

**Senate Select Committee on California Job Creation and Retention
Informational Hearing – October 6, 2011**

Impacts of Regulation of Storm Water Runoff in California

In examining the regulatory scheme in California for the control of storm water runoff, the Little Hoover Commission recently observed:

“No topic dominated the Commission’s study like storm water regulation. It is the area in which the [State Water Boards’] patchwork of permits has an effect on virtually everyone in California. More than 30,000 storm water discharges are subject to permits (compared to about 2,200 permits for wastewater treatment) that regulate the behavior of large and small cities, construction sites and industry. A diverse group of water users – the military, small and large businesses, home builders, local governments and more – face enormous costs as they try and control and limit storm water pollution.”¹

Storm water discharges are generated by runoff from land and impervious areas such as paved streets, parking lots, and building rooftops during rainfall and snow events that often contain pollutants. Federal and state laws impose regulatory controls on storm sewer discharges. Municipalities are required to obtain and comply with a federal regulatory permit limiting the quantity and quality of water runoff that can be discharged from storm sewer systems. In addition, permits for discharges associated with industrial activity must comply with technology-based effluent limitations, as well as any more stringent limitations necessary to meet water quality standards.

A. History and Development of Storm Water Regulatory Scheme

The quality of the nation’s waters is governed by an extraordinarily complex statutory and regulatory scheme that imposes regulatory and administrative responsibilities on both the federal and state governments. The federal Clean Water Act (CWA)² regulates the discharge of

¹ *Clearer Structure, Cleaner Water: Improving Performance and Outcomes at the State Water Boards*, Executive Summary, January 22, 2009

² 33 U.S.C. § 1251 et seq.

pollutants into navigable waters, prohibiting discharges from “point sources”³ unless certain statutory exceptions apply.

Part of the federal Clean Water Act is the National Pollutant Discharge Elimination System (NPDES), which is the primary means for enforcing effluent and water-quality standards established by the EPA and state governments. The NPDES sets out the conditions under which the federal EPA or a state with an approved water quality control program can issue permits for the discharge of pollutants in wastewater. In California, wastewater discharge requirements are the equivalent of the NPDES permits required by federal law.

1) Early categorical exemption for storm water: In the 1970s, the U.S. EPA adopted regulations categorically exempting discharges from a number of classes of point sources, including separate storm sewers containing only storm runoff uncontaminated by any industrial or commercial activity. Environmental groups challenged this exemption in federal court, which held that a storm sewer is a “point source” and the EPA did not have the authority to exempt categories of point sources from the Clean Water Act’s NPDES permit requirements.⁴ Although the court acknowledged the practical problems relating to storm sewer regulation, the court found the EPA had the flexibility under the CWA to design regulations that would overcome these problems.

In 1987, Congress amended the CWA in order to mandate the control of storm water discharges in municipal, industrial and construction arenas. Storm water discharges became regulated as point source discharges and subject to a broader array of pollution control requirements. For example, discrete standards could be imposed, limiting the degree to which harmful chemicals may be present in discharges. These standards are expressed as effluent limits, which may be established for any pollutant found in storm water discharges. The primary method for controlling storm water discharges is with best management practices (BMPs).

2) Storm water discharges now fully regulated: The federal CWA mandates NPDES permits for storm water discharges “associated with industrial activity,” discharges from large and medium-sized municipal storm sewer systems, and certain other discharges. The law sets out a timetable for promulgation of the first of a two-phase overall program of storm water regulation.⁵ In 1990, the US EPA issued the Phase I Rule regulating large discharge sources.

The 1987 amendments to the CWA mandated a second stage of storm water regulation by ordering the US EPA to identify and address sources of pollution not covered by the Phase I Rule. Under the Phase II Rule, NPDES permits are required for discharges from small municipal separate storm sewer systems (“small MS4s”) and storm water discharges from construction

³ Federal law defines a “point source” as “any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged.” (33 U.S.C. § 1362(14).)

⁴ *Natural Resources Defense Council v. Costle* (D.C. Cir 1977) 568 F.2d 1369

⁵ 33 U.S.C. § 1342(p)(2)-(4)

activity disturbing between one and five acres.⁶ Small MS4s may seek permission to discharge by submitting an individualized set of Best Management Practices (BMPs), either in the form of an individual permit application, or in the form of a notice of intent to comply with a general permit.

