California Regional Water Quality Control Board
Central Coast Region

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Agricultural Order Renewal

Public Comments and Alternatives to

02/01/2010 Preliminary Draft Staff Recommendations

CEQA: Comment Letters

All of these letters were received before the deadline of August 27th, 2010.

Comment ID	Affiliation	Date Received
A38	Darlene Din, Ag Land Use Consultant	8/27/2010
F76	OSR Enterprises	8/25/2010
FB13	California Farm Bureau	8/27/2010
M23	Salinas Valley Water Coalition	8/27/2010
U23	Phyto Remediation Engineering	8/18/2010
U24	Phyto Remediation Engineering	8/25/2010
U25	Environmental Defense Center and Coastkeepers	8/27/2010
U26	Patrick J. Maloney	8/27/2010

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August 27, 2010

California Regional Water Quality Board
Central Coast Region
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401-7906

Re: Central Coast Staff New Order Proposal for the Regulation of Waste Discharge from Irrigated Lands

Dear Mr. Roger Briggs, Executive Officer;

This comment letter is submitted on behalf of myself working with many clients that are involved in agriculture and affected by the proposed action of the Central Coast Regional Water Quality Control Board in response to request from the CEQA scoping meeting. During the course of the public meeting held August 16, 2010 it became apparent that the standards recommended by staff to meet the protection of water quality in surface, storm, and ground water could have unintended consequences to everyone on the Central Coast. In order to provide solutions in one aspect of the agricultural operation you would need to migrate another aspect- in short agricultural operations are very much ever-changing large ecosystems- that are complex and "circular" in the need for constant stewardship. We as members of the community all need both water and food; we must renew an approach that is focused on true water quality solutions and not regulations that are data and documents in nature. Changes in on farm culture practices are happening on the central coast and this work must continue in a proactive approach.

As such, the Central Coast Regional Water Quality Control Board should adopt a significantly different proposal with less stringent terms and conditions than that proposed in the renewed "Conditional Waiver of Waste Discharge Requirements for Irrigated Lands" (New Order). The focus of the new order should solely on water quality solution with a "carrot and stick" (by providing proactive incentives) rather than regulations that are punitive.

As the New Order purportedly stands, it is in direct conflict with Porter-Cologne, CEQA, and the Williamson Act as well as possibly sets itself up to be preempted due to direct conflicts with the current existing codes under the California Water Codes, Food and Agriculture Codes, the Department of Fish & Game, the Department of Pesticide Regulation, NEPA and the Farmland Protection Policy Act.

Alternative revisions of the New Order should be constructed within the proper parameters set forth through the Porter-Cologne Water Quality Control Act and CEQA (California Water Code [CWC] §§'s 13000 et seq.) that are at least feasible to all present and probable future beneficial uses of water within the Central Coast. The Porter Cologne Act denotes that any water quality plans/proposals *must* consider all demands upon the water source and that each regional water board shall establish such water quality objectives in water quality control plans as in its judgment *will ensure the reasonable protection of beneficial uses of that water*. (CWC § 13241) It has been recognized through state and federal policies that agriculture is a beneficial use of water. No where does that ring more true than here in the Central Coast, where we generate $13 billion dollars worth of food products annually, growing over 200 different crops, and employing over 60,000 people. (American Farmland Trust, US Agriculture Statistics - 2007 Ag Census www.farmland.org, http://www.awqa.org/ag/statistics.html)

Water quality issues *do* exist on the Central Coast, and agricultural practices *should* continue to be amended in order to further protect our surface and ground water. The primary concern or contention with this proposal is the feasibility, reasonability, and achievability of the proposed New Order.

Agriculture is non-point source – is not a finite project

Non-Point source impacts to water quality are difficult to define and they are equally difficult to remediate. These are not engineered systems subject to formulaic approaches. Instead, non-point sources are generally dynamic and ever-changing large ecosystems that are conditions by varying degrees of management. Non-point sources are difficult to study as variables cannot be controlled, and in reality, are a discipline which is in the rudimentary stages of development.

Under CEQA Agriculture is a beneficial use of water and declared a resource, and therefore must be considered in water quality proposals/plans.

The purpose of the New Order should consider the protection of agricultural resources as a rather vital beneficial past, present and probable future use of the areas water.

It has been recognized and established that agriculture is a beneficial use of water, through state and federal policies such as CEQA, the Farmland Protection Policy Act and the National Environmental Policy Act. Agriculture is the number one industry in California, providing employment for one in ten Californians and producing a safe and reliable food and fiber source depended on throughout the world. (CALFED Final Programmatic EIS/EIR, July 2000, pg. 7.1-1) In this current climate of high unemployment rates, July of 2010 saw an unemployment rate of 12.3%, up from 5.1% in July of 2000, it can be argued that Agriculture, and Agricultural resources, should be preserved, sustained and maintained now more than ever. (Bureau of Labor Statistics Data, http://data.bls.gov) The Legislature has declared that a sound natural resource base of soils, water, and air must be maintained in order to preserve agriculture and ensure a healthy farming industry, and thereby a healthy(ier) economy. (Food & Agriculture Code § 802(g)) It is imperative that Agriculture's beneficial use of water be taken into account in this New Order, and that any and all alternative proposals should be looked into for less detrimental, yet still effective, plan for the beneficial use of this finite resource.

CEQA sets forth guidelines and provides direction that agencies should refer to the 1997 California Agricultural Land Valuation and Site Assessment Model as prepared by the California Department of Conservation an optimal model to use in assessing impacts on agriculture and farmland. It asks agencies to take into account whether a proposed project would:

1) Convert prime farmland, unique farmland, or farmland of state-wide importance to non-agricultural use
2) Conflict with existing zoning for agricultural use or a Williamson Act contract
3) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of farmland to non-agricultural use.

California Code of Regulations, Title 14, CEQA Guidelines Appendix G, § II, Agricultural Resources.

The CCRWQCB instead asks "interested persons" to provide information with specificity as to potentially significant environmental impacts, including unavoidable significant adverse environmental impacts associated with the means of compliance. The boards vested obligation through the Porter-Cologne Act (see below) is to "attain the highest reasonable water quality considering all demands being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible." (US v. State Water Resources Control Board (1986) 182 Cal.App.3d 82, 116)

The CCRWQB staff does not generate this New Order proposal within the authority in which CEQA and the California Code of Regulations, title 14 sets forth. It seems, (without seeing the actual proposal), that if the New Order the Region 3 Water Quality Control Board is proposing may even be exceeding its authority and abusing it's discretion.

<u>Intent of the Porter-Cologne Water Quality Control Act</u>

The intent of the Legislature in creating the Porter-Cologne Act can best be determined by taking a plain adaptation of the wording of the statutes. The Act states

> "The people of the State [which includes the Agricultural Community] have a primary interest in the conservation, control and utilization of the water resources of the state and that quality shall be protected for the use and enjoyment… activities and factors which affect the quality of the waters of the state shall be regulated to attain the highest water quality which is reasonable, considering all demands being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible."
> CWC §§'s 13000 et. seq.

I would request that staff responds to the comments provided by the public at the hearing on August 16th and to evaluative as having impacts that cannot be mitigated.

Another rather pertinent CEQA related concern, as was requested to be brought forth by "interested individuals" in response letters regarding the CEQA scoping meeting held on August 16th, 2010, brings about Water Code § 13241. While the Region 3 Water Quality Control Board *does* follow § 13242 in that an implementation plan must contain a description of the nature of specific action that are needed to achieve the water quality objectives, a time schedule, and a plan for monitoring compliance, they *do not* follow 13241, which states that statutory considerations are set forth that must be considered when establishing water quality objectives –

- **Past, present, and probable future beneficial uses of water**
- Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto
- Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area
- **Economic considerations**
- The need to develop and use recycled water.

Economic considerations

As stated in the letter dated March 1, 2010 from James W. Bogart President & General Counsel, the Grower-Shipper Association of Central California has reviewed the "Preliminary Draft Staff Recommendations for an Agricultural Order" prepared by the Central Coast Regional Water Quality Control Board staff (hereafter referred to as "Staff") dated February 1, 2010. Please review and response to the issues raised in this letter. As acknowledged in the document, this region is one of the largest agricultural regions in the U.S., "reflecting a gross production value of more than six billion dollars in 2008, contributing 14 percent of California's agricultural economy." On behalf of our more than 300 members throughout the Central Coast we are writing to express our immense concern with this proposed document, specifically with the economic consequences that are sure to follow if it is implemented.

Due to the short time frame, we were unable to conduct a statistically relevant survey of our members to determine the economic costs of implementing the draft waiver as proposed by staff. However, we have conducted surveys of growers throughout the seven counties to gauge the costs implementation on a per acre basis and determined costs to range from $354 to $445 for wine grapes and $250 to $916 for cool season vegetables per acre. Based on conversations with growers and a review of 2008 crop reports published by agricultural commissioner's in the seven affected counties we have determined costs for implementation by region. The numbers are staggering. For wine grape production the costs for the entire seven county region range from $36 Million to more than $45 Million. For cool season vegetables, the costs are a drastic $48 Million to more than $176 Million. After years of profit margin decline an agricultural waiver that costs industry hundreds of millions to implement has the potential to destroy numerous farms on the Central Coast.

After including these overlooked factors, not only will the Ag industry be adversely affected in a significant economic fashion, it is highly probable that entire commodities will fall vulnerable due to this imposition – in conflict with the Food & Agr. Code § 802 (a), Farmland Protection Policy Act, and the California Code of Regulations title 14, Appendix G, § II, regarding Agricultural resources. Castroville alone could stand to lose the ability to farm artichokes, when Castroville accounts for more than 80% of the world's artichoke production. An additional example of another specialty crop primarily in this region would be brussels sprouts. There are acres planted in coastal areas of San Mateo, Santa Cruz, and Monterey Counties of California, most of the United States production is in California.

