

August 24, 2018

Re: Background Materials for the Environmental Panel

Dear Board Members, Executive Officer Robertson, Mr. Chris Rose, Staff, and Interested Public:

Following are Environmental Panel background materials for the September 20-21, 2018 board meeting.

This packet contains:

- 1) The California Coastkeeper Alliance Position Statement and Agricultural Principals. This policy statement represents the position of the ten California Waterkeepers and the Alliance. We anticipate this position will be endorsed by many local and national groups in the weeks to come. This Position Statement was unanimously approved by the ten "Keepers."
- 2) California's Nonpoint Source Pollution Policy. (Highlights added). Agriculture is a "nonpoint" source of pollution. While some may have suggested this "Policy" is mere guidance, we feel the Policy is essential regulation.
- 3) Water Code Section 13269 (highlights added). This is the "Waiver" section of Porter-Cologne. We understand there may be a decision between issuing a waiver or a General WDR. We feel that in most ways the two approaches are very similar; while the "waiver" language may be more explicit in places, there is far more helpful case law dealing with WDRs.

Our packet is meant to positively frame the Agricultural Order and the context we are working within, both for water board members and members of the public who are participating in this process. Please, we are in no way suggesting that Regional Board members or staff are not familiar with these laws and policies, we simply intend to indicate – to all readers -- the context we feel we are working within.

Thank you for the opportunity to participate in this important process.

Sincerely,



Steve Shimek
Executive Director

**CALIFORNIA COASTKEEPER ALLIANCE
POSITION STATEMENT & AGRICULTURAL PRINCIPLES**

POSITION STATEMENT

California serves as a leading agricultural producer within the United States and supplies over 400 agricultural commodities throughout the nation and the world. California is a top producer of over 74 different commodities in the nation and produces nearly half of all U.S.-grown fruits, nuts, and vegetables with 13 specific commodities grown exclusively within the state. Many products are exported worldwide, and the agricultural industry accounts for over \$20 billion of California's economy annually.

The success of California agriculture, however, is dependent on the state's climate, soil health, and water resources. On average, California agriculture irrigates more than 9 million acres using roughly 34 million acre-feet of water typically diverted from surface waters or pumped from groundwater. While a majority of irrigated water is used efficiently to reduce the demand of water by individual farms, and even used to recharge groundwater supplies, water diversions for irrigated agriculture pose significant environmental challenges by diminishing instream flows and depleting groundwater aquifers throughout the state.

Water discharges from agricultural operations in California pose significant threat to water quality by transporting pollutants – ranging from toxic pesticides, sediment, nitrate, and salts – pathogens, and heavy metals from cultivated fields into surface and groundwater. Encroachment of streams and rivers throughout the state by intensive farming and grazing have also led to the destruction of natural riparian zones through increased erosion, nutrient and sediment pollution, higher water temperatures, and degraded aquatic habitats. Nutrient pollution and eutrophication are pressing challenges to water quality in California and agriculture is the largest source of nitrogen input into the environment in the state. The over- or improper application of fertilizers onto agricultural fields can cause excess nutrients to be lost to the environment through runoff, erosion, leaching, or volatilization, and impair beneficial uses of water throughout the state, including drinking water and recreation.

To address the impairment of California waterways from agricultural operations, the California Coastkeeper Alliance has identified eleven critical principles California must pursue to protect Californians and maintain swimmable, fishable, and drinkable waterways statewide.

PRINCIPLE ONE – Individual growers are held accountable with enforceable standards, milestones, and timelines in irrigated Agricultural Orders. Most existing Agricultural Orders regulating agricultural activities within California contain no enforceable standards to ensure growers are complying with state-wide water quality objectives.

PRINCIPLE TWO – Robust surface water monitoring and reporting is required in irrigated Agricultural Orders to demonstrate compliance with enforceable standards. Without monitoring to determine whether individual growers' management measures are achieving water quality standards, it is impossible to hold growers accountable for their polluted runoff.

PRINCIPLE THREE – Irrigated Agricultural Orders include transparent reporting and do not delegate regulatory authority to Third-Party Coalitions. By delegating data collection responsibilities and not providing some oversight over Third-Party Coalitions, Regional Boards statewide risk the submission of inaccurate, incomplete, and misinterpreted water quality and water use data.

PRINCIPLE FOUR – Pesticide monitoring protocols are updated using best available science to allow for detection of toxicity violations. Pesticide monitoring protocols have failed to keep pace with new pesticide technology and product use by focusing on pesticides that are no longer widely used in California, rather than those currently used.

PRINCIPLE FIVE – Riparian setbacks are required to enhance natural ecological and hydrological function. Encroachment of riparian zones from intensive farming and grazing has led to higher nutrient and sediment pollution, higher water temperatures, lower water tables, poor water storage, and degraded aquatic environments.

PRINCIPLE SIX – Livestock grazing is prohibited in California waterways and within riparian setbacks. Improper livestock grazing poses a serious threat to water quality, through the direct discharge of contaminants and increases in erosion from poor soil health.

PRINCIPLE SEVEN – Irrigated water is not wasted and is allocated reasonably to ensure public trust resources are protected. California needs to better implement existing laws to protect against overallocation of the state’s water supplies and preserve public trust resources.

PRINCIPLE EIGHT – Cover crop is required, and no-till management practices are incentivized, to reduce erosion and improve soil health. Compaction of soils from overgrazing, the destruction of stream bank vegetation and riparian zones, and traditional tillage practices have all led to increased rates of bank instability and erosion, in turn increasing sediment runoff.

PRINCIPLE NINE – Every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. Studies indicate that fertilizer from irrigated agriculture is the largest source of nitrate pollution in drinking water in California, with irrigated agriculture causing 78 percent of the nitrate loading to groundwater.

PRINCIPLE TEN – Concentrated animal feeding operations are sited away from surface waters and areas with high potential for groundwater infiltration. The proliferation of Concentrated Animal Feeding Operations (CAFOs) and associated concentrated waste has the potential to contribute nutrients, suspended solids, pathogens, and heavy metals to surface and groundwater supplies.

PRINCIPLE ELEVEN – All applicable beneficial uses must be considered and protected when adopting Agricultural Orders. The objectives required by the State Water Resources Control Board to protect beneficial uses may be numeric or narrative, or some mix of both, often leading to confusion and the exclusive consideration of human-beneficial uses.

PRINCIPLE ONE – Individual Growers are Held Accountable with Enforceable Standards, Milestones, and Timelines in Irrigated Agricultural Orders.

Problem:

Agricultural operations pose some of the most serious threats to California’s water resources; however, current regulation of the industry is not on par with the severity or magnitude of those threats. Most existing Agricultural Orders regulating agricultural activities within California contain no effective mechanisms to ensure that growers covered by a specific order are complying with state-wide water quality objectives. Even when exceedances are detected, there is typically no requirement that water quality benchmarks become formal effluent limitations and thereby enforceable by the State and Regional Water Boards. This lack of enforceable standards has led to widespread water quality impairments due to agricultural activities throughout the state.

The State Water Board’s current reliance on management practices in lieu of enforceable standards is illegal under the Porter-Cologne Act and the state’s Nonpoint Source Policy. Without performance standards linked to actual objectives, existing requirements, like nutrient management ratios, do not enable us to understand how water quality will be impacted by those practices or whether those practices are effective for meeting standards. Further still, relying on best management practices has proven insufficient for ensuring that water quality standards are being met.

Answer:

The Nonpoint Source Policy states that “management practice implementation never may be a substitute for meeting water quality requirements.” California should make a finding to that effect to ensure that growers are held accountable by implementing legally enforceable standards tied to water quality objectives. Nutrient ratios should be enforceable and linked to water quality objectives and agricultural operations that result in discharges to high-quality waters must be required to meet antidegradation standards.

Actions California Should Take:

- ❖ Violation of nutrient application and removal (A/R) ratios should be an enforceable standard. Any violation of the nutrient AR ratios should result in additional controls to prevent further receiving water exceedances. State and Regional Water Boards should – independent of third parties – develop nutrient A/R ratios based on the best available science for high nitrogen risk crops.
- ❖ Growers should comply with water quality standards in the shortest time possible – not once an exceedance is detected. Further, the Regional Water Boards should determine the shortest time possible and set enforceable interim milestones to achieve water quality standards – not Third-Party Coalitions. Regional Water Boards should require submission of field-level data to begin during the first year of order adoption.
- ❖ State and Regional Water Boards should conduct legally sufficient antidegradation analyses. A Water Board must make findings when a permitting activity may produce waste that will discharge into existing high-quality waters, identify degradation of waters through appropriate monitoring, and provide adequate means of ensuring Best Practicable Treatment of Control standards would be implemented when high quality water is degraded by existing agricultural activities.
- ❖ The State and Regional Boards should translate narrative standards for nutrients to numeric standards. All regions should either accept the default baseline nutrient standards consistent with the EPA criteria based on Aggregate Ecoregion III [Phosphorus, Total 0.020 mg/L. Total Nitrogen 0.38 mg/L] or determine site-specific standards using EPA developed protocols to replace the baseline.

PRINCIPLE TWO – Robust Surface Water Monitoring and Reporting is Required in Irrigated Agricultural Orders to Demonstrate Compliance with Enforceable Standards.

Problem:

California's agricultural program has a systematic management failure throughout the state due to a lack of verification monitoring to ensure compliance with water quality standards at the farm or operation level. Existing water quality monitoring requirements focus on stream sample collection at resolutions that are far too inadequate to determine compliance on a farm-by-farm or site-by-site level. This inadequacy significantly hampers enforcement efforts and also fails to assist farmers themselves in determining whether or not their management practices are effective. The Nonpoint Source Policy requires that that management practices are "tailored to a specific site and circumstance;" however, that criteria is impossible to verify solely with representative monitoring. As a result, the Regional Water Boards continue to have no evidence demonstrating that current management measures will effectively achieve water quality standards.

Without monitoring to determine whether individual growers' management measures are achieving water quality standards, it is impossible to hold growers accountable for their polluted runoff; and ultimately, impossible to protect our waterways from agriculture pollution.

Answer:

The State must recognize and acknowledge that representative monitoring, without any individual monitoring requirements, is insufficient to verify that beneficial uses are being protected. Instead, agricultural operations should be required to impose a monitoring scheme that verify individual compliance with water quality standards and maximize individual accountability, while ensuring buy-in and cooperation from growers. Growers implementing responsible and truly effective practices and indicate their achievement of meeting water quality standards will not be required to do individual monitoring. If a water quality exceedance is identified, however, the State should require individual monitoring that moves upstream from the polluted site to identify the specific sources of degradation.

Actions California Should Take:

- ❖ Monitoring programs should be developed such that when receiving water violations are detected, iterative follow-up monitoring activities are carried out until individual contributors (e.g., farms) are identified. Once a second receiving water violation has been detected in the subwatershed, require all growers upstream of that exceedance to begin conducting edge-of-field monitoring until the responsible parties are identified and the exceedance is corrected.
- ❖ Require all growers that are discharging into impaired waterways where benchmark exceedances have been detected to conduct edge-of-field monitoring until growers demonstrate achievement of discharge effluent limitations.