3) Maximum extent practicable: The goal of the NPDES program is to reduce the discharge of pollutants to the “maximum extent practicable” (MEP), and to eliminate non-storm water discharges. The relevant federal law declares that “permits for discharges from municipal storm sewers...shall require controls to reduce the discharge of pollutants to the *maximum extent practicable*, including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.”⁷ To ensure this scheme would be administratively workable, Congress placed a moratorium on many new types of required storm water permits until 1994, and created a phased approach to necessary municipal storm water permitting depending on the size of the municipality.

4) California law: Under the federal Clean Water Act, nature and extent of the controls in an NPDES permit depends on the applicable state water quality standards for the affected water bodies.⁸ Each state is required to develop water quality standards that establish the desired condition of a waterway. A water quality standard for any given water segment has two components: (1) the designated beneficial uses of the water body and (2) the water quality criteria sufficient to protect those uses.

Each state is free to enforce its own water quality laws so long as its effluent limitations are not “*less stringent*” than those set forth in the CWA.⁹ California law was enacted to “ensure consistency with the requirements for state programs implementing the Federal [CWA].”¹⁰ California law also provides that the state and regional water boards shall “issue *waste discharge requirements*”¹¹ ... which apply and ensure compliance with all applicable provisions [of the Clean Water Act], together with any more stringent effluent standards or limitations necessary to implement water quality control plans, or for the protection of beneficial uses, or to prevent nuisance.”¹²

Thus, state-issued NPDES storm water permits may specify procedures to control pollutants to the maximum extent practicable (MEP), but may additionally impose such other provisions as

⁶ 40 C.F.R. §§ 122.26; 122.34

⁷ 33 U.S.C. § 1342(p)(3)(B)

⁸ *Communities for Better Environment v. State Water Resources Control Bd.* (2003) 109 Cal.App.4th 1089

⁹ 33 U.S.C. § 1370

¹⁰ Water Code § 13372

¹¹ Water Code section 13374 provides that “the term ‘waste discharge requirements’ as referred to in this division is the equivalent of the term ‘permits’ as used in the [Clean Water Act].”

¹² Water Code, § 13377

the US EPA administrator or the State determines appropriate for the control of these pollutants.¹³

B. The State Water Resources Control Board

The State Water Resources Control Board (State Water Board) California has several storm water regulatory program areas, which include the regulation of storm water runoff from construction activities, specific industrial activities, roads and highways, and from large and small municipal storm sewer systems.

Phase 1 of the municipal storm water program regulates storm water permits for medium (serving between 100,000 and 250,000 people) and large (serving 250,000 people) municipalities. Phase II regulates smaller municipalities, including non-traditional small operations, such as military bases, public campuses, and prison and hospital complexes. The Phase II permit is currently undergoing review in 2011. The largest, single municipal discharger in California is the California Department of Transportation (Caltrans) and their network of highways and road facilities. The Caltrans permit is also under review and renewal in 2011.

In addition, the Industrial General Permit is currently undergoing public review. Under the expiring permit, specific industrial activities must use the best technology available to reduce pollutants in their discharges. They are also required to develop both a storm water pollution prevention plan and a way to monitor their progress. According to the State Water Board, there are approximately 10,000 active Industrial General permit holders.

1) Renewal of Phase II Municipal and Industrial Permits: As noted above, these permits are currently undergoing review. In discussing this process, the State Water Board notes that,

“While early program efforts focused on controlling pollutants and implementing good management practices, the program is now also emphasizing holistic strategies aimed at not only preventing problems but providing many community benefits. Storm water is an important resource and Low Impact Development and Green Infrastructure techniques are now capitalizing on opportunities in California. The goal is to capture the water that runs off concrete and non-permeable surfaces and use it, for example, to water trees, plants and other living things on the same plot of land from which it would flow away. Groundwater supplies are replenished, too, and the amount of pollutants that flow into our waterways is reduced.”