In closing, it is urged that the board keep in mind the various possible conflicts that the staff's proposal could bring about in the New Order. An alternative proposal should be drafted to reflect the concerns with the adverse economic and environmental effect that these policy considerations that would likely be brought about by this New Order. The (new) New Order should be drawn with heed to the dozens of competent, relevant and meaningful responses to the February 1, 2010 Preliminary Draft Staff Recommendations, with special consideration spent on:

- Preliminary Alternative Agricultural Proposal provided by the California Farm Bureau Federation, April 1, 2010 Group 1, FB6
- Somach, Simmons & Dunn, April 1, 2010 Group 4, A21
- Central Coast Agriculture Water Quality Coalition, Group 4, A24
- Western Growers, April 17, 2010 Group 13, A29
- Best, Best & Kreiger, March 31, 2010 Group 4, FB6
- William Elliot, dated April 1, 2010, Group 6 F47

After considerable effort has been made in the preparation of these responses containing possible alternative plans as well as various areas of concern, be they economic or environmental, as well as possible conflict with local, state and federal laws that would be brought about in the adoption of the staff recommendations. The production of these letters should not be in vain, they should be read, reviewed, and responded to as according to CEQA, Porter-Cologne, and the California Code of Regulations, in order to form a more reasonable, attainable, and feasible water quality management plan.

Sincerely

Darlene Din

cc: Russell M. Jefferies Vice Chair
Monica S. Hunter, Board Member
Gary C. Shallcross, Board Member
David T. Hodgin, Board Member
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August 25, 2010

VIA FACSIMILE: (805) 543-0397
AND U.S. MAIL

Mr. Howard Kolb
California Regional Water Quality Control Board
Central Coast Region
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401

Re: Comments on CEQA Scoping for Proposed New Order Regulating Waste Discharges from Irrigated Lands

Dear Mr. Kolb:

We represent OSR Enterprises concerning the pending replacement of the current Ag Waiver, and we attended the CEQA scoping meeting in San Luis Obispo on August 16, 2010. On behalf of OSR, we would like to offer several comments on the process as well as the substance of the discussion at that meeting.

We share the concern expressed by some who attended the meeting that the scoping meeting was not scheduled at the appropriate time in the process of project consideration. Staff completed an Initial Study for the proposed new order and released that document on or about February 1, 2010. The Initial Study presumes that the proposed new order "does not cause effects that are more severe than discussed in the 2004 Environmental Analysis/Negative Declaration." While the Initial Study purports to include an evaluation of potentially significant environmental impacts through completion of an Environmental Checklist, in fact every potential impact is identified as having either no impact or less than significant impact. Staff concludes that "adoption of and compliance with the Preliminary Draft Irrigated Ag Order will not have a significant negative impact on the environment." This conclusion, effectively determining that staff would issue a Negative Declaration as it had in 2004, was reached before February 1, 2010 – before the first public workshop on the draft new order.

In light of staff's determination before February 1 that the project would have no significant environmental impact, the timing of the CEQA scoping meeting six months later is curious indeed. Pursuant to CEQA Guidelines section 15083, an agency may engage in "early consultation" with "any person or organization [the lead agency] believes will be concerned with the environmental effects of the project. Many public agencies have found that early consultation solves many potential problems that would arise in more serious forms later in the review process. This early consultation may be called scoping." Section 15083 urges the agency to coordinate its public "scoping" with scoping pursuant to Public Resources Code section 21083.9 and Guidelines section 15082, which require the lead agency to convene at least one scoping meeting with responsible agencies under CEQA, other public agencies with jurisdiction, and any individuals or organizations that have filed a written request for notice for the express purpose of reviewing the proposed scope of environmental review and considering the environmental information that other agencies will require.

Moreover, CEQA Guidelines section 15004 states that environmental document preparation and review should be coordinated in a timely fashion with planning review and project approval processes used by the agency. "These procedures, to the maximum extent feasible, are to run concurrently, not consecutively." This Guideline specifies that public agencies "shall not . . . take any action which gives impetus to a planned or foreseeable project in a manner that forecloses alternatives or mitigation measures that would ordinarily be part of CEQA review of that public project."

Clearly the Guidelines contemplate "scoping" far earlier in the process than has occurred here. In our view, the appropriate time for the scoping meeting involving the public was at or before the preparation of the Initial Study, through which staff determined the scope of review it intended to undertake, i.e., to issue a Negative Declaration. Consulting the public about its environmental concerns six months later after two public workshops and extensive testimony on the draft new order hardly can be considered "early consultation."

To the extent that staff intended the August 16 meeting to be a scoping of the environmental review needed for an order yet to be released, the meeting was premature. Staff was unclear (and apparently in conflict) concerning whether the "project" being considered at that meeting was the February 2010 version or the September 2010 version of the new order, or whether the September 2010 version is to be considered a "new" project or a "revision." Staff cannot reasonably expect the public to comment on the potentially significant environmental impacts of an order that has not been released for public comment and for which staff has not released its proposed scope of environmental review. At a minimum, staff needed to establish and explain with clarity the context of the scoping meeting. Scoping cannot occur in a hypothetical universe or a vacuum, as was the case with this particular meeting.

In short, asking the public either to comment belatedly on an order that is in all but final form or to comment on the basis of what hypothetically will be in an order not yet released compromises the integrity of the process as contemplated in CEQA. We think the agency's compliance with CEQA has been seriously flawed throughout this process and apparently it is continuing down a path of inadequate compliance.

Concerning the specific significant environmental impacts expected to arise from the agricultural community's effort to comply with the proposed new order as released in February 2010, our client is in agreement with virtually all of the impacts identified by those in attendance at the August 16, 2010 meeting. The public commentary contradicted many of staff's conclusions in the Initial Study and the Environmental Checklist and made it clear that additional environmental review is needed. It is staff's responsibility to consider all of these significant impacts and potential ways to mitigate these impacts, along with alternatives to the project itself, including a "no project" alternative. In our view, the "no project" alternative should consider the further extension of the current Ag Waiver, while another alternative would be revisions to that Ag Waiver that are consistent with the recommendations of OSR and the larger agricultural community.

We appreciate having the opportunity to participate in this process and look forward to additional environmental review.

Very truly yours,

Susan M. Basham

Susan M. Basham
for PRICE, POSTEL & PARMA LLP

SMB:lkh

cc: Jim Rice, OSR
Pat Fidel, OSR

CALIFORNIA FARM BUREAU FEDERATION
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August 27, 2010

Via First-Class Mail & Email
AgOrder@waterboards.ca.gov

Ms. Lisa McCann
California Regional Water Quality Control Board
Central Coast Region
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401-7906

Re: California Environmental Quality Act ("CEQA") Scoping Comments for the Regulation of Waste Discharges from Irrigated Lands

Dear Ms. McCann:

The California Farm Bureau Federation ("Farm Bureau") is a non-governmental, non-profit, voluntary membership California corporation whose purpose is to protect and promote agricultural interests throughout the state of California and to find solutions to the problems of the farm, the farm home, and the rural community. Farm Bureau is California's largest farm organization, comprised of 53 county Farm Bureaus currently representing approximately 85,000 members in 56 counties. Farm Bureau strives to protect and improve the ability of farmers and ranchers engaged in production agriculture to provide a reliable supply of food and fiber through responsible stewardship of California's resources.

Farm Bureau, on behalf of the Santa Barbara County Farm Bureau, the San Luis Obispo County Farm Bureau, the Monterey County Farm Bureau, the San Benito County Farm Bureau, the Santa Cruz County Farm Bureau, the Santa Clara County Farm Bureau, and the San Mateo County Farm Bureau, appreciates the opportunity to provide California Environmental Quality Act ("CEQA") Scoping comments on the Central Coast Regional Water Quality Control Board's ("Regional Board") development of a renewed conditional wavier of waste discharge requirements for discharges from irrigated lands ("Ag Waiver"). Farm Bureau offers the following concerns and comments regarding the scope and content of the environmental analysis and environmental documentation for the forthcoming Ag Waiver:[1]

Necessity of an Initial Study to Analyze Proposed Project's Environmental Effects

Under CEQA, it is the responsibility of the lead agency to conduct an environmental analysis and determine whether an EIR shall be required.[2] The initial study is the preliminary analysis that the lead agency prepares in order to determine whether the project might have a significant effect

[1] Farm Bureau incorporates by reference the comments submitted in its April 1, 2010 comment letter entitled *"Comments in Response to Preliminary Staff Recommendations for an Agricultural Order to Control Discharges from Irrigated Lands."*
[2] Cal. Code Regs., tit. 14, § 15365.

on the environment.[3] When the agency determines that an EIR is unnecessary, the initial study serves the purpose of "providing documentation of the factual basis" for concluding that a negative declaration will suffice.[4] Specifically, the purposes of an initial study are to:

(1) Provide the Lead Agency with information to use as the basis for deciding whether to prepare an EIR or a Negative Declaration.
(2) Enable an applicant or Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a Negative Declaration.
(3) Assist in the preparation of an EIR, if one is required, by:
    (A) Focusing the EIR on the effects determined to be significant,
    (B) Identifying the effects determined not to be significant,
    (C) Explaining the reasons for determining that potentially significant effects would not be significant, and
    (D) Identifying whether a program EIR, tiering, or another appropriate process can be used for analysis of the project's environmental effects.
(4) Facilitate environmental assessment early in the design of a project;
(5) Provide documentation of the factual basis for the finding in a Negative Declaration that a project will not have a significant effect on the environment;
(6) Eliminate unnecessary EIRs;
(7) Determine whether a previously prepared EIR could be used with the project.[5]

The initial study serves to document the agency's reasoning in reaching its conclusion to prepare an environmental impact review document or a negative declaration by disclosing "the data or evidence upon which the person(s) concluding the study relied. Mere conclusions simply provide no vehicle for judicial view."[6] Pursuant to CEQA, Farm Bureau respectfully asks for the release of a new Initial Study given that the new conditional waiver of waste discharges currently being prepared is fundamentally different from the 2004 Conditional Waiver and is not based upon the Preliminary Staff Draft Waiver released on February 1, 2010.[7]

