



NATURAL RESOURCES DEFENSE COUNCIL

February 15, 2008

Via electronic mail and U.S. mail

Tam Doduc, Chair  
State Water Resources Control Board  
1001 I Street  
Sacramento, CA 95814

***Re: Draft Strategic Plan Update: 2008-2012***

Dear Chair Doduc and Members of the Board:

On behalf of the Natural Resources Defense Council and its more than 100,000 members in California, we appreciate the opportunity to comment on the State Water Resources Control Board's (State Board) Draft Strategic Plan Update: 2008-2012 (Draft Plan). We believe that the Draft Plan represents an important improvement over previous strategy proposed by the Board, and that the attempt by the Board to set forth measurable goals for progress in achieving water quality standards, sustainable water supplies, and efficient practices is commendable. This is particularly the case given the widespread recognition that California faces substantial challenges to both the quantity of its water supply and quality of state water bodies due to the effects of continued population growth, construction and development, and global warming.

However, despite the advances in approaching these issues the State Board has made, we believe that the Draft Plan does not adequately determine a course for meeting its stated priorities of protecting and restoring surface waters, or promoting sustainable water supplies.

**The Draft Plan Must Establish More Aggressive Goals for the Protection and Restoration of Surface Water Bodies**

The Draft Plan sets initial targets for the reduction of pollution to and support of beneficial uses in surface water bodies in priority watersheds that both serve to continue the status quo and make the ultimate goal of full support of beneficial uses for all affected water bodies unlikely to be realized. The Draft Plan sets an objective of decreasing the number of impaired water bodies in priority watersheds by 10% by 2015, with a goal of all water bodies in priority watersheds fully supporting beneficial uses by 2030.<sup>1</sup> While we again support the Board's decision to implement measurable goals for reducing this pollution, the initial target is simply not aggressive enough and represents

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<sup>1</sup> Draft Strategic Plan Update, Priority 1 at 6.

a plan no more ambitious than is currently being implemented under other state and regional permitting programs.

Requiring that only 10% of these impaired bodies attain water quality standards in the next seven years represents such a slow pace of progress that it fails in any meaningful sense to allow, much less ensure, that 100% of the impaired bodies will support beneficial uses just fifteen years later. The complacency inherent in the proposed schedule is all the more inappropriate in light of the fact that the Draft Permit will rely on TMDLs as the principal means of achieving full beneficial use of the water bodies. TMDLs have been required under the Clean Water Act (CWA) since 1972, but the Draft Permit suggests that only now will they be implemented as a means of attaining water quality standards, more than thirty-five years after their introduction. This completely belies the intent of Congress in requiring TMDLs, which was "that TMDLs be established promptly-in accordance with the timetable provided in the statute." *Alaska Center for the Environment v. Browner*, 20 F.3d 981, 983 (9th Cir. 1994). Further, as TMDL compliance schedules frequently extend for a decade or more (see, e.g., Los Angeles Regional Water Quality Control Board Resolution 01-013, *Los Angeles River Trash TMDL*, (September 19, 2001) (allowing 13 year implementation schedule); Resolution 2002-022, *Santa Monica Bay Beaches Wet Weather Bacteria TMDL*, (December 12, 2002) (allowing 13 year implementation schedule)), the lack of near-term improvement creates the specter of full implementation occurring up to fifty or more years after TMDLs were first required to be put into practice. This is an unacceptably long delay under the Clean Water Act.

The lack of appropriately timed schedules is echoed in other objectives listed under this priority. The Draft Plan calls for a reduction in the volume and pollutant load of urban runoff of only 10% by 2012,<sup>2</sup> again representing an all too timid goal for reducing pollution to state water bodies.

We recommend instead that the Board set a goal of all water bodies meeting beneficial uses by 2020, with an interim goal of all TMDLs for listed impaired waters being issued by 2013, with maximum seven year implementation schedules thereafter. The interim goals should be revised to include decreasing the number of impaired water bodies in priority watersheds by at least 40% by 2015.

The Draft Plan Should Include Strong Requirements to Implement Low Impact Development, a Potentially Transformative Strategy to Address the Leading Source of Pollution, Urban Runoff

The Promotion of Sustainable Water Supplies is an appropriate priority, but the strategy as currently designed fails to adequately support or promote the use of Low

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<sup>2</sup> Id., Objective 1.3 at 10.