Effluent Limitations: In documents describing the changes it proposes for the Industrial General Permit, the State Water Board points out that previous industrial permits have required dischargers who detected a pollutant in ‘significant quantities’ to implement clean-up procedures when appropriate, and assess whether additional BMPs are necessary. It notes that, heretofore, there have been not established numeric limits on the amount of specified pollutants that can be discharged in storm water emanating from these sites. According to the State Water Board, this led to inconsistent interpretations and difficulty in enforcement. Despite the fact that no other

¹³ *Building Industry Assn. of San Diego County v. State Water Resources Control Bd.* (2004) 124 Cal.App.4th 866

state has imposed these numeric limits, the State Water Board declares in the draft permit document that:

“The State Water Board is mindful that, for storm water permits, US EPA has recommended the use of BMPs in lieu of numeric effluent limitations, and the limited use of sampling and analysis in storm water permits, because it is generally difficult to calculate numeric effluent limitations for the widely variable flows associated with storm water and to monitor such intermittent discharges. In reissuing this General Permit, however, the State Water Board has concluded that it is feasible to require numeric effluent limitations and sampling and analysis requirements in certain circumstances.”¹⁴

Parenthetically, a recent report of the National Academies of Science noted among other things, “The uncertainties and variabilities surrounding both the nature of the storm water discharges and the capabilities of various pollutant controls . . . make it much more difficult to set precise limits in advance for storm water sources.”¹⁵

The State Water Board argues that the US EPA *authorizes* the use of numeric effluent limitations¹⁶ and/or BMPs, and that it is the “best professional judgment (BPJ) of the State Water Board staff that dischargers employing [the best available technology] and the [best control technology] can reduce the pollutants in their storm water effluent to achieve concentrations at or below”¹⁷ the point at which the numeric limits will be applied.

New controls in Phase II Municipal permit: As described above, both large and small municipal sewer system operators must comply with permits that regulate storm water entering their systems under a two-phase system. The Phase II draft permit will regulate smaller municipalities, including non-traditional small operations, such as military bases, public campuses, and prison and hospital complexes.¹⁸

The new Phase II permit under review at the State Water Board implements and enhances actions to control specified listed pollutants, pollutants of concern, by imposing Total Maximum Daily Loads that may be discharged by these municipalities. In addition the draft permit requires more specific and comprehensive storm water monitoring, including monitoring of the storm water for specified pollutants. In addition, the draft permit requires implementation of so-called

¹⁴ NPDES General Permit Fact Sheet for Storm Water Discharges Associated with Industrial Activities, January 28, 2011

¹⁵ *Urban Stormwater Management in the United States*, National Academies of Science, 2008, p. 84. The report also notes that the current approach to regulating storm water “seems inadequate to overcome the unique challenges of stormwater,” and as applied to storm water, it is a “poor fit.” (Id., at p. 83)

¹⁶ 40 C.F.R. 122.44(k) These US EPA regulations (40 C.F.R. Subchapter N) establish effluent limitation *guidelines* for storm water discharges from facilities in eleven industrial sectors, but no state has yet imposed these guidelines as numeric limits..

¹⁷ Draft Industrial Permit, January 28, 2011, p.8

¹⁸ Phase 1 permits were issued for medium (pop. 100,000 – 250,000) and large (pop. > 250,000) municipalities.

Low Impact Development practices, and requires municipalities to inspect industrial and commercial businesses in their jurisdictions, and perform follow-up effectiveness assessments.

Low Impact Development: In its discussion of Low Impact Development (LID) the State Water Board notes that, in January 2005, it adopted “sustainability” as a “core value” for all of its activities and programs, and directed staff to consider sustainability in all future policies, guidelines, and regulatory actions. According to the State Water Board:

“LID is a ‘sustainable’ practice that benefits water supply and contributes to water quality protection. Unlike traditional storm water management, which collects and conveys storm water runoff through storm drains, pipes, or other conveyances to a centralized storm water facility, LID takes a different approach by using site design and storm water management to maintain the site’s pre-development runoff rates and volumes. The goal of LID is to mimic a site’s predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to the source of rainfall. LID has been a proven approach in other parts of the country and is seen in California as an alternative to conventional storm water management. The Water Boards are advancing LID in California in various ways.