Agricultural Resources Must Be Considered During Environmental Review

Agricultural resources are an important feature of the existing environment of the State, and are protected under federal policies, such as the Farmland Protection Policy Act and National Environmental Policy Act ("NEPA"), State policies, and CEQA. Agriculture is the number one industry in California, which is the leading agricultural state in the nation.[8] Agriculture is one of the foundations of this State's prosperity, providing employment for one in 10 Californians and a variety and quantity of food products that both feed the nation and provide a significant source of exports.[9] In 1889, the State's 14,000 farmers irrigated approximately one million acres of farmland between Stockton and Bakersfield. By 1981, the number of acres in agricultural production had risen to 9.7 million.[10] More recently, the amount of agricultural land in the State

[3] *Friends of Davis v. City of Davis* (2000) 83 Cal. App. 4th 1004, 1016, ["the task of the lead agency is not to determine whether the project will have a significant effect on the environment, but only *whether it might have such an effect*." (emphasis added)].
[4] Cal. Code Regs., tit. 14, § 15063(c)(5).
[5] Cal. Code Regs., tit. 14, § 15063(c).
[6] *Citizens Assn. for Sensible Development of Bishop Area v. County of Inyo* (1985) 172 Cal. App. 3d 151, 171.
[7] Staff's Preliminary Draft Waiver deviates significantly from the 2004 Conditional Waiver. (See Preliminary Draft Waiver Attachment 5, pp. 2-3.) As stated at the August 16, 2010 CEQA Scoping Meeting, the current CEQA scoping process is not based upon the Preliminary Draft Waiver released by Staff on February 1, 2010. Thus, given that the waiver currently under development will deviate from and is not reliant upon the February 1, 2010 Preliminary Draft Waiver, a new Initial Study is needed.
[8] Food & Agr. Code, § 802(a).
[9] CALFED Final Programmatic EIS/EIR, July 2000, pg. 7.1-1.
[10] Littleworth & Garner, California Water II (Solano Press Books 2007) p. 8.

has declined. From 1982 to 1992, more than a million acres of farmland were lost to other uses. Between 1994 and 1996, another 65,827 acres of irrigated farmland were lost, and this trend is expected to continue.

In order to preserve agriculture and ensure a healthy farming industry, the Legislature has declared that "a sound natural resource base of soils, water, and air" must be sustained, conserved, and maintained.[11] Prior to negatively impacting agricultural lands, decision makers must consider the impacts to the agricultural industry, the State as a whole, and "the residents of this state, each of whom is directly and indirectly affected by California agriculture."[12]

One of the major principles of the State's environmental and agricultural policy is to sustain the long-term productivity of the State's agriculture by conserving and protecting the soil, water, and air that are agriculture's basis resources.[13] Overly expansive and duplicative regulations may conflict with this policy by leading to the conversion of agricultural lands to other uses. This conversion would add to the existing statewide conversion of substantial amounts of agricultural lands to other uses, and may conflict with adopted plans of many local governments, including cities and counties, and existing habitat conservation plans or natural community conservation plans. Such conversion will have a significant impact on the region's environment, including the agricultural environment.

CEQA require analysis of significant environmental impacts and irreversible changes resulting from proposed projects.[14] These include unavoidable impacts; direct, indirect, and cumulative effects; irreversible and irretrievable commitment of resources; relationships between short-term uses and long-term productivity; and growth-inducing impacts to the environment. Pursuant to CEQA, the physical environment includes agricultural lands and resources. Given the national and statewide importance of agriculture and the legal requirements of environmental review, Farm Bureau urges the Regional Board to properly assess all direct and indirect effects on the agricultural environment resulting from the proposed project in its environmental analysis.[15]

Of particular relevance for such analysis of impacts on the agricultural environment, CEQA Guidelines Appendix G, section II, Agriculture and Forestry Resources, states the following:

> In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

[11] Food & Agr. Code, § 802(g).
[12] Food & Agr. Code, § 803.
[13] Food & Agr. Code, § 821(c).
[14] In CEQA, "[s]ignificant effect on the environment" means, "a substantial, or potentially substantial, adverse change in the environment." (Pub. Resources Code, § 21068.) The CEQA Guidelines make it clear the "environment" in question encompasses, "any physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise and objects of historic or aesthetic significance." (Pub. Resources Code, § 21060.5.)
[15] Any and all adverse environmental effects on agricultural resources resulting from the project, as well as cumulative impacts that will occur over time, must be fully assessed and disclosed under CEQA, as well as avoided or mitigated as required by CEQA.

(a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
(b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?
(c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?
(d) Result in the loss of forest land or conversion of forest land to non-forest use?
(e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?[16]

Regulations of Waste Discharges From Irrigated Lands Must Be Feasible

In formulating regulations of waste discharges from irrigated lands, such as a conditional waiver, the Regional Board should seek to develop the most efficient and feasible program that accomplishes water quality goals.[17] Given the diverse array of geography, topography, local conditions, and agricultural commodities grown in the Central Coast, water management and monitoring programs must be flexible and allow for necessary adaptations, both for localized areas and throughout the Central Coast. In addition to being flexible, future regulations and project alternatives must be feasible such that they are "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors."[18] All components of feasibility must be fully analyzed within the Regional Board's environmental analysis of the regulations and its impacts to agriculture.

Scope of Regulations of Waste Discharges From Irrigated Lands

Before expanding regulations of waste discharges from irrigated lands to include discharges to groundwater, the Regional Board should review and synthesize available studies to determine if and where there is a groundwater quality problem resulting from irrigated agriculture. There currently exist several outstanding, established programs from which such a determination could be made prior to expanding the current program to address groundwater. For example, there is the Ground-Water Ambient Monitoring and Assessment ("GAMA") Program being conducted by the State Water Resources Control Board ("State Water Board") in coordination with the U.S. Geological Survey and Lawrence Livermore National Laboratory; the Ground Water Protection Program being conducted by the Department of Pesticide Regulation, which determines where and how pesticides are contaminating groundwater, identifies areas sensitive to pesticide contamination, and develops mitigation measures to prevent that movement; and the Central Valley Salinity Alternatives for Long-Term Sustainability ("CV-SALTS") Program being conducted by the Central Valley Water Board, the State Water Board, the Central Valley Salinity Coalition, and stakeholders to develop and implement a comprehensive salinity and nitrate management program. Additionally, a host of other state, federal and local agencies have been implemented, or are implementing, groundwater monitoring programs. These agencies include

[16] Cal. Code Regs., tit. 14, § 15000 et seq, ("CEQA Guidelines, Appendix G).
[17] Pub. Resources Code, § 21061.1.
[18] *Ibid*.

the Department of Water Resources, Department of Public Health, Department of Toxic and Substance Control, the U.S. Environmental Protection Agency ("EPA"), Bureau of Reclamation, and individual counties throughout the Region. In order to adequately and properly assess groundwater resources and avoid regulatory duplication and expense, the Regional Board should coordinate with other governmental agencies and entities involved in groundwater quality programs.

Specific Environmental Concerns That Must Be Analyzed in the Regional Board's Environmental Review

Upon review of the Preliminary Draft Order, accompanying documents, and presentations, Farm Bureau has identified several specific concerns relating to agricultural resources that should be analyzed in the environmental review, as follows:[19]

- **Accurate and Complete Identification of Agricultural Resources**: The agricultural lands surrounding the Project must be accurately and completely depicted. The California Department of Conservation, through the Farmland Mapping and Monitoring Program ("FMMP"), monitors changes in Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance. The environmental analysis should incorporate the FMMP Maps as a basis for its analysis. The acreage of farmland that will be converted and/or impacted from this project must be included in the environmental review. Additionally, any other changes in the existing environment due to the project which, due to their location or nature, could result in conversion of agricultural to nonagricultural use must also be examined.
  Farm Bureau also recommends that any agricultural impact discussion for areas outside existing Important Farmland Map boundaries be based on the agricultural land definition in the Williamson Act.[20] This would also be in accordance with the definition of "agricultural land" in CEQA. Public Resources Code Section 21060.1 provides:
  (a) "Agricultural land" means prime farmland, farmland of statewide importance, or unique farmland, as defined by the United States Department of Agriculture land inventory and monitoring criteria, as modified for California.
  (b) In these areas of the state where lands have not been surveyed for the classifications specified in subdivision (a), "agricultural land" means land that meets the requirements of "prime agricultural land" as defined in paragraph (1), (2), (3), or (4) of subdivision (c) of section 51201 of the Government Code.
  (c)
- **Accurate and Complete Analysis of All Impacts**: The impact analysis must not be limited to direct impacts from the regulations. The analysis should consider all direct, indirect, and reasonably foreseeable cumulative impacts.

- **A Full Range of Alternatives Must be Examined**: The Regional Board shall identify and rigorously examine all reasonable alternatives for the project.[21] The range of alternatives must be feasible and must avoid or substantially lessen the project's significant environmental effects[22] "*even if these alternatives would impede to some degree the attainment of the project objectives or would be more costly*."[23] A feasible alternative is one that is "capable of being accomplished in a successful manner within a

[19] Note: this list is not exhaustive.
[20] The California Land Conservation Act of 1965 (Gov. Code, §§ 51200 *et seq.*), commonly known as the "Williamson Act."
[21] 40 C.F.R. §§ 1500.2 subd. (e), 1501.2 subd. (c), 1502.1, 1502.14 subd. (a), 1502.15 subd. (d).
[22] Pub. Resources Code, §§ 21002, 21001.1(a), 21100(b)(4), 21150.
[23] Cal. Code Regs., tit. 14, § 15126.6, subd. (b), *emphasis added.*

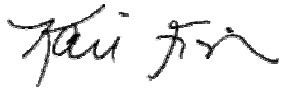
reasonable period of time, taking into account economic, environmental, social, and technological factors."[24]

- **All Impacts to Agricultural Resources Must be Fully Mitigated:** All feasible mitigation measures that are analyzed in the environmental review documents need to address the impacts to agricultural resources, must be fully described, and must mitigate for the impacts. A project of this magnitude has the potential to negatively impact agricultural lands, leading to the conversion of significant amounts of agricultural land to non-agricultural use.[25]

- **Social and Economic Impacts Must be Analyzed:**[26] Although impacts that are solely economic in nature do not constitute "significant effects on the environment," economic or social impacts that will or have the potential to cause a physical change should be considered.[27] The term "significant effect on the environment" is defined in Section 21068 of CEQA as meaning "a substantial or potentially substantial adverse change in the environment."[28] This focus on physical changes is further reinforced by Sections 21100 and 21151.[29] Despite the implication of these sections, CEQA does not focus exclusively on physical changes, and it is not exclusively physical in concern.[30] Thus, in certain situations such as the adoption of an expansive regulatory irrigated lands discharge program, economic and social effects of the project must be used to determine the significant effects on the environment.[31]

Thank you for the opportunity to provide our comments. We look forward to further involvement and discussion with the Regional Board on the renewal of regulations concerning waste discharges from irrigated lands.