PRINCIPLE THREE – Irrigated Agricultural Orders include Transparent Reporting and Do Not Delegate Regulatory Authority to Third-Party Coalitions.

Problem:

Under both State and Federal law, disclosure of water quality data to the public is vitally important. Anything less than individual grower data violates the Clean Water Act, the Porter-Cologne Act, and the Nonpoint Source Policy. However, most growers currently police and regulate themselves through Third-Party Coalitions managed and directed by the growers themselves. These Coalitions control the submission of compliance data and aggregate it with the intent of preventing enforcement against specific growers. Coalitions are also solely responsible for the quality assessment of the information.

Coalitions have not adequately demonstrated measurable progress toward achieving water quality objectives. For example, when the Ventura County Agricultural Irrigated Lands Group analyzed seven years of its cooperative monitoring program data, it concluded that the available data collected on water quality and best management practice implementation was insufficient to “associate any potential reduction in total pollutant loading with grower action.” Anonymous data without an explicit grower name attached to it does not achieve individual accountability. It limits the ability of the public and the Regional Water Boards to comprehensively analyze the implementation and effectiveness of management practices. It also violates the California Constitution, Proposition 59, which includes a public right of access to government information.

Answer:

Third Party Coalitions oversight should be minimized, while their function to help growers be encouraged and rewarded. Third Party Coalitions have the potential to increase consistency, reduce costs and increase efficiencies for growers, and provide coordination and information sharing, all of which should be encouraged. However, the Nonpoint Source Policy is clear that the responsibility to regulate and enforce water quality standards ultimately rests with the State and Regional Water Boards. As such, these responsibilities should not be delegated to Coalitions, which should instead best serve as a peer-to-peer educational and coordination role. By delegating responsibilities, and not providing some oversight over Coalitions, the Regional Boards risk the submission of inaccurate, incomplete, and misinterpreted data by the Coalitions through an inherent bias in favor of growers, in turn compromising efforts to protect water quality.

The Regional Boards should disallow the anonymous reporting of data, ensuring that all data submitted includes the explicit names of property owners and growers, as well as the best management practices they are implementing. This would increase transparency and accountability, in turn ensuring that growers are indeed implementing best management practices and meeting water quality standards. Increasing transparency may also assist with local implementation of the State Groundwater Management Act (SGMA) and enforcement of drinking water standards of the Safe Drinking Water Act.

Actions California Should Take:

- ❖ Revoke the authority of Third Party Coalitions to anonymize and aggregate data. Third-Party Coalitions should serve an educational and coordination role, and be encouraged to help increase consistency among growers, reduce costs, and provide peer-to-peer information sharing among growers.
- ❖ Make data publicly accessible and include the name of the property owner and grower and link the best management practices implemented and nitrogen management data to specific locations.
- ❖ Require independent auditing or some other means of verification, which will allow the Water Boards, along with the public, to ensure accuracy.
- ❖ Conduct independent research of the benefits (ex: reduce costs, increase efficiencies for growers, coordination and information sharing) and the negatives of Coalitions (ex: aggregating data, anonymous reporting, manipulating data to suggest improvements in the watershed that are not actually occurring).

PRINCIPLE FOUR – Pesticide Monitoring Protocols are Updated using Best Available Science to Allow for Detection of Toxicity Violations.

Problem:

Over 1.2 billion pounds of pesticides are used annually in the United States, much of it for agriculture. Nearly 200 million pounds of pesticides are applied to California farms annually. While these pesticides can be valuable for agricultural operations, they often leave the field in soil and water and negatively impact non-target plant, animals, and humans. For example, the majority of active pesticides applied to California vineyards, totaling almost two million pounds, are applied during the winter and spring months, when rain is mostly likely to carry excess pesticides into local waterways.

While most monitoring still focuses on the toxicity posed by diazinon and chlorpyrifos, the use of those pesticides has been declining for many years, and current testing protocols have not kept pace with new pesticide technology. Most agricultural operations have shifted to using more toxic and persistent alternatives, such as pyrethroids and neonicotinoids. As a result, the toxicity of California's waterways may be significantly underestimated due to the lack of monitoring for these pesticides.

Answer:

The State should rely on federally backed toxicity testing that currently exists for many of the pesticides currently popular in California, rather than rely on existing sampling methods which are based on the science of pesticides no longer commonly used in California. For example, the EPA-approved test species, the crustacean *Hyalella azteca*, is native to California and an important food source for native fishes. It is also sensitive to pyrethroid pesticides. In combination with the small fly, *Chironomus*, which is sensitive to neonicotinoid pesticides, sampling can provide a far more accurate picture of the toxicity caused by pesticides commonly used today. At the same time, the State must monitor more regularly for contaminants like 123-TCP and DBCP that are legacy pollutants from agricultural operations that are still impacting water quality, but not currently monitored.

Farmers also have a range of possible best management practices they can implement to limit the contamination of waterways from pesticides. Possible best management practices include:

- ❖ Strive for maximum use of naturally occurring control forces in the pest's environment, including weather, pest diseases, predators, and parasites.
- ❖ Focus first on non-chemical measures that help prevent problems from developing, rather than relying on chemicals to kill infestations after an infestation has occurred.
- ❖ Use chemical pesticides only if close inspection shows the chemical pesticides are required to prevent severe damage.
- ❖ Use cultural methods, biological controls, and other alternatives to conventional chemical pesticides.
- ❖ Use field scouting, pest forecasting, and economic thresholds to ensure that pesticides are used for real, rather than perceived, pest problems.
- ❖ Match pesticides with field site features to minimize the risk of contaminating waterways.

Actions California Should Take:

- ❖ Incorporate toxicity testing into statewide monitoring and reporting requirements using a panel of test organisms including the 3-species test, as well as *Hyalella*, which is sensitive to pyrethroid pesticides, and *Chironomus*, which is sensitive to neonicotinoid pesticides.
- ❖ Implement into State law the US EPA standards for pesticide residues in drinking water that address approximately 200 organic chemicals.
- ❖ Require an annual evaluation of pesticides in use statewide, in consultation with academics, to determine if the panel of test organisms should be modified.

PRINCIPLE FIVE – Riparian Setbacks are Required to Enhance Natural Ecological and Hydrological Function.

Problem:

Intensive farming and grazing has led to a destruction of natural riparian zones along streams, rivers, wetlands, and bays throughout the state. Encroachment of riparian zones has led to higher nutrient and sediment pollution and higher water temperatures. Any value provided by thin vegetated setbacks that are left is often mitigated by the increased erosion from adjacent plowing, grazing, and road building. Degraded riparian areas often have a lower water table, poor water storage, poor fish habitat with water warm and little shade, and low wildlife diversity. Along most of the Russian River, for example, setbacks do not exist beyond the top of the bank and the river has been put into an unnatural straitjacket as wineries are increasingly built up to river's edge. As a result, at least 75 percent of the riparian forests in the Russian River watershed, which are critical for filtering pollution from the adjacent vineyards, have been lost.

California's current agricultural program is not mandating, prioritizing, or even incentivizing the use of healthy riparian setbacks to protect beneficial uses. Third-party sustainability programs for growers to self-certify their operations have proven insufficient. Unfortunately, the threats of riparian encroachment are expected to only become more serious as climate change results in longer and hotter drier periods and increasingly intense flood events that further erode the riparian zone.

Answer:

Riparian setback zones provide various ecological benefits, including the creation of stable and productive soils, cleaner water, enhanced wildlife habitat, protection of crops and livestock, enhancement of aesthetics and recreation opportunities, increased control of stream temperature, and offer filtration of pollution from adjacent agricultural lands. Wood roots increase the resistance of streambanks and shorelines to erosion and riparian vegetation provides litter and woody debris, which helps create the critical habitat and conditions for aquatic organisms. As a result, areas with healthy riparian setbacks typically have a higher water table, increased underground water storage, higher vegetation productivity, higher wildlife diversity, better fish habitat, and cleaner water.

Riparian setbacks would serve to protect streams running through agricultural operations by achieving the conditions beneficial to both the environment and landowners. Setbacks are permanent areas and shrubs located adjacent to streams, lakes, ponds, and wetlands meant to enhance ecological functions. For example, plants stabilize soils and reduce erosion while foliage can provide shade and reduce water temperature. Setbacks of sufficient width also intercept sediments, nutrients, pesticides, and other contaminants to reduce surface water pollution. Most scientists suggest that a setback of 25-50 meters is appropriate to measurably improve water quality. Other best management practices growers can implement to reduce runoff at the edges of waterways include avoiding underdrains that erode stream channels, planting permanent cover crops to maintain erosion control, and avoiding cultivation before or during rainy conditions.

Actions California Should Take:

- ❖ Set mandatory riparian setback zones with a width based on best available science for that region. Require a minimum 25-foot setback for roads.
- ❖ Provide formal guidance to growers on drainage patterns and sediment and erosion control measures.
- ❖ Develop technical assistance programs for growers that will include guidelines for designing projects that increase stormwater capture and infiltration, reduce runoff, and protect wetlands and riparian areas.
- ❖ Incentivize growers to establish flow breaks and floodplains to control flows and to build detention ponds and swales to filter pollutants and increase groundwater recharge.
- ❖ Complete a Stream Protection Policy focused on riparian habitat, as a follow up to the Wetlands Policy.
- ❖ Adopt a statewide policy of annual net gain of ecologically functioning riparian and wetland habitat to mitigate for a century of net loss of these critical habitats.

PRINCIPLE SIX – Livestock Grazing is Prohibited in California Waterways and Within Riparian Setbacks.

Problem:

Improper livestock grazing poses a serious threat to water quality, through the direct discharge of contaminants and increases in erosion from poor soil health. In the American West, livestock grazing is often cited as the most widespread cause of species endangerment. Poor grazing practices can wreak ecological havoc on sensitive ecosystems by destroying vegetation, damaging wildlife habit, and disrupting natural processes. 120 California waterways are impaired specifically due to grazing activities impacting riparian zones. Lush streams and riparian forests throughout California have been reduced to flat, dry wastelands, and once-rich topsoil has been severely degraded. Further, some landscapes have become prone to unnaturally severe fires due to the overgrazing of native grasses.

The primary impacts of grazing come from the unmanaged concentration of livestock in waterways and riparian areas. When livestock are allowed unfettered, direct access to a stream or river, their waste can increase the concentration of nutrients and bacteria, as well as other pathogens like viruses and fungi. When concentrated in riparian areas, grazing livestock can remove the vegetation needed to retain stream bank stability and degrade soils. In turn, this increases stream temperature due to the lack of shade and increases erosion, leading to wider and shallower streams. Overgrazing and the compaction of soils by livestock also decreases infiltration rates, deteriorates soil structure, and decreases organic cover material. These impacts can modify the entire hydrologic regime of the waterways with cascading effects on aquatic organisms. Infiltration of water in the riparian and flood plain areas plays a key role in watershed function, including the capture, storage, and safe release of water with implications on flood risk and water supply.

