State and Federal Approach to Control of Nonpoint Sources of Pollution

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Introduction

The successful control of "nonpoint source (NPS) pollution" or "polluted runoff" relies on a combination of outreach, education, cooperation and technical assistance for agricultural and timber landowners. The primary goal of this fact sheet is to clarify the responsibilities of agriculturists and natural resource managers regarding compliance with water quality regulations in California. It is the first component of an outreach program being designed jointly by University of California Cooperative Extension (UCCE) and staff from the North Coast Regional Water Quality Control Board. As such it represents a commitment by both agencies to work together to assist landowners to control NPS pollution and improve water quality statewide.

Regulatory Status

On May 5, 2004, the State Water Resources Control Board (SWRCB) adopted a new policy regulating NPS pollution. This policy affects landowners and operators throughout the state engaged in agricultural production, timber harvest operations and other potential sources of NPS pollution. Known as the *Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program* (NPS Implementation and Enforcement Policy), it was required by Senate Bill 390 enacted in 1999. This fact sheet provides an update on regulation of nonpoint source pollution in California, explaining what is now required by the SWRCB and Regional Water Quality Control Boards (RWQCBs) of landowners and operators as potential dischargers.

What are Nonpoint Sources of Pollution (NPS)?

Federal water quality regulations differentiate nonpoint from point sources of pollution. Point sources include pipes or ditches coming from factories, water treatment plants or other facilities or sites with a distinct identifiable source. Nonpoint sources enter waterways as runoff from diffuse distributed sources across the landscape. Since much of California is forest, range, and agriculture, associated land use activities are considered potential sources for NPS in addition to urban landscapes.

The California Porter-Cologne Water Quality Control Act (Porter-Cologne Act) does not differentiate between regulation of point or nonpoint sources of pollution. Instead, it states that any activity or factor that affects water quality is subject to regulation. This means not only materials that enter the water column directly, like manure or sediment (known as "waste discharges" or "pollutants") but also processes that effect water quality. For example, decreases in flow or reductions of riparian shade can cause an increase in water temperature, a form of "pollution" that is subject to regulation.

The common pollutants and pollution that may originate from agriculture and timber lands are sediment, elevated water temperatures, nutrients, pathogens, and pesticides. Even though many of these constituents occur naturally in most water bodies, excessive levels of these constituents can impair or cause the loss of beneficial uses in these water bodies. For example, increased turbidity can impair domestic water supplies and elevated stream temperatures can decrease fish survival.

Although state and federal laws regarding control of NPS have been in existence since the early 1970's, water quality enforcement initially focused on point sources. Recently the focus has shifted to NPS. It is likely that efforts to control nonpoint sources of pollution will continue to increase for the foreseeable future. According to the US EPA (USEPA, 1996),

Today, nonpoint source (NPS) pollution remains the Nation's largest source of water quality problems. It's the main reason that approximately 40 percent of our surveyed rivers, lakes, and estuaries are not clean enough to meet basic uses such as fishing or swimming.

Here in California, there are 685 water bodies on California's 2002 Clean Water Act Section 303(d) List of Water Quality Limited Segments (SWRCB, 2002). When combined with the number of pollutants by which a water body is impaired there are 1,883 water body/pollutant combinations on the list. Regulations and policies for controlling NPS pollution are being implemented across the state to address these impacted waters.

Federal Law Regarding NPS

The United States Clean Water Act and the Coastal Zone Management Act, both enacted in the 1970's, are the primary federal statutes that mandate states to control water quality. Funding for the state to administer the required planning and regulatory programs is provided through the federal Environmental Protection Agency (EPA) and is dependent on the state submitting plans to control NPS pollution that meet criteria established by federal law. The state must also provide assurances that it has the necessary regulatory authority to implement the plans.

California Authority for Regulating NPS It's the Porter-Cologne Act in California

Within California, the main statute that gives the state and regional boards the authority to control water quality is the Porter-Cologne Act, which was initially adopted in 1969. The underlying principle of the Porter-Cologne Act is that "All discharges of waste into the waters of the State are privileges, not rights." So although formal policy for the regulation of NPS pollution is a relatively recent development in California, the authority to do so has always existed within the Porter-Cologne Act. Now that the State is focusing more energy on controlling NPS pollution, new policies and plans have been developed at the state level and RWQCBs are developing conforming plans.