Sincerely,



Kari E. Fisher
Associate Counsel

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[24] *See* Pub. Resources Code, § 21061.1; Cal. Code Regs., tit. 14, § 15364.

[25] The Regional Board should consult with applicable county and local governments to assess local agricultural mitigation measures. For example, San Joaquin County and Yolo County have adopted ordinances to preserve agricultural land through the use of agricultural easements for agricultural land lost to development. San Joaquin County requires a 1:1 mitigation ratio for any "General Plan amendment that changes the designation of any land from an agricultural to a nonagricultural use" or any "Zoning Reclassification that changes the permitted use from agriculture to a nonagricultural use, regardless of the General Plan designation." (*San Joaquin County General Plan*, Section 9-1080.3(a),(c).) Yolo County requires a 1:1 mitigation ratio for any "conversion or change from agricultural use to a predominantly non-agricultural use…." (*Yolo County General Plan*, Section 8-2.2416(3).)

[26] CEQA requires analysis of a proposed project's potential impacts agriculture, but social and economic changes are not considered environmental impacts in and of themselves under CEQA, although they may be used to determine whether a physical change is significant or not. CEQA also permits discussion of social and economic changes that would result from a change in the physical environment and could in turn lead to additional changes in the physical environment (Cal. Code Regs., tit. 14, § 15064 subd. (f).)

[27] Cal. Code Regs., tit. 14, §§ 15064(e), 15131.

[28] Pub. Resources Code, § 21068.

[29] Discussion following Cal. Code Regs., tit. 14, § 15131.

[30] *Ibid*.

[31] *Citizens Assn. for Sensible Development of Bishop Area v. County of Inyo* (1985) 172 Cal. App. 3d 151, 170, ["The lead agency shall consider the secondary or indirect environmental consequences of economic and social changes. . . . economic or social change may be used to determine that a physical change shall be regarded as a significant effect of the environment. Where a physical change is caused by economic or social effects of a project, the physical change may be regarded as a significant effect in the same manner as any other physical change resulting from the project. Alternatively, economic and social effects of a physical change may be used to determine that the physical change is a significant effect on the environment."].

Salinas Valley Water Coalition
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(831) 674-3783 • FAX (831) 674-3835

TRANSMITTED VIA EMAIL

Central Coast Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, Ca 93401-7906 27 August, 2010

Re: Comments to CEQA Scoping for the Regulation of Waste Discharges from Irrigated Lands

Dear Mr. Roger Briggs;

The Salinas Valley Water Coalition (SVWC) is a not-for-profit organization comprised of agricultural landowners, farmers and businesses within the Salinas Valley. The SVWC's primary purpose is to participate in the various governmental processes surrounding our water issues, in an effort to preserve the water rights of its members, protect their water resources and to effect water policy decisions in a manner that provides this protection while sustaining agricultural production and quality of life within the Salinas Valley.

The SVWC supports full environmental review of any proposed „new' or „amended' program to regulate irrigated lands and their various components. We believe the appropriate document is a "program EIR", one that would require several subsequent actions to implement proposed programs and regulations. However, the Program EIR will provide the basis to which many of the subsequent actions would be undertaken, and an evaluation of the potential impacts of the various actions – at least at the programmatic level. While the subsequent actions and programs may individually require additional CEQA evaluation, it is difficult to fully understand **all** of the potential impacts of the proposed „new' regulations unless a program environmental impact report is first completed. Without such a document, the public and decision-makers fail to be fully informed.

We have been carefully watching the process that is taking place in Region 5, and we believe Region 3 would benefit from Region 5's experience. Region 5 is developing a long-term irrigated lands regulation program. Region 3 would greatly benefit from developing a similar long term irrigated lands regulation program. Such a program would need to have specific milestones and targets for review of how, and if, the various components of the program are working – and the program would need to have sufficient flexibility to allow for such a review, evaluation and appropriate modification, as necessary to accomplish this.

The SVWC's is not advocating a specific program alternative at this time, but rather, we request that the following „Region 5' alternatives[1] be included in scope of the CEQA document for Region 3's irrigated land regulation program. These alternatives provide options worthy of consideration and evaluation as to which one, or combination of, would best provide for meeting

[1] Please refer to Region 5's Irrigated Lands Regulatory Program Environmental Impact Report for complete detail and discussion on each of the alternatives referred herein.

the water quality goals and needs of Region 3 and that can be implemented in a manner to avoid potential significant adverse impacts – including that of losing prime agricultural lands.

1. Alternative „2': Under this alternative, the Central Coast Regional Water Board (Region 3) would develop a single mechanism or a series of regulatory mechanisms for waste discharge from irrigated agricultural lands to groundwater and surface water. The series of regulatory mechanisms would be designed to provide flexibility in establishing requirements for growers considering the variety of environmental conditions and agricultural operations throughout the Central Coast. These could include WDRs, conditional waivers of WDRs, or conditional prohibitions of discharge.

Under Alternative „2', third-party groups (e.g., water quality coalitions) would function as lead entities representing growers. Regulation of discharges to surface water would be similar to the existing Ag Waiver. However, this alternative allows for a reduction in monitoring under lower threat circumstances and where watershed or area management objective plans are being developed. This alternative also includes requirements for development of groundwater quality management plans (GQMPs) to minimize discharge of waste to groundwater from irrigated lands. However, GQMPs under this alternative would not involve monitoring of groundwater to determine the performance of these management plans. These GQMPs would be reviewed every
5 years by the Region 3 Board and the third-party groups to determine whether and how the GQMPs should be updated. This alternative also relies on coordination with the California Department of Pesticide Regulation (DPR) for regulating discharges of pesticides to groundwater.

Under this alternative, water quality coalitions or other third-party groups would be responsible for general administration of the ILRP and would need to agree to assume greater responsibilities than under the existing Ag Waiver.

Third-party groups would have the option of developing a watershed[2] or area management objectives plan. The goal of this plan would be to meet source control management objectives that would reduce the threat to surface water quality from waste discharge associated with irrigated agriculture. In areas implementing a Region 3 Board-approved watershed or area management objectives plan, surface water monitoring would be reduced. Plans would specify optional water quality management practices that could be implemented to achieve plan objectives. Further, the plan would be developed consistent with the area or watershed commodity types, common agricultural practices, pesticides commonly used, and local land characteristics. Optional practices would be provided to allow growers to adapt to their specific conditions for compliance with the ILRP. The plan also would consider the results of previous water quality sampling.

Growers would be required to track implemented management practices and submit the results to the third-party group. The third-party group would report summary results to Region 3 Board. The third-party group would be required to summarize the results of groundwater and surface water monitoring and tracking in an annual monitoring report to the Region 3 Water Board. All of this would be accomplished in manner that maintains the individual confidentiality.

2. Alternative „3': Under Alternative 3, growers would have the option of working

[2] The original Ag Wavier Order included language regarding watershed program options, and yet after the adoption of the Order, when such an approach was being considered by some, we informed that this was NOT an option because all growers would need to be part of the co-operative monitoring program of CCWQP or do seek an individual WDR. We want to be sure that the watershed approach is a viable option offered in any adopted program by Region 3. Individuals should have the opportunity to work cooperatively together in the manner of their choosing as long as the requirements of the adopted program are being met.

directly with the Region 3 Board or another implementing entity (e.g., county agricultural commissioner's, local water resource agencies) in development of a farm water quality management plan (FWQMP). Growers would individually apply for a conditional waiver or WDRs that would require Region 3 Water Board approval of their FWQMP.

On-farm implementation of effective water quality management practices would be the mechanism to reduce or eliminate waste discharged to state waters. This alternative would provide incentive for individual growers to participate by providing growers with Region 3 Water Board certification that they are implementing farm management practices to protect state waters. This alternative relies on coordination with DPR for regulating discharges of pesticides to groundwater.

Under Alternative 3, growers would be the lead entities working directly with the Region 3 Water Board and would be responsible for applying for coverage, developing FWQMPs, and conducting any required reporting.

Unless specifically required in response to water quality problems, owners/operators would not be required to conduct water quality monitoring of adjacent receiving waters or underlying groundwater. Required monitoring would include evaluation of management practice effectiveness. The Region 3 Water Board, or a designated third-party entity, would conduct annual site inspections on a selected number of operations. They also would review available applicable water quality monitoring data as additional means of monitoring the implementation of management practices and program effectiveness.

3. Alternative „4': Under this alternative, the Region 3 Water Board would develop WDRs and/or a conditional waiver of WDRs for waste discharge from irrigated agricultural lands to groundwater and surface water. As in Alternative 3, growers, or legal entities responsible for waste discharges by a group of growers, would apply directly to the Region 3 Water Board in order to obtain coverage ("direct oversight"). As in Alternative 3, growers would be required to develop and implement individual FWQMPs in order to minimize discharge of waste to groundwater and surface water from irrigated agricultural lands. However, Alternative 4 would include an option for regional monitoring run by a third party instead of monitoring conducted by individual growers.

