

SUNDAY FORUM

The limits of storm-water treatment

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The April 7 neutering of Assembly Bill 1517 increases the likelihood that large fiscal burdens will be imposed on California's cities and counties for storm-water treatment programs. Introduced in February by Assemblyman George Plescia, R-San Diego, the original version of AB 1517 unambiguously barred the State Water Resources Control Board and regional boards from ever prohibiting the discharge of municipal stormwater into California water bodies.

The bill was vehemently opposed by the environmentalists controlling the State and regional boards. The amended version of the bill is watered down to the point of merely stating the state Legislature's intent to "foster science-based, environmentally beneficial, results-oriented, and cost-effective water quality programs.

In 2001, the San Diego regional water quality board mandated what are perhaps the nation's furthest-reaching controls on urban run-off, which includes storm water. Unfortunately, the Los Angeles regional board views San Diego's measures as a good model.

Every five years, the Los Angeles board issues a permit on behalf of the federal government defining waste discharge requirements for the Los Angeles county and cities.

Our University of Southern California research team recently concluded that advanced treatment of storm water is the most likely outcome of current federal and state water-quality regulations. This would be massively expensive, and local regulators know it. They contend that they have never intended to require advanced treatment of storm water, and that cities can meet water quality standards by taking inexpensive steps, such as additional street sweeping. We conclude the opposite.

The federal Clean Water Act requires local authorities to list the water bodies that do not yet meet applicable water quality standards. The draft 2002 list includes almost all of the major

bodies of water in Los Angeles County. Placing a water body on this list triggers a planning process to establish the Total Daily Maximum Load of pollutants that the water body can receive. The new allowable load for trash in Los Angeles stormwater is zero.

Neither the County nor the City of Los Angeles has the means to accommodate this requirement, and this is just the tip of the regulatory iceberg. The U.S. Environmental Protection Agency entered a consent decree with several litigants requiring that the Los Angeles Regional Water Quality Board adopt many more such limits by 2012. The board's permit process will be used to implement load allocations for municipal storm water discharges.

Bacteria is listed as major problem by the Los Angeles Regional Water Board. Bacteria would most likely have to be controlled by use of chlorination, the way sewage is now treated in the region's nine wastewater plants. We estimate that the capital costs for facilities to provide this level of treatment to storm-water flows 364 days per year would approach \$30 billion.

The state water quality standard category defining the maximum level of metals in storm water requires that discharges into many of the region's water bodies meet drinking water and ground water recharge standards. Strict maximum limits on pesticides would be necessary to support fishing and swimming. Reverse osmosis or microfiltration are the only technologies available to remove the pesticides and heavy metals from storm water. The capital costs of regional-scale, reverse-osmosis facilities sufficient to provide treatment to storm water flows 364 days per year would approach \$130 billion.

There is more. Even if the region constructs treatment facilities, we cannot expect to rely on existing flood retention areas like the Sepulveda Basin and the Whittier Narrows to store untreated storm water. The Clean Water Act requires that storm water be cleaned prior to release into such federal waterways. The land assembly costs for storm water retention areas sufficient to accommodate flows 364 days per year would be very

high, approaching \$50 billion.

The federal Clean Water Act was passed in 1973 to address major sources of surface water pollution such as large factories and sewage treatment plants. The results are impressive. Water quality is improving in Los Angeles and Long Beach Harbors, and fisherman report the return of species of sea and bird life absent for many years. However, the environmentalists dominating state and regional water quality boards are reluctant to recognize that we cannot afford to apply the same discharge standards to homes, small businesses, schools, parks, roads, and other facilities.

Fortunately, a great deal can yet be accomplished by sticking to the basics. Los Angeles County and local cities are experimenting with trash removal devices along several of the region's flood control channels. The County and City of Los Angeles have agreed to divert dry season urban runoff to the sanitary sewer system in locations where storm drains flow onto local beaches. On average, the region is dry for 333 days per year, and more dry weather diversion of urban runoff promises further improvements in water quality at exactly the times when people use the area's beaches and rivers.

These steps are important, but will not satisfy local water quality authorities. The political failure of Plescia's bill is a wake-up call. Los Angeles and San Diego members of the State Legislature should join forces now to block the state and regional water quality control boards' march toward uneconomic and unintended consequences.

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