In January 2000, the SWRCB approved a two volume plan for nonpoint source pollution regulation, which was also reviewed and approved by the EPA:

Volume I: Nonpoint Source Program Strategy and Implementation Plan (1998-2013 NPS Program Plan); and

Volume II: California Management Measures for Polluted Runoff (January 2000)

The January 2000 Plan described what was known as the "Three-Tiered Approach" for controlling NPS pollution. In May 2004, this approach was superceded when the SWRCB adopted the Policy for the Implementation and Enforcement of the Nonpoint Source Pollution Control Program, or "NPS Implementation and Enforcement Policy." This policy clarified and made more specific the long existing authority that rested with the SWRCB and RWQCBs to control all discharges of waste including NPS.

Who's in Charge?

Two California agencies share responsibility for developing and implementing the NPS pollution control policies: the SWRCB and the nine RWQCBs. The SWRCB adopts

Shedding Tiers, California Legislature and State Water Resources Control Board Reaffirm Authority in Porter-Cologne Act - The three-tiered approach to nonpoint source pollution control was officially put aside on May 20, 2004, when the State Water Resources Control Board (SWRCB) approved the Policy for the Implementation and Enforcement of the Nonpoint Source (NPS) Pollution Control Program. In 1999, the California legislature passed Bill 390, which rescinded long standing "waivers" for agriculture and forestry, eliminated the tiered approach, and directed the SWRCB to develop this new policy. This policy reaffirmed the long-standing authorities that both the SWRCB and Regional Water Quality Control Boards (RWQCBs) have had to regulate all discharges of waste since the passing of the Porter-Cologne Act in 1969. This includes regulation of nonpoint source pollution from agricultural and timber lands. In clarifying these authorities, the policy requires RWQCBs to actively regulate ongoing and potential NPS discharges and implement a nonpoint source pollution control program.

policy for water quality control, statewide water quality control plans, and regulations that are binding on the nine RWQCBs. The SWRCB also hears appeals from RWQCB actions. RWQCBs adopt regional water quality control plans, issue permits to implement basin water quality requirements, and, when necessary, take enforcement actions. Because of geographic differences between the regions, individual RWQCBs may develop different approaches to NPS control implementation. but these approaches all must be consistent with the law and SWRCB policy.

The NPS Implementation and Enforcement Policy reaffirms RWQCBs' use of the three existing permitting authorities contained in the Porter-Cologne Act for control of NPS discharge. These permitting authorities include:

Regional Water Quality Control Board NPS Permitting Authorities:

- Waste Discharge Requirements (WDR): either individual or general permits
 adopted by RWQCBs with specific criteria, conditions and limitations that describe
 how waste discharge from specific land management can be allowed. WDRs require
 submittal of a report of waste discharge, annual fees and approval by respective
 RWOCBs.
- Waivers of WDR: either individual or categorical permits for land management
 activities that RWQCBs have determined, after a formal hearing, to be consistent with
 State law. Waivers are conditional with specific directions and requirements to
 reduce NPS discharge and impacts from permitted activities. Activities waived by
 RWQCBs may be exempt from filing a report of waste discharge and annual fee
 requirements.
- **Basin Plan Prohibitions**: these are restrictions on pollutant discharges contained within a RWQCB's Basin Plan, rather than issued to individuals or groups as a permit. This tool is used when discharges are occurring without either of the first two types of permits, providing for immediate enforcement action to control a discharge.

In addition to these administrative permitting authorities, the *NPS Implementation and Enforcement Policy* references enforcement options available to the SWRCB and RWQCBs. These enforcement options are authorized by the Porter-Cologne Act. Some examples of enforcement actions include, but are not limited to, Notice of Violation (NOV), Notice to Comply (NTC), Cleanup and Abatement Orders (CAOs), Cease and Desist Orders (CDO), and fines in the form of Administrative Civil Liabilities (ACL).

The NPS Implementation and Enforcement Policy also requires dischargers to develop and implement NPS pollution control programs that meet SWRCB and RWQCB water quality requirements. The policy identifies the following five key elements:

Five key elements to a NPS Pollution Control Program:

- <u>Element 1</u>: Explanation of the purpose of the NPS program and how it will meet water quality requirements.
- <u>Element 2</u>: Description of the specific management practices (commonly known as BMPs) that will be used to meet water quality goals.
- Element 3: A timeline for implementing the program.
- <u>Element 4:</u> A monitoring program to verify management practices were implemented and effective in meeting water quality requirements.
- <u>Element 5</u>: Clear explanation of consequences of not meeting the stated purpose of the program. Developing this element primarily is the responsibility of the RWQCB.

What does this mean on-the-ground?