Answer:

Effective grazing management can not only maximize production for ranchers, it can also help protect riparian ecosystems and other sensitive areas. Effective grazing management practices will limit physical disturbance to soft soils, reduce erosion, and reduce the discharge of sediment, animal waste, nutrients, pathogens, and chemicals to surface water. Other benefits include reduced fire risk and less surface runoff due to greater infiltration into healthy soils.

Ranchers and growers can implement various best management practices that will protect waterways on their properties from the negative impacts of grazing. Sufficient riparian setback zones should be required to limit direct animal access to waterways and to the riparian zone, and to mitigate the acute water quality degradation resulting from livestock entering waterways or degrading the riparian zone. Artificial shade areas can be constructed far from riparian zones to encourage use of upland sites by livestock, particularly in hot locations. Ranchers should also adjust intensity and duration of grazing based on the actual availability of forage to protect soils from erosion (by avoiding overgrazing) and to control animal movement near riparian zones and waterways.

Actions California Should Take:

- ❖ Explicitly prohibit livestock access to riparian zones, ponds or lake shores, wetlands, and streambanks using exclusionary fencing.
- ❖ Require riparian grazing management practices that include: exclusion fencing, animal trails and walkways through or around sensitive areas, and stabilized stream crossings.
- ❖ Incentivize streambank restoration efforts and the development of exclusion fencing and stream setbacks.

PRINCIPLE SEVEN – Irrigated Water is Not Wasted and is Allocated Reasonably to Ensure Public Trust Resources are Protected.

Problem:

California's rivers are regularly dewatered by excessive, and increasing, agricultural surface and groundwater withdrawals. Our waterways have been over-allocated by water rights adjudications that provided virtually no water for instream uses for fish, wildlife, and recreation. At the same time, unregulated groundwater extraction has increased rapidly in recent decades, particularly during drought periods, causing rivers to literally sink underground to fill a depleted aquifer.

Currently over 80 percent of California's water goes to agricultural uses. These diversions, coupled with widespread over pumping of groundwater, have significantly diminished instream flows in rivers and streams throughout the state. On the North Coast, most major rivers and tributaries in the Klamath Basin suffer from significantly reduced flows for a good portion of the year due to diversions for irrigated agriculture. In the Humboldt Region, the proliferation of the marijuana cultivation industry has resulted in significant diversions of instream flows and reduced soil quality, which has increased the runoff of sediment and agricultural chemicals in sensitive aquatic ecosystems.

Answer:

California needs to better implement existing laws to protect against overallocation of the state's water resources. Federal and State wild and scenic rivers acts protect some streamflows. The Federal Act prohibits the construction of any dam or water conduit that would directly affect a designated river. Similarly, California law prohibits most dams on or diversions from designated rivers. In addition to the wild and scenic rivers acts, a number of statutory and common law doctrines might be used to protect streamflows. The public trust doctrine creates public rights in the use of the state's navigable waters for fishing and recreation. Because public rights are paramount, agricultural rights may not interfere with public trust resources. In theory, the State Water Resources Control Board, as trustee of the public's rights, could be enjoined from permitting diversions for agriculture use that interfere with the public's instream rights. California's constitutional restrictions on unreasonable use could also protect instream uses. A determination under the California Constitution stating that diversions depleting environmentally necessary streamflows are presumptively unreasonable would require the State Water Resources Control Board to deny proposed appropriations and forbid riparian diversions threatening streamflows. Another legal protection for streamflows is a statutory provision requiring the State Water Resources Control Board to weigh instream uses when ruling on appropriation applications. The Water Code requires the Board to consider recreational uses and the preservation and enhancement of fish and wildlife in determining whether water is available for appropriation. In acting on an application, the Board must consider the relative benefit of all beneficial uses concerned, including instream uses. The Board must notify the California Department of Fish and Game of all appropriation applications to allow the Department to recommend amounts of water required to protect the stream's wildlife. The Department may also propose modifications to public and private water projects that substantially and adversely affect fish and wildlife.

Actions California Should Take:

- ❖ Apply vastly under-utilized legal tools, such as the waste, unreasonable use, and public trust doctrines.
- ❖ Attain legal recognition of the connectivity between groundwater pumping and instream flows.
- ❖ Develop and prioritize instream water rights to ensure that waterways' needs are addressed.
- ❖ Gather data and require transparent reporting on surface flows, groundwater levels, and water withdrawals and uses.
- ❖ Enforce water use rights violations.
- ❖ Increase agricultural water efficiency while reducing demand so that efficiency savings are left instream. Incentivize growers to implement dry farming practices where possible.

PRINCIPLE EIGHT – Cover Crop is Required, and No-Till Management Practices are Incentivized, to Reduce Erosion and Improve Soil Health.

Problem:

Sediment is the number one non-point source pollutant throughout the United States. Compaction of soils from overgrazing, the destruction of stream bank vegetation and riparian zones, and traditional tillage practices that completely expose the soil surface have all led to increased rates of bank instability and erosion, in turn increasing sediment runoff. The excess buildup of sediment in wetlands and rivers can modify the hydrological regime of the waterway, resulting in degraded stream habitat, suffocation of eggs and young in spawning beds, loss of pool depth, and reduced water filtration. These physical problems, in turn, can severely impact the health of fish species and other aquatic organisms. In addition, the eroded soil particles and sediment mobilized via runoff can also carry a host of other direct contaminants like nutrients, pesticides, and herbicides.

Answer:

Growers have a host of best management practices and proper tillage practices they can implement to reduce the threats of erosion. Leaving cover crops and crop residue after harvest on the soil surface reduces runoff and soil erosion. It can also conserve soil moisture and hold onto the excess nutrients and pesticides on the field to avoid them running off into nearby waterways. Growers should implement no-till systems when possible. The Natural Resources Conservation Services (NRCS) under the U.S. Department of Agriculture defines no-till systems as leaving all residue on the soil surface and disturbing no more than 10 percent of the soil surface while planting.

The benefits of best management practices like cover crops and no-till systems include improved soil stability, improved water holding capacity, and reduced surface ponding of rainfall. This, in turn, increases infiltration and reduces erosion. The increase in infiltration is primarily a result of improved soil structure, slowed runoff, and the presence of old, undisturbed root structures. Infiltration and improved water holding capacity can increase the amount of water available for plants, improving the overall health of crops and any riparian vegetation, which is particularly valuable in water-stressed regions such as California. By increasing the amount of surface residue cover by 80 to 90 percent, no-till systems can also limit wind erosion and dust production and reduce sheet erosion by 94 percent or more. These practices reduce water and air quality problems and the negative impacts of erosion on fish and aquatic organisms, while also increasing the capacity of soils to sequester greenhouse gases like carbon.

These practices also have distinct benefits for the growers themselves by increasing operational efficiency. No-till practices result in reduced labor and inputs costs, allowing farmers to increase their production area or reduce their overall effort. When done well, no-till practices will have no negative impact on crop yields and can improve yield by increasing moisture retention and water availability.

Actions California Should Take:

- ❖ Maximize crop residue by requiring cover cropping from at least October to May. Any field fallowed for any length of time between October and May must be cover cropped.
- ❖ Educate growers on on-farm management best practices, such as no-till, and fund incentive and demonstration programs to promote carbon sequestration, increase water-holding capacity, and improve crop yields.
- ❖ Provide research, education, and technical support for growers, including funding academic research on healthy soil practices and developing a user-friendly soil management database.
- ❖ Under the Healthy Soils Initiative, permit at least 100 new composting and anaerobic digestion facilities by 2020 to increase the generation and use of compost in soil.
- ❖ Improve education and awareness of government cost-sharing programs for implementing best management practices to reduce the financial barriers of implementation and limit up-front costs for growers.
- ❖ Reward best management practices adoption through buyer contract preferences or tax incentives.
- ❖ Provide regular funding to expand programs, such as the UC SAREP Cover Crops Database.

**PRINCIPLE NINE – Every Human Being has the Right to Safe, Clean, Affordable, and Accessible
Water Adequate for Human Consumption, Cooking, and Sanitary Purposes.**

Problem:

Nutrient pollution and eutrophication are pressing challenges to water quality in California and agriculture is the largest source of nitrogen input into the environment in the state. The over- or improper application of fertilizers onto agricultural fields can cause excess nutrients to be lost to the environment through runoff, erosion, leaching, or volatilization. In fact, approximately half of the nitrogen applied to fruit and vegetable crops is used, while only a quarter of the nitrogen in animal feed for livestock becomes meat or dairy products. Once in the waterway, nutrients can lead to an excess growth of aquatic plants, including toxic algae and submerged weeds, which can impair beneficial uses, including drinking water and recreation.

Nitrogen contamination poses a severe threat to human and animal health. Ammonia produced in animal manure and other organic nutrient sources can become toxic and create the conditions for toxic algae blooms. These toxic blooms make swimming unsafe, can poison marine life, and have shut down entire fisheries. Meanwhile, nitrates leaching from fields into aquifers have left over 100,000 square miles of groundwater contaminated with nitrates. Studies indicate that fertilizer from irrigated agriculture is the largest source of nitrate pollution in drinking water in California, with irrigated agriculture causing 78 percent of the nitrate loading to groundwater. Researchers estimate that tens of millions of pounds of nitrate leach into groundwater in the Salinas Valley alone each year. As a result, thousands of domestic and small system wells serving hundreds of thousands of people have nitrate levels exceeding the drinking water standard.

Answer:

Assembly Bill 685 was signed into law in September 2012 and became effective January 1, 2013 (Water Code Section 106.3). The law declares that “every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes.” The law calls on all relevant state agencies to consider the human right to water “when revising, adopting, or establishing policies, regulations, and grant criteria” relevant to domestic water uses. To ensure every human has the right to clean water, the State must require proper nutrient management.

Proper nutrient management encourages the natural process of nutrient cycling, which in turn optimizes crop growth, limits costs for growers, and minimizes the environmental impacts of nutrient pollution. Effective soil and irrigation water testing and monitoring of nutrient loading will also allow farmers to ensure that nutrients are available to meet crop needs while eliminating extraneous nutrient movement off their fields. Growers must effectively work to control nutrients on their lands. Source control, via the application of fertilizer, irrigation water, and organic materials, is often the easiest and most cost-effective pathway for growers to address nutrient pollution. Growers must also engage in regular monitoring of nutrients and the movement of nutrients in soil, water, air, plants, and livestock to maintain crop production while avoiding excess application or accumulation of nutrients.

Actions California Should Take:

- ❖ Set enforceable groundwater nutrient loading performance standards based on accurate, up-to-date models for different ecosystems and basins.
- ❖ Require the provision of near-term emergency replacement water, and permanent drinking water solutions, for communities whose drinking water source is contaminated by agricultural discharges.
- ❖ Do not allow nitrate application safe harbors.
- ❖ Set a fertilizer fee.