LID provides economical as well as environmental benefits. LID practices result in less disturbance of the development area, conservation of natural features, and less expensive than traditional storm water controls. The cost savings applies not only to construction costs, but also to long-term maintenance and life cycle cost. LID provides multiple opportunities to retrofit existing highly urbanized areas and can be applied to a range of lot sizes.

LID includes specific techniques, tools, and materials to control the amount of impervious surface, increase infiltration, improve water quality by reducing runoff from developed sites, and reduce costly infrastructure. LID practices include; bioretention facilities or rain gardens, grass swales and channels, vegetated rooftops, rain barrels, cisterns, vegetated filter strips, and permeable pavements.”

2) Evaluation of economic costs: California law governing the issuance of storm and wastewater permits requires consideration of several factors, including “economic considerations.”¹⁹ These economic considerations are not defined, nor do they specify a particular manner of compliance. Therefore, the matter is within the discretion of the Water Board.²⁰

In addition, the Legislature has stated its intent that “activities and factors which may affect the quality of the waters of the state shall be regulated to attain the highest water quality which is

¹⁹ See Water Code §§ 13263, 13241

²⁰ *City of Arcadia v. State Water Resources Control Bd.* (2006) 135 Cal.App.4th 1392. The court deferred to the expertise of the State Water Board on economic considerations.

reasonable, considering all demands being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible.”²¹

In issuing federal NPDES storm water permits, the State Water Board is required to impose controls to reduce the discharge of pollutants to the “maximum extent practicable,” (MEP) but that standard is rather broad, and may include “such other provisions that [the state] determines is appropriate.”²² There is no requirement that the State Water Board conduct a cost-benefit analysis prior to issuance of a storm water permit. In adopting storm water permits, the State Water Board has found that costs “should be considered in determining MEP, but that a cost-benefit analysis is not required.”

Because the State Water Board is largely exempt from the rulemaking provisions of the Administrative Procedure Act (APA), it need not consider the effect of the permit on business, including the ability of California businesses to compete with businesses in other states, or other economic considerations specific to the APA.

In explanatory notes for the current draft Phase II storm water permits, the State Water Board notes that the US EPA has clarified that the MEP standard should be applied in a site-specific, flexible manner, taking into account cost considerations as well as water quality effects. It notes that permittees are expected to incur incremental costs in implementing the BMPs required by the order issuing the general permit, such as the cost of complying with the Standard Urban Stormwater Mitigation Plans, hydromodification²³ controls, and Low Impact Development requirements. It adds that permittees will also incur additional costs in bringing non-compliant discharges into compliance through the iterative process, which strengthens the controls with each five-year permit cycle.

Focus has been on economic consequences of impairment of water quality: The State Water Board has stated that, in considering the cost of compliance with its storm water permits, it is also important to consider the costs of impairment – the negative impact of pollution on the economy and the positive impact of improved water quality. Although it may be appropriate and necessary to consider the cost of compliance, the board and its staff believe that it is also important to consider the larger economic impacts of implementation of the storm water management program. For example, the board states, “economic benefits may result through program implementation, and alternative costs (as well as environmental impacts) may be incurred by not fully implementing the program.”²⁴

In the Fact Sheet accompanying the current Draft MS4 Storm Water Permit, the State Water Board states:

²¹ Water Code § 13000

²² *Building Industry Assn. of San Diego County v. State Water Resources Control Bd.* (2004) 124 Cal.App.4th 866

²³ Hydromodification is the alteration of the natural flow of water, usually caused by urbanization.

²⁴ See, e.g., Order WQ 2000-11

“It is also important to consider the cost of not implementing a storm water management program. Urban runoff in southern California has been found to cause illness in people bathing near storm drains. A study of south Huntington Beach and north Newport Beach found that an illness rate of about 0.8% among bathers at those beaches resulted in about \$3 million annually in health-related expenses. Extrapolation of such numbers to the beaches and other water contact recreation areas in the state would increase these numbers significantly. Storm water runoff and its impact on receiving waters also negatively affects the tourism industry. . . Effects on tourism from storm water runoff (e.g. beach closures) can have a significant impact on the economy. The experience of Huntington Beach provides an example of the potential economic impact of poor water quality. Approximately eight miles of Huntington Beach were closed for two months in the middle of summer of 1999, impacting beach visitation and the local economy.”²⁵

The State Water Board further contends that storm water program costs are not all attributable to compliance with permits. It states that many program components and their associated costs existed before any MS4 permits were issued. Therefore, storm drain maintenance, street sweeping and trash/litter collection costs cannot be principally attributable to permit compliance since these practices have long been implemented before any storm water permit was issued. Thus, according to the Board, the true cost resulting from permit requirements is some fraction of the total storm water program costs.