Impact Development (LID). As discussed below, implementation of LID practices designed to meet a practicable performance standard has the potential to result in predictable and significant capture of water for re-use. Moreover, and equally important, LID designed to a performance standard can result in a comparable reduction in overall use of water, and, at the same time, a substantial reduction of storm water runoff and associated pollution. By focusing on recycled water to the exclusion of other proven options for sustaining water supply, the plan limits the potential savings in water that can be achieved. In point of fact, the Draft Plan sets only a moderate goal of increasing available water supplies, by 1.725 million acre-feet per year in excess of 2002 levels by 2015 (almost entirely through the use of recycled water), then paradoxically states that it already expects that it will fail to meet its stated 2010 goals under the methodology proposed in the Draft Plan.

By contrast, a preliminary rough estimate of the savings from implementation of LID practices suggests that if LID designed to meet the Maximum Extent Practicable standard were used in 50% of all residential and commercial properties in urbanized southern California and the San Francisco Bay Region, *some 800,000 to 900,000 acre-feet of water annually would be available for on-site recharge and re-use.*<sup>3</sup> With full implementation of LID design to all currently existing development, the amount of water saved annually in Los Angeles County alone would be enough to supply the needs of the entire City of Los Angeles.

This potential savings is critical given the strain on existing water supplies the Draft Plan projects will occur as California's population increases—a problem made all the more apparent by recent studies from researchers at the Scripps Institute of Oceanography which show that drought conditions and human consumption of Colorado River waters, a significant source of water for southern California, have dropped levels in Lake Mead and Lake Powell to only half of their capacity. The researchers estimate that there is now a 50% chance that Lake Mead will be completely dry by 2021, creating a further strain on a water system that California ultimately depends upon.<sup>4</sup>

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<sup>3</sup> This figure was estimated based on figures for recharge loss and runoff reduction for a range of developments analyzed by Dr. Richard Horner, Research Associate Professor in Civil and Environmental Engineering and Landscape Architecture at the University of Washington (see R. Horner, *Investigation of the Feasibility and Benefits of Low-Impact Site Design Practices ("LID") for Ventura County* (February 2007) (hereinafter "Horner Report"). Estimated water savings were applied to total areas of land use by development type as supplied by various county agencies in California, then adjusted by county based on historic average annual rainfall in order to determine total runoff for each development type.

<sup>4</sup> Associated Press, "Scientists: Lake Mead may be dry by 2021", February 13, 2008, available at [http://www.nytimes.com/aponline/us/AP-Lake-Mead-Dry-Up.html?\\_r=1&scp=1&sq=lake+mead&st=nyt&oref=slogin](http://www.nytimes.com/aponline/us/AP-Lake-Mead-Dry-Up.html?_r=1&scp=1&sq=lake+mead&st=nyt&oref=slogin)

Moreover, LID is also the only solution to water quality impairments caused by storm water pollution likely to achieve broad stakeholder support—and its performance is demonstrably superior to BMPs now required by the Regional Water Boards. Over the last year, NRDC has demonstrated through an extensive set of comments on NPDES permits in Ventura County, San Francisco, and Orange County, and in special technical reports authored by the nation's leading storm water expert, that LID has the potential to create robust benefits for communities in which it is implemented, including considerable reductions in water demand *and a reduction of urban runoff to zero or near-zero levels*. For example, using LID, a single restaurant with a 30-car parking lot could capture enough water to meet the needs of a family of four for almost an entire year, while polluted water is nearly eliminated in most circumstances.<sup>5</sup> Research has repeatedly shown LID to be the most effective and cost-efficient means of managing storm water and abating water pollution, and that it has the potential to deliver vast quantities of useable water through recharge and infiltration.

In addition to the identified pollution reduction and potable water savings, use of LID practices has the potential to result in a substantial reduction in CO<sub>2</sub> emissions by reducing the consumption of imported, potable water and its associated energy needs. Even taking into account the energy required to reclaim infiltrated groundwater through groundwater pumping, we estimate that implementation of LID practices at 50% of all currently developed residential and commercial land in southern California would be expected to reduce CO<sub>2</sub> emissions by up to 160,000 metric tons equivalent annually.