PRINCIPLE TEN – Concentrated Animal Feeding Operations are Sited Away from Surface Waters and Areas with High Potential for Groundwater Infiltration

Problem:

In the second half of the 20th century, rapid expansion and vertical integration of the meat production industry almost destroyed independent family farms and led to a shift from traditional meat production and grazing methods to the proliferation of Concentrated Animal Feeding Operations (CAFOs). CAFOs confine tens of thousands of animals and have the potential to contribute large pollutant loads into waterways. In fact, CAFOs can produce as much waste as a small city, but typically lack the basic waste treatment system to process it. A 2017 EPA report shows that only 30 percent of the largest industrialized livestock facilities in the country have permits as required by the Clean Water Act to control their pollution.

Growers typically apply the large amounts of untreated animal sewage produced by their operations onto adjacent croplands. However, growers often apply waste in far excess of the amounts needed to fertilize these lands and as a result, much of that waste is mobilized via runoff into nearby waterways. The large amounts of animal waste produced by concentrated livestock has the potential to contribute nutrients, suspended solids, pathogens, and heavy metals to surface and groundwater supplies. In addition, the growth of contract farming that has resulted from this shift in production has also shifted liability for pollution from the multinational corporations that own the livestock and dictate meat production to the on-the-ground grower. As a result, the companies benefiting from the profit of industrial meat production can hide behind farmers and avoid liability. Beyond farming, CAFOs housing animals for recreational purposes present similar waste discharge concerns in suburban and urban areas and are often ignored by regulators.

Answer:

Because CAFOs are often located near streams and waterways, they must be particularly well managed to minimize human health and aquatic ecosystem impacts. There are multiple best management practices that must be implemented to minimize the impacts of CAFOs and the resulting waste discharges. This includes various mechanisms for runoff control, solid and liquid waste storage and reuse, and nutrient management. The specific practices individual operations should implement are dependent on the type of facility, the animal in the CAFO, any potential receiving water, and the specific area of the facility that is the problem.

CAFOs must also be required to provide specific information regarding their location and specific management practices to allow facilities to be more easily inspected, and the effectiveness of their practices more easily assessed. As part of that effort, agencies and nonprofit organizations must work together to better study and understand the actual impacts of individual CAFOs with extensive water quality monitoring. While rancher-initiated waste-to-energy projects (e.g., converting methane produced by livestock into usable gas) should be encouraged, these projects should include a denitrification component to simultaneously address both climate change/emissions and water quality impacts.

Actions California Should Take:

- ❖ The State Water Board should adopt a Non-Dairy CAFO General Order to regulate animal operations that are not currently addressed, such as equestrian facilities.
- ❖ Establish clear guidelines for facility siting in the permitting process for new facilities or expansions that require CAFOs to be located away from surface waters, areas with high potential for infiltration of contaminants into groundwater supplies, and generally away from critical or sensitive ecosystems.
- ❖ Impose a moratorium on construction for the expansion of CAFOs absent implementation of the best management practices.
- ❖ Identify all Confined Animal Feeding Operations and update the list annually.
- ❖ In areas with high potential for groundwater infiltration, Salt and Nutrient Management Plans associated with agricultural activities should include a monitoring program that is transparently reported to the Water Boards and the general public.

PRINCIPLE ELEVEN – All Applicable Beneficial Uses Must Be Considered and Protected When Adopting Agricultural Orders

Problem:

Each region's "Basin Plan" lists the specific waters to be protected and the specific beneficial uses assigned to each water. Water Code section 13263(a) requires that when issuing waste discharge requirements, Regional Boards "shall take into consideration the beneficial uses to be protected [and] the water quality objectives reasonably required for that purpose."

California Water Code section 13050(f) describes the beneficial uses of surface and ground waters that may be designated by the State or Regional Board for protection, and includes: beneficial uses of the waters of the state that may be protected against quality degradation include, but are not necessarily limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves. Additionally, beneficial uses for surface waters are designated under the federal Clean Water Act section 303 in accordance with regulations contained in 40 CFR 131. In 1972 and 1994, the State Water Resources Control Board adopted a uniform list and description of beneficial uses to be applied throughout all basins of the State; twenty-three beneficial uses are now defined statewide and these beneficial uses include everything from "municipal and domestic supply" and "water contact recreation" through warm and cold "fresh water habitat." The "objectives" required to protect a beneficial use can be numeric or narrative or some mix of both, often leading to confusion.

In the Central Coast Region, beneficial uses of the lower Salinas River include the following: municipal water supply, agricultural water supply, cold freshwater habitat, warm freshwater habitat, fresh water replenishment, water contact recreation, non-contact water recreation, commercial and sport fishing, wildlife habitat, and migration of aquatic organisms. Yet, with all these beneficial uses, the Regional Board allows removal of water that would otherwise enter the river to be treated for agricultural use and groundwater recharge, instead of requiring agricultural pollutant source control, treatment of water, and return of that water to the Salinas River. In summary, only human-beneficial-uses are considered.

In the Eastern San Joaquin, the Central Valley Board is even more cavalier, entirely disregarding any discharge of nitrogen unless it is in excess of the drinking water standard, even though the "aquatic life" standard (cold and warm habitats, commercial and sport fishing, wildlife habitat, migration of aquatic organisms and more, such as rare, threatened or endangered species) is generally a small fraction of the municipal supply limit for nitrogen. Discharge limits for agriculture must be specific and must be protective of all beneficial uses.

Answer:

All beneficial uses must be considered and protected. Agricultural Orders must protect all the beneficial uses of waters of the state that receive agricultural discharges. If beneficial uses of a stream are municipal water supply (10mg/L nitrate as N), cold water habitat (2mg/L nitrate as N), and freshwater replenishment (meaning surface flow), the State and Regional Boards must create limits for nitrate discharge at 2mg/L nitrate as N, and ensure flow for downstream freshwater replenishment.

Actions California Should Take:

- ❖ Monitoring programs must be provided to determine the effects of discharges on all beneficial water uses, including effects on aquatic life, species diversity, and seasonal fluctuations.
- ❖ Agricultural permits must enumerate beneficial uses of all receiving waters and the corresponding standards to protect those beneficial uses.
- ❖ Agricultural permits must require growers to demonstrate, through monitoring and practices, they are achieving the standards protective of all beneficial uses.
- ❖ Narrative standards must be translated into measurable metrics.
- ❖ Ag Orders must contain effluent limitations that achieve the Waste Load Allocation of relevant TMDLs.

**POLICY FOR IMPLEMENTATION AND ENFORCEMENT OF THE
NONPOINT SOURCE POLLUTION CONTROL PROGRAM**

State Water Resources Control Board

California Environmental Protection Agency

May 20, 2004

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POLICY FOR IMPLEMENTATION AND ENFORCEMENT OF THE NONPOINT SOURCE POLLUTION CONTROL PROGRAM

Guidance for Developing An Integrated Program for Implementing and Enforcing the “Plan for California’s Nonpoint Source Pollution Control Program”

I. INTRODUCTION

In December 1999, the State Water Resources Control Board (SWRCB), in its continuing efforts to control nonpoint source (NPS) pollution in California, adopted the *Plan for California’s Nonpoint Source Pollution Control Program* (NPS Program Plan) (SWRCB, 1999). The NPS Program Plan upgraded the State’s first *Nonpoint Source Management Plan* adopted by the SWRCB in 1988 (1988 Plan) (SWRCB, 1988). Upgrading the 1988 Plan with the NPS Program Plan brought the State into compliance with the requirements of section 319 of the Clean Water Act (CWA) and section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA). This document, the SWRCB *Policy for the Implementation and Enforcement of the Nonpoint Source Pollution Control Program* (NPS Implementation and Enforcement Policy), explains how the NPS Program Plan will be implemented and enforced and, in so doing, fulfills the requirements of California Water Code (CWC) section 13369 (a)(2)(B).

To continue receiving federal funds to implement the State’s NPS pollution control program, the State was required to obtain approval of the NPS Program Plan from the U. S. Environmental Protection Agency and the National Oceanic and Atmospheric Administration. Federal approval required the SWRCB to provide assurances that it has the legal authority to implement and enforce the NPS Program Plan. In providing these assurances, the SWRCB cited the mandates and authorities granted it and the Regional Water Quality Control Boards (RWQCBs) by the Porter-Cologne Water Quality Control Act (Porter-Cologne Act). The Porter-Cologne Act designates the SWRCB and RWQCBs as the State agencies with primary responsibility for water quality control in California and obligates them to address all discharges of waste that could affect the quality of the waters of the State, including potential nonpoint sources of pollution. To carry out this mandate, the Porter-Cologne Act has provided the SWRCB and RWQCBs with:

- Planning authority to designate beneficial uses of the waters of the State, establish water quality objectives to protect those uses, and develop implementation programs to meet water quality objectives and maintain and/or restore designated beneficial uses;
- Administrative permitting authority in the form of waste discharge requirements (WDRs), waivers of WDRs, and basin plan prohibitions; and
- Enforcement options to ensure that dischargers comply with permitting requirements.

This NPS Implementation and Enforcement Policy explains how these Porter-Cologne Act mandates and authorities, delegated to the SWRCB and RWQCBs by the California Legislature, will be used to implement and enforce the NPS Program Plan. The policy also provides a bridge between the NPS Program Plan and the *SWRCB Water Quality Enforcement Policy* (Enforcement Policy) (SWRCB, 2002).

The information provided in this policy is designed to assist all responsible and/or interested parties in understanding how the State's NPS water quality control requirements will be implemented and enforced. The parties involved include the SWRCB and the RWQCBs, federal, state and local agencies, individual dischargers, designated third-party representatives and any other interested public and private parties.

In addition to using the Porter-Cologne Act's planning, permitting, and enforcement authorities to prevent and control nonpoint sources of pollution, the SWRCB and RWQCBs have implemented a broad program of outreach, education, technical assistance and financial incentives. This program is supplemented by collaborative efforts with other agencies and non-governmental organizations (NGOs) to help implement and coordinate the use of their programs that contribute to NPS control. The goal is to provide an integrated statewide approach to controlling nonpoint sources of pollution. In structuring this document, a review of the Porter-Cologne Act is provided in Section II, including an overview of the Act related to planning requirements and administrative permitting authorities; Section III provides history and background on development of the State's NPS pollution control program; Section IV discusses the structure of the NPS implementation program including statewide implementation, and the mandatory five key elements of an NPS implementation program. Sections V and VI discuss RWQCB compliance assurance, implementation success, and future considerations.