C. State Regulatory and Administrative Hearing Processes

The Administrative Procedure Act (APA) establishes minimum procedural requirements applicable to quasi-legislative and quasi-judicial actions by state agencies. Generally, an action is considered a quasi-legislative process if the rule or restriction applies generally to a large group of individuals or entities. A “regulation” means every rule, regulation, order, or standard of *general application*.²⁶ On the other hand, the APA also defines a set of protocols that govern administrative adjudication, or quasi-judicial actions.

The determination of whether an administrative action is quasi-legislative or quasi-adjudicative can have implications for the type of process that must be followed, whether ex parte contacts are allowed, and the standard for judicial review.

1) **Adoption of regulations (quasi legislative)**: Chapter 3.5 of the APA²⁷ governs the process for adoption, amendment, or repeal of regulations by state agencies charged with the implementation of statutes, and for legal review of those regulatory actions. The APA authorizes an agency considering adopting, amending, or repealing a regulation to consult with interested

²⁵ Fact Sheet, Draft Phase II Small MS4 General Permit, June 7, 2011

²⁶ Govt. Code § 11342.600

²⁷ Govt. Code § 11340 et seq.

persons before initiating regulatory action, and requires the agency to do so if the regulation involves complex or numerous proposals. The APA requires a state agency to include in a Notice of Proposed Action to adopt, amend or repeal a regulation, an Initial Statement of Reasons for proposing to take the regulatory action, which shall include a description of any reasonable alternatives that would lessen any adverse impact on small business, and the agency's reasons for rejecting those reasonable alternatives.²⁸ The APA requires every agency to prepare a Final Statement of Reasons that must include, among other things, a summary of each objection or recommendation made regarding the specific regulation, together with an explanation of how the proposed action has been changed to accommodate each objection or recommendation, or the reasons for making no change to the proposed regulation.²⁹ Under the APA, the Office of Administrative Law (OAL) reviews, and approves or rejects proposed regulations.

State Water Board exemption: In 1992, the Legislature passed AB 3359 (Sher), which enacted Government Code section 11352, specifically exempting NPDES permits, waste discharge requirements, and waivers of any water quality certification, from the procedural requirements of the APA governing administrative rulemaking and adoption of regulations.³⁰ Thus, when issuing storm water permits, the State Water Board is not required to evaluate the costs to affected persons, discuss alternatives to the regulatory action, and comply with other quasi-legislative rulemaking procedures of the APA.³¹

The State Water Board sponsored the 1992 legislation. In support of the bill, the State Water Board stated that the APA contains a very broad definition of “regulation,” but that the adoption of the various plans and permits are controlled by specific procedures specified in the Porter-Cologne Water Quality Act. The board stated further that if, as can be expected, these plans are rejected by OAL, state water use regulation will be thrown into turmoil. It claimed that all elements of existing basin plans, beneficial use designations, and water quality objectives and discharge prohibitions could be invalidated.

Notably, the State Water Board wrote that the federal Clean Water Act permits and all general permits, including permits for storm drainage, might need to be issued on an individual discharger basis, instead of the current practice of issuing general permits.³²

²⁸ The APA also states that the agency is not required, in this initial statement, to artificially construct alternatives, describe unreasonable alternatives, or justify why it has not described alternatives.

²⁹ Govt. Code § 11346.9

³⁰ Govt. Code § 11352 (b) specifies that the issuance, denial, or revocation of waste discharge requirements and permits pursuant to Section 13377 of the Water Code are exempt from the APA requirements for adoption of regulations. Section 13377 of the Water Code authorizes the State Water Board or the Regional Water Boards to issue permits pursuant to the federal Clean Water Act. (Waste discharge requirements under state law are equivalent to NPDES permits under federal law. See, Water Code § 13374).