Discharge of waste to groundwater and surface water would be regulated using a tiered approach. Fields would be placed in one of three tiers based on their threat to water quality. The tiers represent fields with minimal (Tier 1), low (Tier 2), and high (Tier 3) potential threat to water quality. Requirements to avoid or minimize discharge of waste would be the least stringent for Tier 1 fields and the most stringent for Tier 3 fields. This would allow for less regulatory oversight for low-threat operations while establishing necessary requirements to protect water quality from higher-threat discharges. This alternative relies on coordination with DPR for regulating discharges of pesticides to groundwater.

Growers would be lead entities working directly with the Region 3 Water Board; they would be responsible for applying for coverage, developing FWQMPs, and conducting any required monitoring and reporting. This alternative would allow for formation of responsible legal entities that could serve a group of growers who discharge to the same general location and thus could share monitoring locations. In such cases, the legal entity would be required to assume responsibility for the waste discharges of member growers, to be approved by the Region 3 Water Board, and ultimately to be responsible for compliance with ILRP requirements.

For monitoring, growers would have the option of enrolling in a third-party group regional monitoring program instead of conducting individual monitoring. In cases where responsible legal entities were formed, these entities would be responsible for conducting monitoring. All

growers would be required to track nutrient, pesticide, and implemented management practices and submit the results to the Region 3 Water Board (or an approved third-party monitoring group) annually. Other monitoring requirements would depend on designation of the fields as Tier 1, Tier 2, or Tier 3.

4. Alternative „5': Alternative 5 would consist of general WDRs designed to protect groundwater and surface water from discharges associated with irrigated agriculture.

All growers would be required to apply for and obtain coverage under the general WDRs. This alternative would include requirements to (1) develop and implement a FWQMP; (2) monitor (a) discharges of tailwater, drainage water, and storm water to surface water; (b) applications of irrigation water, nutrients, and pesticides; and (c) groundwater; (3) keep records of (a) irrigation water; (b) pesticide applications; and (c) the nutrients applied, harvested, and moved off the site; and (4) submit an annual monitoring report to the Region 3 Water Board.

Alternative 5 relies on coordination with DPR for regulating discharges of pesticides to groundwater. The Region 3 Water Board would develop general WDRs for irrigated agriculture. Growers would be the lead entity in working with the Region 3 Water Board. The Region 3 Water Board would adopt the WDRs, enroll individual growers under the program, provide regulatory oversight, and enforce the requirements of the program. Each grower would be required to monitor tailwater discharges, storm water discharges, and drainage system discharges. In addition, each grower would be required to conduct nutrient and pesticide tracking as well as groundwater monitoring.

Conclusion:

The above alternatives were developed by a large stakeholder group within Region 5 over a period of time – after much thought and discussion. We believe these alternatives are representative of the types of programs that could work within Region 3. Again, we are not advocating support of each of the alternatives, we are stating that we believe they address the realization that Region 3 is not a one-size-fits-all region, individuals should have options for meeting the requirements of the program, and there should be „flexibility' for the manner in which each grower may choose to meet the requirements of the program. As to which alternative is best for Region 3, only a full analysis through a Program EIR, public participation and comments, will the public and decision-makers be fully informed and able to make this determination.

The Salinas Valley Water Coalition and its members believe it is important to maintain good water quality, to protect our resources including our agricultural resources. We believe this can be achieved by working cooperatively together and through a willingness to look beyond our Region 3 boundaries to our neighbors for consideration of other alternatives that could work to meet our water quality needs.

We thank you for the opportunity to submit these comments and ask that you move forward with a Program Environmental Impact Report that includes the alternatives discussed herein. The purpose of CEQA is to fully inform the public and the decision-makers – prior to decisions being made. We do not believe an adequate evaluation of the various alternatives available to implement any proposed irrigated land regulations, can, or should, be made in a vacuum without full and complete analysis of feasible alternatives.

Sincerely,

Nancy Isakson
President, SVWC

PHYTO REMEDIATION ENGINEERING LLC

Jim Moore
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272 Canon Drive, Santa Barbara, CA 93105
(805) 637-3612
www.PhytoRemediationEngineeringLLC.com

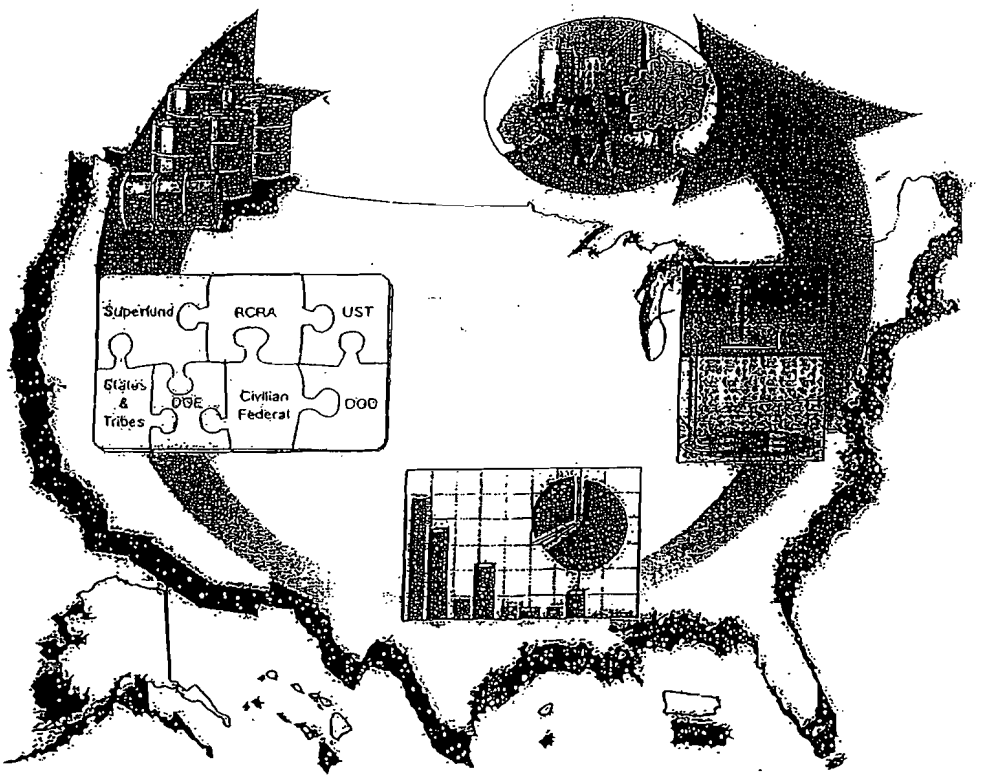
Our Mission

Phyto Remediation Engineering has been created to provide plants and methods to best remove pollutants that threaten our wellbeing.

Our Team

James Moore, Managing Director
Jay Plaehn, Director of Design/Methodology
Sergio Carnalle Ph.D.; Engineer
N. Brauer, Geologist
Matt Brown, Tech Consultant
Dr. Louis Licht, Technical Consultant with 20 years of Phyto Remediation experience (60+ projects)

Cleaning Up the Nation's Waste Sites



In 2004 the Regional Water Quality Control board began the effort to clean up water pollution and groundwater pollution in the farming areas of the Central Coast — roughly an area from Carpinteria to Santa Cruz.

An Anomaly: 90% of the water is from wells.

Nitrate levels in the groundwater caused by use of fertilizers and carcinogens caused by pesticide use on farmland was at levels that caused health problems, even birth defects.

To allow farmers to correct this problem voluntarily the water board issued a conditional waiver and that waiver (that allowed business as usual) expired this year.

Over the past 20 years university studies addressing the problems detailed by the AG waiver have created a database of ways and means to deal with these issues. The least expensive, most effective solution is called Phyto Remediation.

THIS IS OUR BUSINESS.

THE NEED IS HUGE AND URGENT AND WE HAVE POSITIONED OUR TEAM TO RESPOND TO THAT NEED.

May 19, 2010

To: Central Coast Regional Water Quality Control Board
Roger Briggs and Staff

From: Jim Moore
Phyto Remediation Engineering LLC
sequoyallc@yahoo.com

Dear Roger Briggs and Water Board Staff:

I attended the May 17th meeting in San Luis to make contact and speak briefly about pollution cleanup by means of phtyo remediation.

The enormity of the problems detailed by your staff report caused me to step back and take some deep breaths.

A few weeks earlier I had spoken with Dr. Louis Licht about what I had perceived as problems in the Santa Maria area. Dr. Licht is probably the most knowledgeable expert in the country, with more than 60 successful Phyto Remediation projects in the past 20 years. He asked some specific questions and volunteered to consult with us to plan cleanup solutions.

I will share with him whatever information your staff may provide and meet with a few other parties that impressed me at that meeting.

Possibly some staff members had already contacted Dr. Licht as he mentioned an inquiry from a party in Salinas.

I understand the water board's function is to monitor and find ways to improve the water quality with the means available to them: Measurement and Regulation.

My focus and the focus of my company will be:

1 To remove toxins from the runoff leaving the fields as much as possible.
2 Develop a system to reduce the nitrate levels in collection ponds.
3 Develop the best system to lower nitrate concentrations in wells.

Over the past 25 years many universities in the U.S. have studied the problems we face. Now is the time to put that intelligence to work.

I look forward to working with you and your staff in the most amicable and efficient manner.

Sincerely,
Jim Moore
Manager, Director
Phyto Remediation Engineering LLC

TECHNOLOGY SUMMARY

Phytoremediation is the direct use of living plants for *in situ* remediation of contaminated soil, sludges, sediments, and ground water through contaminant removal, degradation, or containment. Growing and, in some cases, harvesting plants on a contaminated site as a remediation method is an aesthetically pleasing, solar-energy driven, passive technique that can be used to clean up sites with shallow, low to moderate levels of contamination. This technique can be used along with or, in some cases, in place of mechanical cleanup methods. Phytoremediation can be used to clean up metals, pesticides, solvents, explosives, crude oil, polycyclic aromatic hydrocarbons, and landfill leachates.

Phytoremediation has been studied extensively in research and small-scale demonstrations, but full-scale applications are currently limited in number. Further development and research of the mechanisms described below likely will lead to wider acceptance and use of phytoremediation.