II. STATUTORY AND REGULATORY BACKGROUND

A. Overview of the Porter-Cologne Water Quality Control Act

The Porter-Cologne Act is the principal law governing water quality control in California. It establishes a comprehensive program to protect water quality and the beneficial uses of waters of the State. The Porter-Cologne Act applies broadly to all State waters, including surface waters, wetlands, and ground water; it covers waste discharges to land as well as to surface and groundwater, and applies to both point and nonpoint sources of pollution.ⁱ

The Legislature has declared that it is the policy of the State that:

1. The quality of all the waters of the State shall be protected;
2. All activities and factors that could affect the quality of State waters shall be regulated to attain the highest water quality that is reasonable; and
3. The State must be prepared to exercise its full power and jurisdiction to protect the quality of water in the State from degradation.ⁱⁱ

The Porter-Cologne Act is administered regionally, within a framework of statewide coordination and policy involving both the SWRCB and RWQCBs.ⁱⁱⁱ The SWRCB adopts State policy for water quality control and statewide water quality control plans in addition to regulations that are binding on the RWQCBs. The RWQCBs each govern one of the nine hydrologic regions into which California is divided, adopting regional water quality control plans (basin plans) for their respective regions.^{iv} Basin plans are reviewed and updated on a triennial basis. The SWRCB must approve basin plans, or any amendments thereto, before they become effective.^v Statewide plans adopted by the SWRCB supersede any RWQCB-adopted plans to the extent of any conflict. The RWQCBs also issue permits and waivers to implement basin plan water quality requirements and, when necessary, take enforcement actions.^{vi} The SWRCB adopts statewide general permits.^{vii} The SWRCB also reviews RWQCB decisions on petitions for review.^{viii} The primary point of contact for dischargers and other interested parties to receive information regarding the laws, regulations and programs related to NPS pollution control is at the regional level.

B. Porter-Cologne Act Water Quality Control Act Planning Requirements

Planning authority under the Porter-Cologne Act extends to any activity or factor that may affect water quality.^{ix} For example, factors that affect water quality include not only waste discharges, but also saline intrusion, reduction of waste assimilative capacity caused by reduction in water quantity, hydrogeologic modifications, watershed management projects, and land use.^x

Water quality control plans designate beneficial uses of water, establish water quality objectives to protect those uses, and provide a program to implement the objectives.^{xi} The beneficial use designations and water quality objectives, together with the State's antidegradation policy,^{xii} constitute water quality standards for purposes of the CWA.^{xiii} The water quality control plan implementation programs are required to describe the nature of actions that are necessary to meet water quality objectives, including recommendations for action by both private and public entities.^{xiv} Implementation programs also must include a time schedule and describe proposed monitoring activities to assess compliance with water quality objectives.^{xv}

C. The Porter-Cologne Water Quality Control Act and Waste Discharge Regulation

The Porter-Cologne Act provides that "All discharges of waste into the waters of the State are privileges, not rights."^{xvi} Furthermore, all dischargers are subject to regulation under the Porter-Cologne Act including both point and NPS dischargers.^{xvii} In obligating the SWRCB and RWQCBs to address all discharges of waste that can affect water quality, including nonpoint sources, the legislature provided the SWRCB and RWQCBs with administrative permitting authority in the form of administrative tools (waste discharge requirements [WDRs], waivers of WDRs, and basin plan prohibitions) to address ongoing and proposed waste discharges. Hence, all current and proposed NPS discharges must be regulated under WDRs, waivers of WDRs, or a basin plan prohibition, or some combination of these administrative tools.

The SWRCB and RWQCBs use their permitting authorities to implement the requirements of applicable State policies and state and regional water quality control plans. Permits take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of CWC section 13241.^{xviii}

With the exception of persons discharging into community sewer systems, any person discharging or proposing to discharge waste that could affect water quality must file a report of waste discharge (RoWD) with the appropriate RWQCB, unless the RWQCB waives the filing.^{xix} A RoWD also is required if a discharger proposes a material change in the character, volume, or location of a discharge.^{xx} The RWQCB must then determine the appropriate action to take, either issuing WDRs to the discharger, or conditionally waiving the requirements.^{xxi} WDRs can prohibit the discharge of waste or certain types of waste, either under specific conditions or in specified areas. As an alternative, the RWQCB may prohibit the discharge of waste or certain types of waste in a water quality control plan.^{xxii}

Because a RWQCB may choose to use the basin planning process to adopt some of these administrative approaches, there is some overlap between the planning and administrative processes. A categorical waiver of waste discharge requirements, for instance, could be adopted as a RWQCB basin plan amendment. The SWRCB and RWQCBs have broad discretion in how they use the administrative tools provided by the Porter-Cologne Act.

1. Waste Discharge Requirements

The RWQCBs have primary responsibility for issuing WDRs. The RWQCBs may issue individual WDRs to cover individual discharges or general WDRs to cover a category of discharges.^{xxiii} WDRs may include effluent limitations or other requirements that are designed to implement applicable water quality control plans, including designated beneficial uses and the water quality objectives established to protect those uses and prevent the creation of nuisance conditions. As in a basin plan prohibition, a WDR may specify certain conditions under which, or areas where, the discharge of waste or certain types of waste will not be permitted. Dischargers operating under a WDR must submit an annual fee to the appropriate RWQCB to cover administrative costs. The fee schedule is determined by the SWRCB, based upon factors such as total flow, volume, number of animals or area involved, etc. These fees help provide the SWRCB and the RWQCBs with resources to administer the WDR program.

The SWRCB also can issue general WDRs under specific conditions.^{xxiv} Violations of WDRs may be addressed, for example, by issuing Cleanup and Abatement Orders (CAOs) or Cease and Desist Orders (CDOs), assessing administrative civil liability or seeking imposition of judicial civil liability or judicial injunctive relief.

2. Waivers of Waste Discharge Requirements

The requirements for a discharger to submit a RoWD or for a RWQCB to issue WDRs may be waived by the RWQCB or SWRCB for a specific discharge or a specific type of discharge if the SWRCB or RWQCB determines, after a public meeting, that the waiver is consistent with any applicable State or regional water quality control plan and is in the public interest.^{xxv} All waivers are conditional and may be terminated at any time. Except for waivers for discharges that the SWRCB or a RWQCB determines do not pose a significant threat to water quality, waiver conditions must include, but need not be limited to, individual, group or watershed-based monitoring.^{xxvi} Waivers may not exceed five years in duration, but may be renewed. Prior to renewing a waiver, the SWRCB or RWQCB must determine whether the discharge in question should be subject to general or individual WDRs.

CWC section 13269(e) provides that “the regional boards and the state board shall require compliance with the conditions pursuant to which waivers are granted....” Therefore, even where the RWQCBs decide to waive the requirement to submit a RoWD for general WDRs, the RWQCBs are encouraged to have an enrollment process for coverage under the waiver of WDRs so that the RWQCBs can identify the dischargers who are required to comply with the general waiver of WDRs. Although the RWQCBs retain their prosecutorial discretion to decide how to ensure compliance with their conditional waivers, the language of section 13269(e), makes it clear that the legislature intends that the RWQCBs allocate some of their resources to ensuring that dischargers are in compliance. Following SWRCB adoption of a fee schedule, RWQCBs are authorized to collect annual administrative fees to establish and implement waivers of WDRs.^{xxvii}

There are many different ways for the RWQCBs to ensure compliance. In the event of noncompliance, a RWQCB could rescind a waiver, or terminate its applicability to individual dischargers, and issue WDRs in its place. If the waiver leaves significant discretion with the discharger to determine how to comply with the waiver’s conditions, the RWQCB could adopt a new waiver that is more directive in terms of the actions that the dischargers must take in order to comply with the waiver. In order to be enforceable, waiver conditions should be clearly specified.

Potential enforcement actions include issuance of a notice of violation (NOV), an informal enforcement action which notifies the discharger of the violation of the waiver condition and the reasonably expeditious time within which compliance must be achieved to avoid proposed adoption of WDRs. Other formal enforcement actions that may be taken include CAOs, CDOs, notices to comply (NTC), and time schedule orders.

3. Prohibitions

Pursuant to CWC section 13243, RWQCBs may prohibit discharges of waste or types of waste either through WDRs or through waste discharge prohibitions specified in a

basin plan. A RWQCB may amend a basin plan to prohibit a particular discharge or a particular type of discharge or to conditionally prohibit a discharge. A conditional prohibition may include specific conditions under which application or enforcement of the prohibition for a particular discharge or particular type of discharge may be waived. In some cases, RWQCBs may waive application of the prohibition for the planning and permitting period of projects or activities. RWQCBs may also use conditional basin plan prohibitions as the primary administrative tool for implementation programs - for example, in cases where a RWQCB desires to prohibit discharges unless certain procedural or substantive conditions are met. Basin plan prohibitions are extremely useful because, once adopted, they allow a RWQCB to take direct and immediate enforcement action by issuing CAOs or CDOs, or assessing civil liabilities, even in the absence of WDRs. Therefore, they allow RWQCBs to respond in a timely manner where NPS pollution generated by certain activities is creating an emergency or a problem that is not otherwise being remedied in an adequate or timely manner.

D. Porter-Cologne Act Enforcement Options

Just as the RWQCBs are obligated to address all NPS discharges of waste through one or more of the available administrative tools, they also are obligated to take steps to ensure that their NPS pollution control requirements are met. The SWRCB Enforcement Policy clearly defines the enforcement options available to a RWQCB. These options range from informal NOV's to formal actions defined in the Porter Cologne Act. Formal actions range from NTCs to civil administrative remedies, and can include referrals for criminal penalties. Both the Enforcement Policy and common RWQCB practice recognize the merit of progressive enforcement---that is, initially taking whatever level of enforcement is appropriate, considering the RWQCB workload and the circumstances of the case, and applying increasingly severe remedies where necessary to correct a problem.

III. DEVELOPING THE STATE'S NPS POLLUTION CONTROL PROGRAM

The State's NPS Program has been developed in conformance with the CWA, CZARA, and the Porter-Cologne Act. The CWA requires the SWRCB to develop and implement an NPS pollution control program and provides funding for this purpose. The NPS Program Plan was the State's response to this requirement, as well as to additional federal requirements for the inclusion of management measures (MMs) consistent with the *CZARA Guidance Specifying Management Measures for Sources of Nonpoint Source Pollution to Coastal Waters* (USEPA, 1993). As described above, the Porter-Cologne Act provides the SWRCB and RWQCBs with the authority and administrative tools to implement the CWA and CZARA requirements.

The Porter-Cologne Act also provides the definition of "waste" that is integral to understanding the SWRCB's and RWQCBs' NPS pollution control authorities and responsibilities. "Waste" is broadly defined to include sewage and "any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of

human or animal origin, or from any producing, manufacturing, or processing operation”.^{xxviii} This definition includes all Attorney General interpretations of the terms “sewage”, “industrial waste”, and “other wastes” under the Porter-Cologne Act’s predecessor legislation.^{xxix} The Attorney General has interpreted the latter terms to include wastes from a wide variety of activities. As a result, it is clear that “discharges of waste” are not limited to discharges resulting from waste disposal activities, but also include releases of pollutants as part of other activities, including all nonpoint sources of waste.^{xxx}

In the Porter Cologne Act, the term “discharge of waste” includes all discharges, point and nonpoint, including agricultural return flows and storm water discharges. The CWA, however, distinguishes between point and nonpoint sources of pollution. Under the CWA, a point source is identified as a discernible, confined, and discrete conveyance, such as a pipe, ditch, or channel. Irrigated agricultural return flows and agricultural storm water runoff are excluded. Nonpoint pollution sources generally are sources of water pollution that do not meet the definition of a point source as defined by the CWA and the CWA requires the State to control nonpoint sources of pollution.