³¹ AB 739 (Laird), Stats. 2007, ch. 610 added subdivision (c) to Section 11352 of the Government Code, exempting from the APA the development, issuance and use of guidance documents relating to municipal storm water programs and permits.

³² Senate Floor Analysis of AB 3359 (Sher), August 25, 1992

Prior to enactment of this exemption, the State Water Board took the position that actions of the Board that affect individuals and small groups are quasi-judicial, while actions that affect large groups are usually quasi-legislative.³³ This is a logical construct, in that general permits, such as the storm water permits in question, typically cover discharges from entities throughout the state that are engaged in a wide variety of activities. The Industrial General Permit governing storm water discharges is a statewide permit that applies to dischargers engaged in numerous different industrial activities. Similarly, municipal storm water permits are deemed “individual permits,” yet they may have nearly 100 cities listed as permittees.

2) Administrative Adjudication – (quasi-judicial): Chapters 4.5 and Chapter 5 of the APA³⁴ govern the conduct of administrative adjudicatory proceedings. An “adjudicative proceeding” means an evidentiary hearing for determination of facts pursuant to which an agency formulates and issues a decision.”³⁵ In this context, a “decision” is an agency action of specific application that determines a legal right, duty, privilege, immunity, or other legal interest of a particular “person,” which may include an individual, partnership, corporation, governmental subdivision or unit of a governmental subdivision, or public or private organization or entity of any character.³⁶

Among other provisions, the APA provides a mechanism by which an agency may conduct an adjudicative proceeding under an informal hearing procedure.³⁷ The informal hearing process is intended to satisfy due process and public policy requirements in a manner that is simpler and more expeditious, and is used by the State Water Board in General Storm Water permits.

Ex parte communications: The APA prohibits ex parte communications³⁸ in connection with adjudicatory proceedings, with specified exceptions. The administrative adjudication process in the APA is limited to decisions of an agency that determine a legal right, duty, privilege, immunity or other legal interest of a particular person.³⁹

The the issue of whether the action is quasi-adjudicative or quasi-legislative is relevant to the propriety of ex parte communications with Board members who act on the waiver. Ex parte

³³ Memorandum from William R. Attwater, Chief Counsel, to Regional Water Board members, August 13, 1992.

³⁴ Govt. Code § 11400 et seq.

³⁵ Govt. Code § 11405.20

³⁶ Govt. Code §§ 11405.50, 11405.70

³⁷ Govt. Code § 11445.10 et seq.

³⁸ Government Code § 11430.10 provides in part that, “[w]hile the proceeding is pending there shall be no communication, direct or indirect, regarding any issue in the proceeding, to the presiding officer from an employee or representative of an agency that is a party or from an interested person outside the agency, without notice and opportunity for all parties to participate in the communication.”

³⁹ See Govt. Code § 11405.50

communication rules are more restrictive for quasi-adjudicative matters. The only exceptions to the prohibition that are applicable to the State Water Board are communications concerning a procedural matter that is not in controversy, and advice from Water Board staff in an adjudicative proceeding that is non-prosecutorial.⁴⁰ The State Water Board has adopted these rules.⁴¹

Thus, no participation by or communication with Members of the State Water Board is allowed once a draft storm water permit is pending. For this reason, no Members of the State Water Board will be attending today's Committee meeting. In January 2009, the Little Hoover Commission issued a comprehensive report on the State Water Boards, in which it suggested that:

“Ex parte rules must be reformed to allow more communication between decision-makers and stakeholders. The regulated community should have greater opportunity to talk with board members who have such significant power to influence their activities. The boards should adopt rules similar to those used by other state regulatory boards such as the Integrated Waste Management Board, which allow communication between regulators and the regulated as long as it is disclosed at public meetings. These new rules should extend to executive officers if they are issuing permits.”⁴²

Today's hearing will discuss issues that have arisen in the context of the storm water regulatory program outlined above, as implemented by the State Water Board, and the impacts of the program on municipalities, businesses and individuals in the state.

⁴⁰ Govt. Code § 11430.30

⁴¹ 23 Cal. Code Regs. §648

⁴² *Clearer Structure, Cleaner Water: Improving Performance and Outcomes at the State Water Boards*, January 22, 2009