Phytoremediation is a general term for several ways in which plants are used to remediate sites by removing pollutants from soil and water. Plants can degrade organic pollutants or contain and stabilize metal contaminants by acting as filters or traps. Some of the methods that are being tested are described below.

Phytoextraction

Phytoextraction, also called phytoaccumulation, refers to the uptake and translocation of metal contaminants in the soil by plant roots into the aboveground portions of the plants. Certain plants called hyperaccumulators absorb unusually large amounts of metals in comparison to other plants. One or a combination of these plants is selected and planted at a site based on the type of metals present and other site conditions. After the plants have been allowed to grow for several weeks or months, they are harvested and either incinerated or composted to recycle the metals. This procedure may be repeated as necessary to bring soil contaminant levels down to allowable limits. If plants are incinerated, the ash must be disposed of in a hazardous waste landfill, but the volume of ash will be less than 10% of the volume that would be created if the contaminated soil itself were dug up for treatment.

Rhizofiltration

Rhizofiltration is the adsorption or precipitation onto plant roots or absorption into the roots of contaminants that are in solution surrounding the root zone. The plants to be used for cleanup are raised in greenhouses with their roots in water rather than in soil. To acclimate the plants once a large root system has been developed, contaminated water is collected from a waste site and brought to the plants where it is substituted for their water source. The plants are then planted in the contaminated area where the roots take up the water and the contaminants along with it. As the roots become saturated with contaminants, they are harvested and either incinerated or composted to recycle the contaminants.

Phytostabilization

Phytostabilization is the use of certain plant species to immobilize contaminants in the soil and ground water through absorption and accumulation by roots,

CEQA- U23
Preliminary Draft Agricultural Order

adsorption onto roots, or precipitation within the root zone. This process reduces the mobility of the contaminant and prevents migration to the ground water or air, and it reduces bioavailability for entry into the food chain. This technique can be used to reestablish a vegetative cover at sites where natural vegetation is lacking due to high metal concentrations in surface soils or physical disturbances to surficial materials. Metal-tolerant species can be used to restore vegetation to the sites, thereby decreasing the potential migration of contamination through wind erosion, transport of exposed surface soils, and leaching of soil contamination to ground water.

Phytodegradation Phytodegradation, also called phytotransformation, is the breakdown of contaminants taken up by plants through metabolic processes within the plant, or the breakdown of contaminants external to the plant through the effect of compounds (such as enzymes) produced by the plants. Pollutants are degraded, incorporated into the plant tissues, and used as nutrients.

Rhizodegradation Rhizodegradation, also called enhanced rhizosphere biodegradation, phytostimulation, or plant-assisted bioremediation/degradation, is the breakdown of contaminants in the soil through microbial activity that is enhanced by the presence of the rhizosphere and is a much slower process than phytodegradation. Microorganisms (yeast, fungi, or bacteria) consume and digest organic substances for nutrition and energy. Certain microorganisms can digest organic substances such as fuels or solvents that are hazardous to humans and break them down into harmless products through biodegradation. Natural substances released by the plant roots—sugars, alcohols, and acids—contain organic carbon that provides food for soil microorganisms, and the additional nutrients enhance their activity. Biodegradation is also aided by the way plants loosen the soil and transport water to the area.

Phytovolatilization Phytovolatilization is the uptake and transpiration of a contaminant by a plant, with release of the contaminant or a modified form of the contaminant to the atmosphere from the plant. Phytovolatilization occurs as growing trees and other plants take up water and the organic contaminants. Some of these contaminants can pass through the plants to the leaves and volatilize into the atmosphere at comparatively low concentrations.

CEQA- U23
Preliminary Draft Agricultural Order

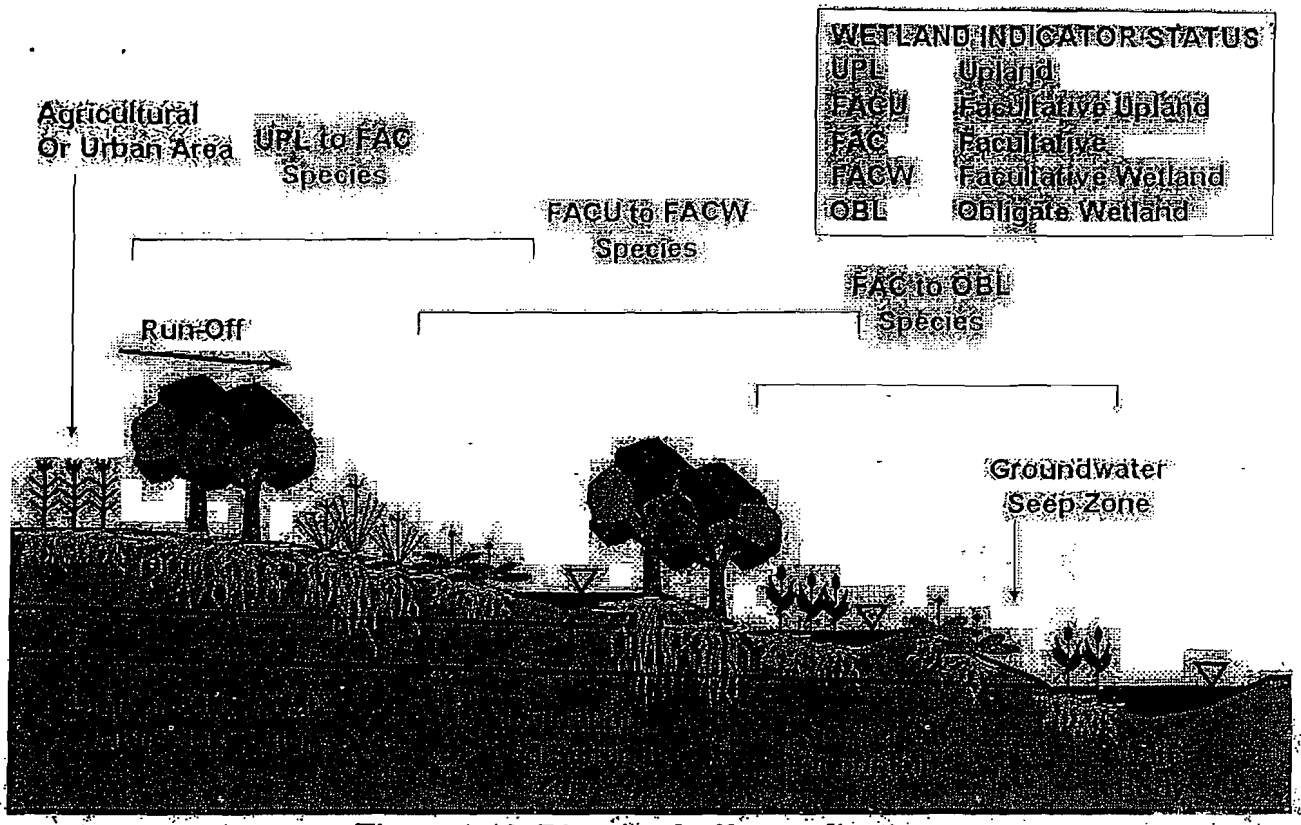
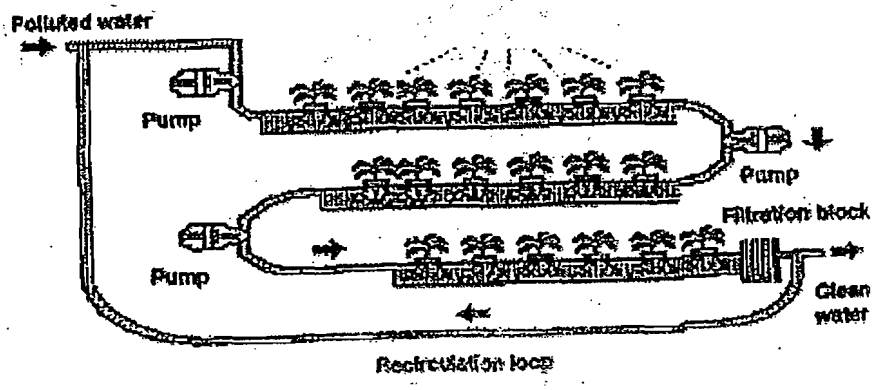


Figure 1-12. Riparian buffer application.

A way to remove toxins from field runoff:

Commercial filters can remove toxins from well water used for irrigation .

To clean water from ponds:



History of the Manager and our Team

The Manager, James E. Moore, is a general contractor in California. He has managed 50+ projects from concept to completion, mostly as an owner with full responsibility for every aspect of each project. He has studied most Phyto Remediation projects done to date, and will coordinate project with input from EPA recognized consultants.

Jay Plaen, the director of methods and materials is an inventor. He holds patents on several products. His passion is sustainable forestry and creative solutions to dairy farming issues.

Sergio Carmalla is an engineer with a wealth of experience in the testing of materials and methods.

N. Brauer is a geologist and soils engineer with expertise in environmental research.

Matt Brown, an inventor with patents for marine applications.

Consulting experts recognized and recommended by the EPA and universities.

August 16, 2010

To: The Water Quality Control Board
and other interested parties:

While the problem of polluted groundwater along the Central Coast seems daunting, even overwhelming, there are solutions that can effect dramatic reductions in contaminants in a relatively short time. And continuing improvement after the first two years.

We believe the problem is best addressed by engineered planted riparian buffers that could be as narrow as 50 feet in width.

Appended is a list of studies and projects done in the past 20 years. Please note many were conducted by Dr. Lou Licht who has agreed to consult with us when we have a project or projects.