NPS pollution typically results from contact between pollutants and land runoff, precipitation, atmospheric deposition, drainage, seepage, or hydrologic modification. Consequently, the most successful control of nonpoint sources is achieved by prevention or by minimizing the generation of NPS discharges. Most NPS management programs typically depend, at least in part, upon discharger implementation of management practices (MPs) to control nonpoint sources of pollution. As originally used in the CWA and its implementing regulations, the term “BMP” officially referred only to practices that had been formally adopted by the SWRCB through its continuing planning program. However, informally, prior to adoption of the NPS Program Plan, the term became used generally to refer to any type of practice for NPS control, whether formally approved or not. To prevent further misunderstanding, in this policy, the term “MP” has replaced the formerly used term “BMP” when referencing practices that have not been formally adopted by the SWRCB.

MPs may include, but are not limited to, structural and non-structural (operational) controls. They may be applied before, during and after pollution producing activities to eliminate or reduce the generation of NPS discharges and the introduction of pollutants into receiving waters. Successful MP implementation typically requires: (1) adaptation to site-specific or regional-specific conditions; (2) monitoring to assure that practices are properly applied and are effective in attaining and maintaining water quality standards; (3) immediate mitigation of a problem where the practices are not effective; and (4) improvement of MP implementation or implementation of additional MPs when needed to resolve a deficiency. MP implementation, however, may not be substituted for actual compliance with water quality requirements. The U.S. Court of Appeals for the Ninth Circuit, in *Northwest Indian Cemetery Protective Ass’n v. Peterson*, held that BMPs [MPs] in a certified water quality management plan were not “...standards in and of themselves. Adherence to the BMPs [MPs] does not automatically assure compliance ...the federal statute [CWA] contemplates that any activity conducted pursuant to a BMP [MP] can be terminated or modified if the conducted activity resulted in a violation of water quality standards.”^{xxxi}

There are many programs provided by state and federal agencies, as well as NGOs, to assist dischargers. These programs can help dischargers understand how their operations can cause NPS pollution and help them choose and implement MPs to prevent or control NPS pollution. In addition, many of the programs provide financial as well as technical assistance.

Since the early 1990s, using CWA § 319(h) funds, the SWRCB and RWQCBs have reached out to dischargers with technical and educational information and financial support to assist with MP implementation. Other informal RWQCB programs have encouraged development of watershed groups to facilitate NPS pollution control efforts. Additional technical expertise and/or financial assistance are provided through the grant and loan sources of other state and federal agencies. These include resource conservation districts (RCDs), University of California Cooperative Extension and the Natural Resources Conservation Service. In addition, there are State agencies, other than the SWRCB and RWQCBs, with programs and authorities related to NPS control that help implement the NPS Program Plan by coordinating their programs and activities. Under the leadership of the SWRCB and the California Coastal Commission (CCC), an Interagency Coordinating Committee (IACC) meets regularly to actively promote and coordinate inter-agency NPS pollution control activities.^{xxxii}

IV. STRUCTURING AN NPS POLLUTION CONTROL IMPLEMENTATION PROGRAM TO ACHIEVE WATER QUALITY OBJECTIVES

An NPS pollution control implementation program is a program developed to comply with SWRCB or RWQCB WDRs, waivers of WDRs, or basin plan prohibitions. Implementation programs for NPS pollution control may be developed by a RWQCB, the SWRCB, an individual discharger or by or for a coalition of dischargers in cooperation with a third-party representative, organization, or government agency. The latter programs are collectively known as “third-party” programs and the third-party role is restricted to entities that are not actual dischargers under RWQCB/SWRCB permitting and enforcement jurisdiction. These may include NGOs, citizen groups, industry groups, including discharger groups, watershed coalitions, government agencies, or any mix of the above. Although a third-party program may be comprised solely of dischargers, the reason it is a third-party program is because the entity that represents the dischargers is not an actual discharger.

A. Challenges of Statewide NPS Pollution Control

The challenges to implementing statewide prevention and control of NPS pollution discharges are significant. The RWQCBs have primary responsibility for ensuring that appropriate NPS control implementation programs are in place throughout the State. RWQCB responsibilities include, but are not limited to, issuing WDRs or a waiver of WDRs for individual discharges or a category of NPS discharges, or adopting a basin plan amendment that addresses NPS discharges.

Given the extent and diversity of NPS pollution discharges, the RWQCBs need to be as creative and efficient as possible in devising approaches to prevent or control NPS pollution. This policy provides guidelines for development of third-party NPS control programs. A primary advantage of the development of third-party programs is their ability to reach multiple numbers of dischargers who individually may be unknown to the RWQCB.

A RWQCB may use whatever mix of organizational approaches it deems appropriate. Coalitions of dischargers may differentiate themselves in many ways: regionally, sub-regionally, by watershed, discharge characteristics, discharger community type, or through participation in some other publicly or privately developed program. Though dischargers participate in third-party programs, organizationally, the programs must be managed by someone other than a discharger. For example, there are organizations or entities already involved in NPS management programs. RWQCBs have had experience working with industry groups, both formally and informally, to develop education and self-regulation within a particular industry. Other organizations have become active in NPS pollution prevention and land restoration efforts through CWA §319(h) grants, State bond grants, or the State Revolving Fund loan program. Many of the partnerships formed to take advantage of these financial resources have developed into self-sustaining third-party organizations. Some are affiliated with RCDs or have developed as part of the Coordinated Resource Management Planning approach; others are watershed groups or have developed their own organizational structure based on other geographic or industry-specific factors. In some situations, the organizations accomplish their goals through a mix of public and private partnership efforts.

RWQCBs are not required to endorse or approve any specific program or type of program. Each program brought before a RWQCB or SWRCB must be individually judged on its merits. The scale against which it will be measured will assess its potential to result in the implementation of actions to successfully prevent or control discharges of nonpoint sources of pollution. The ultimate goal of any NPS control implementation program must be to protect the beneficial uses of the State's waters.

B. Third-Party Programs Administered by State Agencies Other than the SWRCB or RWQCBs

There are agencies, in addition to the SWRCB and RWQCBs, with the authority to implement programs to meet water quality objectives and protect beneficial uses. Several of these agencies are formally linked to the RWQCBs and SWRCB through memoranda of understanding (MOUs) or management agency agreements (MAAs). MOUs and MAAs are important for NPS regulation because they delineate the roles and responsibilities of individual agencies in the State's efforts to control NPS pollution sources. In all cases, agencies with regulatory power act in accordance with their own authorities and processes.

There are two general types of MOUs: (1) cooperative agreements made with other agencies or organizations that are able to provide information or technical or financial assistance to further the State's goal of preventing or controlling nonpoint sources of pollution; and (2) cooperative agreements made with land management agencies with authority to control NPS discharges through inclusion of MPs in their land lease agreements.

With an MAA, the SWRCB may designate another agency as a management agency to take the lead in implementing NPS pollution control. The actions taken by these agencies are taken under their own authorities and using their own regulatory processes. The fundamental purpose of the SWRCB/RWQCBs, when using the management agency approach, is to achieve, through the capabilities of a management agency, at least the same degree of control over NPS pollution as could be attained through direct regulation under SWRCB/RWQCB authority, but to do so more efficiently.

The SWRCB and RWQCBs may not delegate their NPS authorities and responsibilities to another agency, and may not indefinitely defer taking necessary action if another agency is not properly addressing a NPS problem. However, where another agency is constructively involved in NPS efforts, the SWRCB and RWQCB should seek to take those efforts into account and, where appropriate, take advantage of these third-party efforts. Not only does this avoid unnecessary duplication of effort, it can leverage the SWRCB's and RWQCBs' limited staffing and financial resources. Another agency's actions pursuant to an MOU or MAA do not fulfill the RWQCBs' obligation to use its administrative tools to address the relevant NPS discharges. However, another agency's actions can serve, for example, as the basis, in part or in whole, for a RWQCB waiver of WDRs for the activities covered in these agreements.

If water quality problems persist, the RWQCBs may not indefinitely defer enforcement action to other agencies. While the RWQCBs cannot directly enforce another agency's requirements against a discharger who is out of compliance, the RWQCB can ask the agency to enforce its own requirements. In addition, a RWQCB can enforce the conditions or requirements contained in the waiver, WDR, or prohibition that addresses the underlying discharge of waste. Consistent with a particular MAA, the lead agency under an MAA may be given an opportunity to achieve compliance before the RWQCBs take necessary action.

The RWQCBs also have developed partnerships with other agencies that are in a position to take quick and decisive enforcement action. The California Department of Fish and Game, for instance, may take action against a problem discharger under its own laws and regulations, working with either the local county district attorney's office or the attorney general's office.

The RWQCBs have broad flexibility and discretion in using their administrative tools to fashion NPS management programs, and are encouraged to be as innovative and creative as possible, and, as appropriate, to build upon Third-Party Programs. The State Board, in

turn, is encouraged to establish a program that recognizes and honors successful and outstanding third-party efforts.

C. The Key Elements of an NPS Pollution Control Implementation Program

Before approving or endorsing a specific NPS pollution control implementation program, a RWQCB must determine that there is a high likelihood the implementation program will attain the RWQCB's stated water quality objectives. This includes consideration of the MPs to be used and the process for ensuring their proper implementation, as well as assessment of MP effectiveness. Depending on the program, it also may include other factors such as the level of discharger participation. NPS dischargers have had and will continue to have many opportunities to take advantage of the available technical and financial assistance programs administered through the SWRCB, in addition to the assistance offered by other programs. A first step in the education process offered by these programs often consists of discharger assessment of their lands or operations to determine NPS problems, followed by development of a plan to correct those problems. It is important to recognize that development of a plan is only the first step in developing an implementation program that addresses a discharger's NPS pollution discharges. Implementation of the plan, including any necessary iterative steps to adjust and improve the plan and/or implementation must follow the planning stage.

Prior to developing an NPS control implementation program or recognizing an implementation program developed by dischargers or third-parties as sufficient to meet RWQCB obligations to protect water quality, a RWQCB shall ensure that the program meets the requirements of the five key structural elements described below. While the RWQCBs are free to use the administrative tool(s) that they determine to be most appropriate for a particular implementation program, all implementation programs will have the five structural elements in common. Development of Elements 1 and 2 are the primary responsibility of those who are developing the implementation program. Elements 3 and 4 may require consultation with the appropriate RWQCB. Element 5 shall be developed by the RWQCB

For implementation programs developed by non-regulatory parties, factors such as availability of funding, a demonstrated track record or commitment to NPS control implementation, and a level of organization and group cohesion that facilitates NPS control implementation are among the critical factors that must be taken into account. For regulatory programs, the availability of staff resources to administer the implementation may be a major concern.