The NPS Implementation and Enforcement Policy requires the SWRCB and RWQCBs to use the permitting and enforcement authorities delegated to them by the Porter-Cologne Act to regulate NPS pollution and to enforce their regulations. Within the limits of available staff time and resources, RWQCBs are now required to actively engage in NPS pollution control through the now clarified and specific authorities that have been in existence since the passing of the Porter Cologne Act in 1969. Landowners and managers, in turn, are responsible for choosing management practices that effectively control nonpoint pollution sources on their property.

Admittedly, available SWRCB and RWQCB staff time and resources are limited compared to the vast area and number of landowners that may be considered "dischargers." Thus, successful control of NPS pollution will largely rely on outreach, education and technical assistance to landowners, in addition to the regulatory options.

Since water quality regulation is implemented through the nine independent RWQCBs, the specifics of what will change or happen on the ground may be different between regions and land uses. Future additional fact sheets in this series will provide guidance on RWQCB specific efforts to control NPS pollution. In addition, you may request information from respective RWQCBs about their specific programs and policies.

As RWQCBs formalize their application of the state NPS policy, land managers may need to seek guidance in finding the answers to the following questions:

- 1) Do your land management activities have the potential to discharge waste (for example, sediment, nutrients, pathogens and/or pesticides) or cause a condition of pollution (for example, by raising water temperature) to waters of the State?
- 2) If so, under which administrative authority (WDRs, waivers, or prohibitions) will your activity be regulated? In some cases, you may have a choice as to when you can conduct your land management activities in such a way as to comply with either a conditional waiver or a general WDR. The final decision, however, is up to the RWQCB.
- 3) If you have an existing water quality management plan, can it be revised to meet the needs of an NPS Pollution Control Program? It is possible that Farm and Ranch Water Quality Planning and other conservation efforts with groups like Resource Conservation Districts can serve as a starting platform upon which you can develop additional program elements to meet the NPS Implementation and Enforcement Policy's five key element requirements.

The goal of providing these questions and the information in this fact sheet is to clarify California water quality regulations and the responsibilities and roles that agricultural and timber landowners have in reducing discharges of waste and pollution to waters of the state. In the end, a potential discharger will need to identify human-caused sources of sediment, nutrients, temperature, pathogens, and pesticides on the property they manage.

A program to address those sources within a specified time frame will also need to be developed with some way to monitor results. While there are a few additional details, it need not be any more complicated than that.

Sources of Additional Information

- Jones, A., T. Harter, M. Bianchi and J. Harper. 2003. Water Pollution Control Legislation. Farm Water Quality Planning Reference Sheet 8.1 University of California, Division of Agriculture and Natural Resources- Publication 8088 http://groundwater.ucdavis.edu/Publications/Harter-FWQFS%208088.pdf
- State Water Resources Control Board (SWRCB). 2000. Nonpoint Source Program Strategy and Implementation Plan, 1998-2013 (PROSIP). California Coastal Commission.
- State Water Resources Control Board (SWRCB). 2002. Clean Water Act Section 303(d) list of water quality limited segments. SWRCB, Sacramento, California.
- State Water Resources Control Board (SWRCB). 2004. Policy for implementation and enforcement of the Nonpoint Source Pollution Control Program. California Environmental Protection Agency, Sacramento, California.
- United States Environmental Protection Agency (USEPA). 1996. Nonpoint source pollution: The nations largest water quality problem. Pointer No. 1. EPA841-F-96-004A http://www.epa.gov/owow/nps/facts/point1.htm

Website Resources

Federal Level

US Environmental Protection Agency, Office of Water, Nonpoint Source website http://www.epa.gov/owow/nps/

State Level

State Water Resources Control Board Nonpoint Source Pollution Control Program website

http://www.swrcb.ca.gov/nps/protecting.html

NPS Plan Volume I

http://www.waterboards.ca.gov/nps/docs/planvol1.doc

NPS Plan Volume II

http://www.swrcb.ca.gov/nps/cammpr.html

NPS Implementation Policy

http://www.swrcb.ca.gov/nps/docs/oalfinalcopy052604.doc

Other points of contact for information on NPS Program Plan

If you would like a CD containing the NPS Program Plan sent to you, please leave your name and mailing address with Kelly Maurie at (916) 327-9530 or by email at kmaurie@waterboards.ca.gov. For any problems associated with downloading the NPS Program Plan from this website, please contact Mary Tappel at (916) 341-5491, or by email at mtappel@waterboards.ca.gov.

If you have any questions concerning the NPS Program Plan, please send them to Steve Fagundes, Chief of NPS Program Plan Implementation Unit at the State Water Resources Control Board: 1001 'I' Street, 15th Floor, Sacramento, CA 95814. You may also contact him at (916) 341-5487 or by email at sfagundes@waterboards.ca.gov.

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