canals as 'multi-functional waterways' including park areas, trails, docks and waterfront development." American Planning Association April 2015

"the designers want to 'mitigate catastrophe' but also aim to place New Orleans on the cutting edge of water technology" <https://nextcity.org/daily/entry/what-will-new-orleans-look-like-after-its-urban-water-plan-is-complete>

- **San Antonio Riverwalk.** Probably the longest established most successful multi-benefit flood control project in the U.S.; see www.sanantonioriverwalk.com
- **American River (Sacramento).** A very brief history and additional reference resources are given on the American River Parkway Foundation guide http://arpf.org/pdf_files/ARPmap.pdf

In conclusion, including the desire for ‘increased flood protection’ in the Storm Water Strategy without qualifying what that involves is a grave error and will result in repeating mistakes of the past and continued destruction of the surface water ecosystems in this state. The Strategy must provide a shift in the flood control paradigm, including details of acceptable methods to achieving increased flood protection.