NPS control implementation programs shall include the following five key elements:

KEY ELEMENT 1: An NPS control implementation program's ultimate purpose shall be explicitly stated. Implementation programs must, at a minimum, address NPS

pollution in a manner that achieves and maintains water quality objectives and beneficial uses, including any applicable antidegradation requirements.

Existing and potential beneficial uses of the waters of the State are identified through a public process. RWQCBs establish water quality objectives to protect those uses, and a program to implement the objectives. The State also is required to adopt and implement an antidegradation policy designed to protect water quality that is higher than that necessary to protect the designated beneficial uses. For purposes of this policy, the term “water quality requirements” is used to include water quality objectives established to protect beneficial uses and any higher level of water quality needed to comply with the State’s antidegradation policy.

An NPS control implementation program must be specific as to the water quality requirements it is designed to meet. For example, if the program relies upon dischargers’ use of MPs, there should be a strong correlation between the specific MPs implemented and the relevant water quality requirements. The program also should provide other information as required by the RWQCB, including but not limited to the identification of participant dischargers. The RWQCB must be able to ensure that all the significant sources of the NPS discharges of concern are addressed.

KEY ELEMENT 2: An NPS control implementation program shall include a description of the MPs and other program elements that are expected to be implemented to ensure attainment of the implementation program’s stated purpose(s), the process to be used to select or develop MPs, and the process to be used to ensure and verify proper MP implementation.

A RWQCB must be able to determine that there is a high likelihood that the program will attain water quality requirements. This will include consideration of the MPs to be used and the process for ensuring their proper implementation. It also will include other factors such as the level of discharger participation and the effectiveness of the MPs implemented.

MPs must be tailored to a specific site and circumstances, and justification for the use of a particular category or type of MP must show that the MP has been successfully used in comparable circumstances. If an MP has not previously been used, documentation to substantiate its efficacy must be provided by the discharger. A RWQCB must be convinced there is a high likelihood the MP will be successful. A schedule assuring MP implementation and assessment, as well as adaptive management provisions must be provided. We recognize that in the earlier stages of some pollution control programs, water quality changes may not be immediately apparent, even with the implementation of pollution control actions. Although MP implementation never may be a substitute for meeting water quality requirements, MP implementation assessment may, in some cases, be used to measure nonpoint source control progress.

KEY ELEMENT 3: Where a RWQCB determines it is necessary to allow time to achieve water quality requirements, the NPS control implementation program shall include a specific time schedule, and corresponding quantifiable milestones designed to measure progress toward reaching the specified requirements.

The Porter-Cologne Act (CWC §13242[b] and § 13263[c]), the NPS Program Plan, and the NPS Implementation and Enforcement Policy recognize that there are instances where it will take time to achieve water quality requirements. The effort may involve all or some of various processes, including: identification of measurable long term and interim water quality goals; a timeline for achieving these goals; identification and implementation of pollution control MPs; provision for maintenance of the implementation actions; provision for additional actions if initial actions are inadequate; and, in the case of third-party organizations, identification of a responsible third-party to lead the efforts.

In considering approval of specific interim goals and the time necessary to achieve those goals, a RWQCB may consider such factors as the necessity of providing for significant capital outlays for MP implementation, the presence of a severely degraded waterbody, and whether or not an NPS control implementation program is a component of a larger TMDL implementation program. The time schedule may not be longer than that which is reasonably necessary to achieve an NPS implementation program's water quality objectives. Preliminary development of the time schedule shall be undertaken by the party responsible for developing the NPS control implementation program. The RWQCB may amend and must approve the time schedule. If the RWQCB later determines that additional time is necessary to complete the program, it may make further amendments to the time schedule or issue an enforcement order that contains a compliance schedule.

KEY ELEMENT 4: An NPS control implementation program shall include sufficient feedback mechanisms so that the RWQCB, dischargers, and the public can determine whether the program is achieving its stated purpose(s), or whether additional or different MPs or other actions are required.

Verification measures to determine whether an NPS control implementation program is meeting its stated purpose is a key element of all NPS control implementation programs. In addition to verification of proper MP implementation (Key Element 2), feedback mechanisms are needed to clearly indicate whether and when additional or different MPs or MP implementation measures must be used, or other actions taken. Designing the appropriate types and frequency of verification and feedback measures (e.g. reporting, inspection, monitoring, etc.) is an integral part of implementation program development and success.

In all cases the NPS control implementation program should describe the measures, protocols, and associated frequencies that will be used to verify the degree to which the MPs are being properly implemented and are achieving the program's objectives, and/or to provide feedback for use in adaptive management. These efforts are

necessary to determine whether the program is on time and on track in achieving its goals.

Depending on the water quality problem, the cause, the beneficial uses at risk, and the purpose for which the monitoring will be used (e.g. adaptive management or regulatory purposes) the appropriate type(s) of monitoring should be used. Some monitoring approaches include photo monitoring; assessing residual dry matter on rangelands; various indicators of healthy instream habitat; riparian and wetland habitat structure, density and cover; and bioassessment. Some programs may involve collecting and reporting ambient water quality monitoring data. Those programs should be consistent with the SWRCB Surface Water Ambient Monitoring Program (SWAMP) Data Quality Management Plan (DQM), which provides for more than one level of data quality. The DQM approach to data quality recognizes that the rigor needed to monitor for regulatory purposes may not be necessary for other purposes. Consequently, the SWAMP DQM provides data quality and reporting objectives for both regulatory and screening studies. Regardless of which approach is used, all monitoring programs should be reproducible, provide a permanent/documented record and be available to the public.

KEY ELEMENT 5: Each RWQCB shall make clear, in advance, the potential consequences for failure to achieve an NPS control implementation program's stated purposes.

A RWQCB action to approve or endorse an NPS control implementation program shall contain a general description of the course of action or actions to be taken if verification/feedback mechanisms indicate or demonstrate that the program is failing to achieve its stated objectives. Although not binding on the RWQCB, this element should be written with the objective of creating clear expectations and reinforcing the obligations that dischargers, third parties, and other agencies, in addition to the RWQCBs, have accepted in agreeing to implement an NPS control implementation program. This element also has the advantage of requiring the examination of proposed programs with respect to options for enforcement should the program not proceed as well as expected.

Clear expectations regarding potential RWQCB responses to inadequate or ineffective programs, including but not limited to adopting a revised program or the taking of an enforcement action, provides dischargers and the public with greater certainty regarding the process. RWQCB options will vary significantly, depending on the structure of the program. (e.g., which administrative tool or tools are being utilized, whether third-party regulatory or land use agencies, or private entities are coordinating the dischargers' efforts, etc.) While not all programs need be directly enforceable, any enforcement limitations that might be encountered should be well understood by the RWQCB prior to approving or endorsing an NPS control implementation program.

In cases of individual noncompliance, selective enforcement actions may be taken. In cases of third-party noncompliance, an effort to revise the third-party program is an alternative. Generally, prior to initiating major revisions to a program, informal contact with dischargers, group representatives, or other third parties, if any, will be attempted in order to redirect unsuccessful efforts. However, although the direction and efforts of a particular third-party program are being undertaken as a group effort, with group designated or accepted leadership, if the group or third-party fails to follow through on their commitments, any RWQCB enforcement action taken will be against individual dischargers, not the third-party.

V. RWQCB Compliance Assurance

Typically, the RWQCBs have regulated individual dischargers, rather than groups of dischargers who are represented by or coordinated through third parties. Individual dischargers, including both landowners and operators, continue to bear ultimate responsibility for complying with a RWQCB's water quality requirements and orders. Generally, under the Porter-Cologne Act, the RWQCBs cannot take enforcement actions directly against non-discharger third parties. As part of the fifth element described above, the RWQCBs will need to explain how significant non-compliance can be addressed in Third-Party Programs. This explanation should include information as to the criteria for measuring program success, what constitutes failure, and the actions that may be taken in response to failure. Individual dischargers need to be informed as to what individual discharger actions or inactions will lead to individual enforcement. This explanation is necessary so that participating dischargers understand the ramifications of non-compliance, even if that non-compliance is by a third party they have selected as their representative. Options short of individual enforcement actions could include RWQCB actions such as changing a program to remove some autonomy, or developing sequential enforcement phases related to triggering events built into the program. Ultimately, the ineffectiveness of a group through which a discharger participates in NPS control efforts cannot be used as an excuse for lack of individual discharger compliance.

The SWRCB Enforcement Policy clearly defines the enforcement options available to a RWQCB. Both the Enforcement Policy and common RWQCB practice also recognize the merit of progressive enforcement. With progressive enforcement, a RWQCB implements enforcement through an "...escalating series of actions that allows for the efficient and effective use of enforcement resources to: (1) assist cooperative dischargers in achieving compliance; (2) compel compliance for repeat violations and recalcitrant violators; and (3) provide a disincentive for noncompliance."

VI. IMPLEMENTATION SUCCESS AND FUTURE CONSIDERATIONS

This policy provides a template for NPS pollution control in California. However, the ability of the SWRCB and RWQCB to aggressively implement and enforce the State's NPS Program in a reasonable timeframe is directly linked to the resources available—both staff and

budget—to carry out the program. The SWRCB recognizes that it needs to provide strong support for the RWQCBs' efforts through available technical and financial oversight and assistance. Statewide, a diverse array of parties participate in various ways to implement NPS pollution control measures. However, in most situations, the primary participants are the RWQCBs and NPS dischargers. The RWQCBs are expected to develop their own priorities and schedules for addressing the specific types of NPS pollution present within their regions. Successful implementation of the NPS Program largely depends on two factors: the ability of the RWQCBs to use their administrative authorities and limited resources in creative and efficient ways, and the willingness of dischargers to implement MPs and other strategies that effectively prevent or control NPS discharges. To help accomplish this goal, dischargers are urged to take advantage of the many technical and financial assistance programs available to assist them. These are described earlier in this document.

Current land use management practices that have resulted in NPS pollution have a long and complicated physical, economic and political history. In addition to the need for resources, forging a new history of pollution control will take time and commitment, as well as a willingness to examine the use of practices that have resulted in current NPS pollution discharges and the barriers to change. Therefore, it is expected that it will take a significant amount of time for the RWQCBs to approve or endorse NPS control implementation programs throughout their regions, and even longer for those programs to achieve their objectives.