Rather than promoting the use of LID practices as a method of reducing water consumption and increasing sustainable water supplies in the state—and in addressing polluted runoff—the Draft Plan fails to mention LID as a potential source of water savings or increased supply. Indeed, it mentions LID under its priority goal of reducing pollution only to state that the Board must identify the impediments associated with the implementation of LID. This approach in the Draft Plan indicates a lack of adequate knowledge of this topic. LID practices have been successfully documented in dozens of reports, case studies, and projects throughout California and nationwide. Just a handful of the hundreds of examples of the practicability of LID today include the City of Santa Monica Municipal Code, which requires strategies for maximizing the amount of runoff directed to permeable areas and/or maximizing storm water storage for reuse or infiltration; a 2006 City of Chicago storm water ordinance, under which developers can adopt a variety of techniques—including green roofs, rain barrels and cisterns—to capture rainfall that qualify as volume control BMPs; and, the Western Washington Municipal Stormwater Permit, under which permittees are to require “Roof Downspout Control BMPs” for the purpose of reducing the hydrologic disruption of developed

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<sup>5</sup> See Horner Report at 15. The prototypical restaurant studied by Dr. Horner would capture 0.88 acre-ft. of runoff per year. A typical family of four uses approximately 1 acre-ft. of water per year.



sites. In 2008, the benefits, and utility of LID implementation, are simply not subject to reasonable dispute. In fact, a recent report by the Low Impact Development Center, commissioned by the State Water Board, already discusses impediments to implementing LID. Perhaps fittingly, the report gave as one reason for the lag in broad LID implementation the “bureaucratic inertia” of the type embodied in the Draft Plan.

#### The Draft Plan Should Not Promote the Development of a Statewide MS4 Permit

The Draft Permit proposes, in order to improve consistency across the Water Boards, studying the feasibility of developing a statewide storm water permit for Phase I municipal separate storm sewer systems (MS4s).<sup>6</sup> NRDC has on multiple occasions commented on the seeming inconsistency of action between Regional Boards and of the requirements among the various Phase I National Pollutant Discharge Elimination System (NPDES) permits they approve. However, development of a general Phase I permit would serve to hinder, not help, efforts to reduce storm water pollution in the state. Instead, the SWRCB should aggressively implement AB 739, which calls for statewide guidance on quantifiable and consistent requirements in MS4 permits.

A statewide Phase I MS4 permit is not a strategic direction for the State Board because the Board has already demonstrated in each of its previous attempts at developing statewide NPDES permits that it is currently incapable of developing a general permit within the time constraints imposed by the CWA, or containing provisions necessary to ensure state water criteria will be met. The CWA mandates that NPDES permits must be reissued every five years. 33 U.S.C. § 1342(b). However, across the spectrum of its statewide permits, the State Board has failed to develop and reissue the appropriate permit within the time allotted under the CWA. In some cases, its delay has doubled to ten years the amount of time between reissuance of a permit (see Construction General Permit 99-08-DWQ, (adopted nine years ago on August 19, 1999); Industrial Storm Water General Permit Order 97-03-DWQ (adopted eleven years ago on April 17, 1997); California Department of Transportation (Caltrans) Storm Water General Permit Order 99-06-DWQ (adopted nine years ago on July 15, 1999).) To suggest that the same approach should be applied to the more complex situation presented by MS4 discharges indicates a regrettable insistence on repeating practices already shown to be ineffective—and, indeed, illegal.

Additionally, the argument generally presented in favor of creating a general permit, namely that the one permit will improve efficiency by reducing the need to separately review and analyze numerous individual permit applications, is inapplicable in the current case. While there are thousands of permittees covered under the General Construction Permit or General Industrial Permit, there are a total of only twenty-seven Phase I MS4 permits in California, each of which cover significant area and population

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<sup>6</sup> Draft Strategic Plan Update, Action 7.2.1 at 28.

in their own right. These permits already are general permits in fact if not law. Review of these few permits can and should be made more efficient, but the practical constraints on issuing two dozen permits every five years is simply not comparable to the workload that would accompany individual industrial and construction permits throughout California.

Conclusion

We thank the Board Members and Board Staff for this opportunity to comment on the Draft Plan. While we are pleased with the focus on metrics in much of the Draft Plan, we believe that significant further efforts are warranted before it is finalized. Please feel free to contact us if you have any questions regarding our comments.

Sincerely,

A handwritten signature in cursive script, appearing to read "David Beckman" and "Noah Garrison", with the initials "(ByNG)" written in parentheses to the right of the signature.

David Beckman  
Noah Garrison