> *As agriculture and urbanization encroach upon downgradient surface water bodies, NPS pollution is often generated in the runoff. This can contain fertilizers, pesticides, and animal waste from agriculture; sediment from cleared, urbanized lands; and road salts, automotive fluids, and other urban chemicals from roadways and infrastructure. Riparian buffers are vegetated areas that protect adjacent water resources from NPS pollution. In addition, these buffers provide bank stabilization and habitat for aquatic and other wildlife.*

STATE OF CALIFORNIA
CENTRAL COAST
Received
AUG 16 2010
895 A
San Luis O
CA 93401

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Erickson, L.E., M.M. Rankin, S.C. Grant, and J.P. McDonald (Eds.), *Proceedings of the 12th Annual Conference on Hazardous Waste Research,* Kansas City, Missouri, May 19-22, 1997. URL http://www.engg.ksu.edu/HSRC/97Proceed/proc97.html.

CEQA- U23
Preliminary Draft Agricultural Order

GRANTS

ORGANIC CHEMICAL CONTAMINATION OF SOIL/WATER (cont.)

Principal Investigator(s)	Budget Total/Current	Project No./ Completion Date	Project Title
Parkin, Gibson	$259k/$0k	5 1992	Feasibility of *In Situ* Anaerobic Bioreclamation of Mixtures of Toxic Chemicals: Feasibility of Using Genetically Engineered Bacteria to Degrade Trichloroethylene in Activated-Sludge Systems
Characklis, Jones, Cunningham, Lewandowski	$394k/$0k	89-23 1992	*In Situ* Bioremediation of Organic Groundwater Contaminants
Banerji, Bajpai	$323k/$0k	7 1992	Migration and Biodegradation of Pentachlorophenol in Soil Environment
Schnoor, Parkin	$349k/$0k	10 1992	Modeling Dissolved Oxygen, Nitrate, and Pesticide Contamination in the Subsurface Environment
Yanders, Kapila	$327k/$0k	9 1992	Time-Dependent Movement of Dioxin and Related Compounds in Soil
Glasgow	$141k/$0k	11 1992	Vadose Zone Decontamination by Air Injection
Schnoor, Licht	$246k/$0k	89-10 1994	Deep-Rooted Poplar Trees as an Innovative Treatment Technology for Pesticide and Toxic Organics Removal from Groundwater
Schnoor, Licht	$39k/$0k	R-1 1993	The Role of Deep-Rooted Poplar Trees in Adding Organic Carbon to the Soil for Pesticides and Toxic Organics Removal
Parkin	$135k/$0k	91-08 1994	The Effect of Redox Conditions on Transformations of Carbon Tetrachloride
Kapila, Armstrong, Puri	$282k/$0k	91-04 1994	Laboratory and Field Evaluation of Upward Mobilization and Photodegradation of Polychlorinated Dibenzo-P-Dioxins
Cunningham, Costerton	$306k/$0k	91-25 1994	Microbial Transport in Porous Media
Tracy, Davis, Erickson, Schnoor	$367k/$0k	90-13 1995	Modeling the Use of Plants in the Remediation of Soil and Groundwater Contaminated by Hazardous Organic Substances
Licht, Schnoor	$349k/$0k	91-03 1995	Riparian Poplar Tree Buffer Impact on Non-Point Source Surface Water Contamination
Parkin	$214k/$0k	91-07 1995	Formation and Transformation of Pesticide Degradation Products Under Various Electron Acceptor Conditions
Illangasekare	$477k/$0k	91-10 1997	Modeling for Design and Testing of Treatment and Remediation Technologies for Aquifer Soils Contaminated with Organic Waste Chemicals

PERT 1992

PERT 1992

1994

1995

1994

PERT 1995

1995

ORGANIC CHEMICAL CONTAMINATION OF SOIL/WATER (cont.)

CEQA- U23
Preliminary Draft Agricultural Order

GRANTS

Principal Investigator(s)	Budget Total/Current	Project No./ Completion Date	Project Title
Erickson, Fan	$269k/$0k	91-29 1996	Remediation of Soil Contaminated with an Organic Phase
Coats, Anderson	$152k/$0k	93-05 1997	Use of Vegetation to Enhance Bioremediation of Surface Soils Contaminated with Pesticide Wastes
Kapila, Forciniti, Armstrong	$142k/$0k	93-16 1996	Laboratory and Field Evaluation of Upward Mobilization and Photodegradation of Polychlorinated Aromatics in Soil
Bajpai, Banerji, Puri, Zappi	$281k/$0k	94-08 1998	Remediation of Soils Contaminated with Wood-Treatment Chemicals (PCP and Creosote)
Gibson, Tracy, Kennedy	*	NCIBRD 1 1997	Use of C_2 to C_{18} Organic Acids and Selected Surfactants to Enhance Bioremediation of DNAPL-Contaminated Aquifers
Parkin, Schnoor, Alvarez	$416k/$0k	93-02 2001	The Role of Metallic Iron in the Biotransformation of Chlorinated Xenobiotics
Parkin	$198k/$0k	93-24 2001	Application of Anaerobic and Multiple-Electron-Acceptor Bioremediation to Chlorinated Aliphatic Subsurface Contamination
Segar	$204k/$0k	94-07 2000	Trichloroethene (TCE) Cometabolism in Fluidized-Bed Bioreactors
Schnoor, Burken	$475k/$0k	94-25 2000	Uptake of BETX Compounds and Metabolites by Hybrid Poplar Trees in Hazardous Waste Remediation
Davis, Erickson	$345k/$0k	94-27 2000	Plant-Assisted Remediation of Soil and Groundwater Contaminated by Hazardous Organic Substances: Experimental and Modeling Studies
Illangasekare	$521k/$0k	94-29 2000	Extension of Laboratory-Validated Treatment and Remediation Technologies to Field Problems in Aquifer Soil and Water Contamination by Organic Waste Chemicals
Miller	$158k/$0k	94-15 1998	Removal of Chlorinated Hydrocarbons from Contaminated Water Using Air-Sparged Hydrocyclone Technology
Doucette, Bugbee, Stevens	$504k/$0k	95-10 2000	Fate of Trichloroethylene (TCE) in Plant/Soil Systems: Evaluating Phytoremediation
Zhang, Comfort, Shea	$394k/$0k	95-32 2001	Simultaneous Transformation of Atrazine and Nitrate in Contaminated Water, Sediment, and Soil by Zero-Valent Iron-Promoted Processes

1997

2000

*Funded through the Great Lakes/Mid-Atlantic Hazardous Substance Research Center

ORGANIC CHEMICAL CONTAMINATION OF SOIL/WATER (cont.)

CEQA-023
Preliminary Draft Agricultural Order

CAN WE MAKE A DIFFERENCE

Between Santa Barbara and Santa Cruz counties there are 3,000 farms.

90% of the water used on these farms is well water.

This well water is unsafe to drink.

When this water is used for irrigation fertilizers and pesticides are added to aid in crop production.

The runoff from the fields goes to the groundwater and surrounding waterways.

Don't drink it. Don't swim in it. Can anything survive in it?

CAN WE FIX THIS PROBLEM?

Our company was created to do this work.

20 years of research at universities creates a database of plants and methods to remove pollutants from soil and groundwater.

At Phyto Remediation we have begun this cleanup.

WILL YOU, CAN YOU JOIN US?

Jim Moore
Manager Director
Phyto Remediation Engineering

August 25, 2010

Central Coast Regional Water Quality Control Board
Roger Briggs and Staff

Attn: Lisa McCann

Dear Lisa,

I am directing this letter to you as I believe your area of responsibility is Ag runoff – groundwater. If I am wrong, please direct it to the proper party.

A component of the revised Ag order of interest is the requirement of a 100' buffer around all farm land. A bitter pill for farmers as every 400' of buffer will remove one acre from production.

While a 100' buffer might have some positive effect in reducing nitrate levels, science suggests an engineered, planted buffer with the proper trees, plants, grasses could be as narrow as 50' and would reduce nitrate and pesticide levels dramatically in a few seasons (20 years of research and projects support this contention). Monitoring, sampling could and should be done by neutral parties before the buffer installation to create a benchmark for each field; then again at appropriate times in following growing seasons.

This information could be private if funded by the farmer; or public if funded by an agency.

This is an important first step towards the improvement of groundwater quality as clean runoff will eventually flush the groundwater to acceptable levels.

Additionally, if engineered buffer systems could be combined with effective well water filtering we could look forward in a few years to safe drinking water – and feel better about what we eat.

Because the Central Coast is essentially a 'closed' system, i.e. well water for irrigation, runoff to groundwater, groundwater to well water, the solutions are simple and available.

In any case the Central Coast of California should have higher water quality standards than a third world country.

I look forward to working with you and your staff in the most amicable and efficient manner.

Sincerely,
Jim Moore
Phyto Remediation Engineering
805-637-3612
sequoyallc@yahoo.com

August 27, 2010

Regional Water Quality Control Board
Central Coast Region
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401

Re: <u>California Environmental Quality Act (CEQA) Scoping Comments and Recommendations for the Regulation of Waste Discharges from Irrigated Lands</u>

Dear Regional Board:

We offer these comments on the CEQA scoping plan for the Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands ("New Order"). The Environmental Defense Center (EDC), Monterey Coastkeeper (MCK), Santa Barbara Channelkeeper (SBCK) and San Luis Obispo Coastkeeper (SLOCK) support a conditional waiver program that contains robust regulatory provisions to ensure that waters on the Central Coast are protected from agricultural discharges. In general, we are very supportive of the Draft Order made available for review in February 2010. The waiver program described in that February Draft Order would result in beneficial environmental impacts and would not result in negative impacts to the environment. Therefore, the CEQA process leading up to the New Order should be minimal. In particular, we support a reiteration of the Negative Declaration (attached hereto as Exhibit A) issued for the inaugural conditional waiver, Regional Board Order No. R3-2004-0117, in July 2004.

EDC is a non-profit public interest law firm that represents community organizations in environmental matters affecting California's south central coast. EDC protects and enhances the environment through education, advocacy and legal action. MCK protects the water, watersheds and coastal ocean for the benefit of wildlife and human populations alike. MCK serves Monterey and Santa Cruz counties including the northern Salinas and Pajaro river basins. SBCK is a non-profit environmental organization dedicated to protecting and restoring the Santa Barbara Channel and its watersheds through citizen action, education, field work and enforcement. SBCK has nearly ten years of experience in conducting citizen water quality monitoring activities in agricultural watersheds. SLOCK is a program of Environment in the Public Interest and has consistently participated in water pollution, environmental impact and endangered

906 Garden Street Santa Barbara, CA 93101 Phone (805) 963-1622 FAX (805) 962-3152
www.edcnet.org

species permit processes via comments on particular permits, or when necessary via enforcement actions in northern Santa Barbara County and throughout San Luis Obispo County.