A rigorous dedication to periodic evaluation of all aspects of the program and an adaptive management approach will facilitate the road to success. Statewide implementation of the NPS program is predicated not only on individual NPS discharger actions to adopt and adapt alternative MPs, but upon the development and adaptation of self-determined management structures that encourage and support these changes. Much is known about the MPs that most effectively prevent and control polluted runoff. Less is understood about the alternative alliances and management structures - the third-party programs - that most efficiently and effectively will result in the watershed or industry-wide actions needed to control NPS pollution statewide. In addition to the public and private financial resources dedicated to this purpose, this effort will require a conscious willingness to experiment, evaluate and adapt management approaches that will support and bring us closer to our ultimate goal -- controlling NPS pollution to protect the quality of waters of the State in accordance with the mandates of the Porter-Cologne Act.

REFERENCES

SWRCB, 1988. Nonpoint Source Management Plan. State Water Resources Control Board, Division of Water Quality, Sacramento, CA. November 1988.

SWRCB, 1999. Plan for California's Nonpoint Source Pollution Control Program. Division of Water Quality, Sacramento, CA. December 1999.

SWRCB, 2002. Water Quality Enforcement Policy. Office of Statewide Initiatives, Sacramento, CA. February 2002.

USEPA, 1993. Guidance Specifying Management Measures for Sources of Nonpoint Source Pollution in Coastal Waters. January 1993.

END NOTES

- i. CWC 13050[e], 13260[a], 13263[a], 13376, 13377. See also *Lake Madrone Water District v. State Water Resources Control Board* (1989) 209 Cal.App.3d 163, 171-175, 256 Cal.Rptr. 894 (Lake Madrone); *Tahoe-Sierra Preservation Council v. State Water Resources Control Board* (1989) 210 Cal.App.3d 1421, 1435, 259 Cal.Rptr. 132; 63 Ops.Cal.Atty.Gen. 51, 53-359 (1980) (Tahoe-Sierra).
- ii. See Water Code section 13000
- iii. See Water Code section 13000
- iv. (CWC sections 13200, 13201)
- v. (CWC section 13245)
- vi. (CWC sections 13168, 186)
- vii. (CWC sections 13263(i), 13377; 40 Code of Federal Regulations [CFR] section 122.28; Cal. Code of Regulations [CCR] Title 23, section 2235.2)
- viii. (CWC section 13320; CCR, Title 23, sections 2050-2068)
- ix. (CWC sections 13000, 13050(i), 13140, 13142, 13241)
- x. See discussion in Chief Counsel's Statement for the State Nonpoint Source Management Program Administered by the State Water Board and the Regional Water Boards (October 1988), pp. C-1 through C-2. See also *Recommended Changes in Water Quality Control, Final Report of the Study Panel to the California State Water Resources Control Board, Study Project, Water Quality Control Program*, pp. 3-4 (1969).
- xi. (CWC section 13050[j], 13241) The State Water Resources Control Board and the Regional Water Quality Control Board must consider the factors specified in CWC section 13241 when adopting or revising water quality objectives.
- xii. The federal antidegradation policy is contained in 40 C.F.R. sec. 131.12. The state is required to adopt and implement an antidegradation policy consistent with the federal policy. The federal policy establishes three tiers of water quality protection. The first tier establishes a minimum requirement that existing instream uses and the level of water quality necessary to protect those uses be maintained and protected. The second tier is designed to protect high quality waters by establishing prerequisites for allowing degradation of these waters. The third tier addresses outstanding national resource waters.
- xiii. (See 33 U.S.C. sec. 1313(c); 40 CFR sections 131.3[i], 131.6)
- xiv. (CWC section 13242)
- xv. (CWC section 13242)
- xvi. CWC section 13263[g]
- xvii. CWC section 13260
- xviii. CWC section 13263[a]
- xix. (CWC sections 13260, 13269)
- xx. (CWC section 13264)
- xxi. (CWC sections 13263, 13269)
- xxii. (CWC section 13243)
- xxiii. (CWC section 13263[a] and [i])
- xxiv. (CWC section 13263[i])
- xxv. CWC section 13269(a)(1)
- xxvi. CWC section 13269 (a)(2)
- xxvii. CWC section 13269(a)(4)(A)
- xxviii. (CWC section 13050[d])
- xxix. *Lake Madrone*, supra, fn. 1, 209 Cal.App. 3d at 169, 256 Cal.Rptr. 894; see *Recommended Changes in Water Quality Control, Final Report of the Study Panel to the California State Water Resources Control Board, Study Project, Water Quality Control Program* (1969) (Final Report), App. A, p. 23.
- xxx. See e.g., *Lake Madrone*, supra, fn. 1 (release of accumulated sediment from a dam held a discharge of waste). See also discussion in *Sawyer, State Regulation of Groundwater Pollution Caused by Changes in Groundwater Quantity or Flow* (1988) Pacific L.J. 1267, 1273-1275.
- xxxi. *Northwest Indian Cemetery Protective Association vs. Peterson*, (Ninth Circuit 1986) 795 F.2d688, 697, revised on other grounds (1988) *Lung vs. Northwest Indian Cemetery Protective Association* 485 U.S. 439 [108 S.Ct. 1319.99 L.Ed.2d.
- xxxii. Statewide information about IACC agencies and their activities is currently available at <http://www.swrcb.ca.gov/nps/iacc.html>.

WATER CODE - WAT

DIVISION 7. WATER QUALITY [13000 - 16104]

(Division 7 repealed and added by Stats. 1969, Ch. 482.)

CHAPTER 4. Regional Water Quality Control [13200 - 13286.9]

(Chapter 4 added by Stats. 1969, Ch. 482.)

ARTICLE 4. Waste Discharge Requirements [13260 - 13276]

(Article 4 added by Stats. 1969, Ch. 482.)

13269.

(a) (1) On and after January 1, 2000, the provisions of subdivisions (a) and (c) of Section 13260, subdivision (a) of Section 13263, or subdivision (a) of Section 13264 may be waived by the state board or a regional board as to a specific discharge or type of discharge if the state board or a regional board determines, after any necessary state board or regional board meeting, that the waiver is consistent with any applicable state or regional water quality control plan and is in the public interest. The state board or a regional board shall give notice of any necessary meeting by publication pursuant to Section 11125 of the Government Code.

(2) A waiver may not exceed five years in duration, but may be renewed by the state board or a regional board. The waiver shall be conditional and may be terminated at any time by the state board or a regional board. The conditions of the waiver shall include, but need not be limited to, the performance of individual, group, or watershed-based monitoring, except as provided in paragraph (3). Monitoring requirements shall be designed to support the development and implementation of the waiver program, including, but not limited to, verifying the adequacy and effectiveness of the waiver's conditions. In establishing monitoring requirements, the regional board may consider the volume, duration, frequency, and constituents of the discharge; the extent and type of existing monitoring activities, including, but not limited to, existing watershed-based, compliance, and effectiveness monitoring efforts; the size of the project area; and other relevant factors. Monitoring results shall be made available to the public.

(3) The state board or a regional board may waive the monitoring requirements described in this subdivision for discharges that it determines do not pose a significant threat to water quality.

(4) (A) The state board or a regional board may include as a condition of a waiver the payment of an annual fee established by the state board in accordance with subdivision (f) of Section 13260.

(B) Funds generated by the payment of the fee shall be deposited in the Waste Discharge Permit Fund for expenditure, upon appropriation by the Legislature, by the state board or appropriate regional board for the purpose of carrying out activities limited to those necessary to establish and implement the waiver program pursuant to this section. The total amount of annual fees collected pursuant to this

section shall not exceed the costs of those activities necessary to establish and implement waivers of waste discharge requirements pursuant to this section.

(C) In establishing the amount of a fee that may be imposed on irrigated agriculture operations pursuant to this section, the state board shall consider relevant factors, including, but not limited to, all of the following:

(i) The size of the operations.

(ii) Any compliance costs borne by the operations pursuant to state and federal water quality regulations.

(iii) Any costs associated with water quality monitoring performed or funded by the operations.

(iv) Participation in a watershed management program approved by the applicable regional board.

(D) In establishing the amount of a fee that may be imposed on silviculture operations pursuant to this section, the state board shall consider relevant factors, including, but not limited to, all of the following:

(i) The size of the operations.

(ii) Any compliance costs borne by the operations pursuant to state and federal water quality regulations.

(iii) Any costs associated with water quality monitoring performed or funded by the operations.

(iv) The average annual number of timber harvest plans proposed by the operations.

(5) The state board or a regional board shall give notice of the adoption of a waiver by publication within the affected county or counties as set forth in Section 6061 of the Government Code.

(b) (1) A waiver in effect on January 1, 2000, shall remain valid until January 1, 2003, unless the regional board terminates that waiver prior to that date. All waivers that were valid on January 1, 2000, and granted an extension until January 1, 2003, and not otherwise terminated, may be renewed by a regional board in five-year increments.

(2) Notwithstanding paragraph (1), a waiver for an onsite sewage treatment system that is in effect on January 1, 2002, shall remain valid until June 30, 2004, unless the regional board terminates the waiver prior to that date. Any waiver for onsite sewage treatment systems adopted or renewed after June 30, 2004, shall be consistent with the applicable regulations or standards for onsite sewage treatment systems adopted or retained in accordance with Section 13291.

(c) Upon notification of the appropriate regional board of the discharge or proposed discharge, except as provided in subdivision (d), the provisions of subdivisions (a) and (c) of Section 13260, subdivision (a) of Section 13263, and subdivision (a) of Section 13264 do not apply to a discharge resulting from any of the following emergency activities:

(1) Immediate emergency work necessary to protect life or property or immediate emergency repairs to public service facilities necessary to maintain service as a result of a disaster in a disaster-stricken area in which a state of emergency has been proclaimed by the Governor pursuant to Chapter 7 (commencing with Section 8550) of Division 1 of Title 2 of the Government Code.

(2) Emergency projects undertaken, carried out, or approved by a public agency to maintain, repair, or restore an existing highway, as defined in Section 360 of the Vehicle Code, except for a highway designated as an official state scenic highway pursuant to Section 262 of the Streets and Highways Code, within the existing right-of-way of the highway, damaged as a result of fire, flood, storm, earthquake, land subsidence, gradual earth movement, or landslide within one year of the damage. This paragraph does not exempt from this section any project undertaken, carried out, or approved by a public agency to expand or widen a highway damaged by fire, flood, storm, earthquake, land subsidence, gradual earth movement, or landslide.

(d) Subdivision (c) is not a limitation of the authority of a regional board under subdivision (a) to determine that any provision of this division shall not be waived or to establish conditions of a waiver. Subdivision (c) shall not apply to the extent that it is inconsistent with any waiver or other order or prohibition issued under this division.

(e) The regional boards and the state board shall require compliance with the conditions pursuant to which waivers are granted under this section.

(f) Prior to renewing any waiver for a specific type of discharge established under this section, the state board or a regional board shall review the terms of the waiver policy at a public hearing. At the hearing, the state board or a regional board shall determine whether the discharge for which the waiver policy was established should be subject to general or individual waste discharge requirements.

(Amended by Stats. 2004, Ch. 183, Sec. 360. Effective January 1, 2005.)