EDC and SBCK participated in the 2004 stakeholder process which informed Regional Board Order No. R3-2004-0117. EDC, MCK and SBCK participated in the 2009 stakeholder process convened by staff to discuss the New Order. We have also engaged other Central Coast public interest organizations in this process, including organizations that focus on water quality and related issues.

The Notice of CEQA Scoping Meeting and Schedule released on July 27, 2010, states that interested persons are requested to comment on specific issues, including economics and the environment.

Estimated Costs of Compliance

Some commenters at the Regional Board's May 12 hearing in San Luis Obispo suggested that the February Draft Order would result in significant environmental impacts, i.e. farmland conversion, which may affect agricultural business practices and economics. While the estimated costs of regulatory programs must be discussed under certain statutes, CEQA does not require consideration of economic impacts.[1] As such, costs associated with farmland conversion are not appropriate for consideration in a CEQA document. Potential for significant *environmental* impacts related to farmland conversion is discussed below.

Environmental Impacts

CEQA Guidelines Section 15070(a) provides that where there is no substantial evidence that a project will have a significant effect on the environment, a responsible public agency should prepare a Negative (or Mitigated Negative) Declaration.

As noted above, the Regional Board approved a Negative Declaration when it adopted Order No. R3-2004-0117 in July 2004. In doing so, the Regional Board noted that the 2004 Order was "designed to reduce discharges of agricultural pollutants and improve water quality." The Draft Order would "not require or allow any changes in practices that could degrade the quality of the environment or have environmental effects that could cause substantial indirect or direct adverse effects on human beings." (2004 Negative Declaration, at p. 34.) The same finding holds true today, with respect to the February 2010 Draft Order.

The 2004 Negative Declaration also provides guidance for analysis of farmland conversion:

[1] CEQA Guidelines § 15064(e). "Economic and social changes resulting from a project shall not be treated as significant effects on the environment."

> Many [best management practices] may actually improve agricultural resources by reducing the loss of topsoil or improving soil quality . . . .
>
> Conservation practices that could affect the amount of land used for producing crops include vegetating farm roads, installing vegetated filter strips along creeks and at the ends of field rows, planting cover crops, and installing sediment detention basins. The Regional Board has reviewed the potential cost of some commonly used practices that might be employed by growers. Practices vary widely in both their initial installation costs and in long-term costs associated with maintenance and reduced cropping area. In some cases practices can result in improved productivity that will offset costs associated with taking some land out of production for conservation practices. Some practices, such as improved irrigation efficiency and nutrient management, can result in cost savings over time.

(2004 Negative Declaration, at p. 29-30.) Consequently, potential conversion of farmland should be considered a less-than-significant impact.

Alternatives

If this CEQA process culminates in an Environmental Impact Report (EIR), an alternative that utilizes individual Waste Discharge Requirements (WDRs) should be developed. Any alternative examined by the Regional Board must meet objectives described in the Porter-Cologne Water Quality Control Act, the federal Clean Water Act and other statutes and regulations designed to protect water quality in the State of California.[2] It is possible that the waiver approach will no longer be sufficient, either wholly or in part, to meet the objectives described in our clean water laws. While potentially cumbersome, a WDR approach guarantees a finer-grain inspection of the root causes of water quality degradation. Preferably, if an EIR is deemed necessary, staff will examine an alternative that only implements WDRs, and a separate alternative that utilizes a combination of WDRs, waiver(s) and other tools at the Regional Board's disposal.

Conclusion

Please issue an Initial Study and Negative Declaration as soon as possible, so that staff may resume work on the important task of updating the Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands.

Thank you, and please do not hestitate to contact us with any questions or concerns.

---

[2] CEQA Guidelines section 15126.6 states that an EIR must describe a reasonable range of alternatives to a proposed project. Alternatives must feasibly attain most (but not all) project objectives and must avoid or substantially lessen any significant effects of the proposed project.

Sincerely,

/s/ *Nathan G. Alley*

Nathan G. Alley, Staff Attorney
Environmental Defense Center

/s/ *Steve Shimek*

Steve Shimek, Executive Director
Monterey Coastkeeper

/s/ *Kira Redmond*

Kira Redmond, Executive Director
Santa Barbara Channelkeeper

/s/ *Gordon Hensley*

Gordon Hensley, Executive Director
San Luis Obispo Coastkeeper

Att: Initial Study and Negative Declaration for Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands, Central Coast Regional Water Quality Control Board, July 2004.

EXHIBIT A

INITIAL STUDY and Negative Declaration For Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands

Central Coast Regional Water Quality Control Board

Prepared by:

Central Coast Regional Water Quality Control Board
895 Aerovista Place
San Luis Obispo, CA 93401
Contact: Alison Jones, Environmental Scientist, (805) 542-4646

July 2004

Item No. 3, Attachment No. 1
July 9, 2004 Meeting
AG Waiver

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Attachments

1. Draft Order titled "Conditional Waivers of Waste Discharge Requirements for Discharges from Irrigated Lands"
2. Draft Monitoring and Reporting Program titled "Monitoring and Reporting Program No. R3-2004-XXXX for Dischargers Enrolled under Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands"

Project Information Form

Central Coast Regional Water Quality Control Board

Draft Negative Declaration

1. Project title:	Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands
2. Lead agency name and address:	Central Coast Regional Water Quality Control Board 895 Aerovista Place San Luis Obispo, CA 93401
3. Contact person and phone number:	Alison Jones, Environmental Scientist (805) 542-4646
4. Project location:	Central Coast Region
5. Project sponsor's name and address:	Not applicable
6. General plan designation:	Not applicable
7. Zoning:	Not applicable

8. Description of project: Section 13269 of the California Water Code (CWC) authorizes the Central Coast Regional Water Quality Control Board (Regional Board) to waive waste discharge requirements (WDRs) for a specific discharge or specific type of discharge if the waiver is in the public interest. The waiver must be conditional and may be terminated at any time. The Regional Board may also waive the requirement to submit a report of waste discharge. In 1999, Senate Bill 390 amended CWC Section 13269. CWC Section 13269 specifies that waivers in effect on January 1, 2000, terminate on January 1, 2003, but may be renewed following a hearing. Waivers may only be adopted for a maximum of five years.

The Regional Board proposes to adopt a conditional waiver of WDRs for discharges from irrigated lands, including tailwater, subsurface drainage, and stormwater runoff, and to waive the requirement to submit reports of waste discharge. Irrigated lands include nurseries and soil-floored greenhouses as well as lands planted to row crops, vineyards, tree crops, and field crops. This waiver would be in effect for five years beginningJuly 8, 2004.

The conditions of the proposed waiver would require all owners and operators of irrigated lands in the Central Coast Region to: 1) enroll with the Regional Board by submitting a Notice of Intent, 2) complete fifteen hours of water quality education, 3) develop a farm water quality management plan that addresses, at a minimum, erosion control, irrigation management, nutrient management and pesticide management, 4) implement management practices in accordance with the farm plan, and 5) conduct individual monitoring or participate in a cooperative monitoring program.

This waiver would set forth two categories of waivers of Waste Discharge Requirements. One category (Tier 1) applies to dischargers who have already completed the education and farm plan development requirements and have begun to implement management practices for their operations. The other category (Tier 2) applies to dischargers who have not yet completed all the requirements for a Tier 1 waiver. Tier 2 waivers would be renewable annually for up to three years.

The conditions of the waiver include timely completion of education and plan development requirements, implementation and reporting of management practices designed to protect water quality, and compliance with all requirements of applicable water quality control plans.

The goal of the waiver program is to manage discharges from irrigated lands to ensure that such discharges do not cause or contribute to conditions of pollution or nuisance as defined in Section 13050 of the California Water Code and do not cause or contribute to exceedances of any Regional, State, or Federal numeric or narrative water quality standard.

Details of the proposed waiver conditions are contained in the attached draft order (*Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands*).

9. Surrounding land uses and settings: The project encompasses approximately 600,000 acres of irrigated agricultural lands in the Central Coast Region, and includes the irrigated lands in the Pajaro, Salinas, Santa Maria, and Santa Ynez River watersheds as well as several smaller coastal streams. Although agriculture (irrigated lands and rangeland) is the dominant land use throughout the Central Coast Region, many watersheds have mixed uses, where agricultural lands are interspersed with rural residential, suburban and urban areas. Salinas, the Region's largest city, has a population of more than 100,000, and lies surrounded by agricultural lands at the base of the watershed of the Salinas River, which drains to Monterey Bay National Marine Sanctuary. The Central Coast Regional Water Quality Control Board has jurisdiction over all of the watersheds listed above, which all drain to the Pacific Ocean. The region includes all or part of the following counties: San Mateo, Santa Cruz, Santa Clara, San Benito, Monterey, San Luis Obispo, Santa Barbara and Venture.

10. Other public agencies whose approval is required: None

Environmental Factors List

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:
The environmental resource categories identified below are analyzed herein to determine whether the Proposed Project would result in adverse impacts to any of these resources. None of the categories below are checked because the Proposed Project is not expected to result in "significant or potentially significant impacts" to any of these resources.

- ☐ Aesthetics
- ☐ Hazards & Hazardous Materials
- ☐ Public Services
- ☐ Agriculture Resources
- ☐ Hydrology/Water Quality
- ☐ Recreation
- ☐ Air Quality
- ☐ Land Use Planning
- ☐ Biological Resources
- ☐ Mineral Resources
- ☐ Utilities/Service Systems
- ☐ Cultural Resources
- ☐ Noise
- ☐ Mandatory Findings of Significance
- ☐ Geology/Soils
- ☐ Transportation/Traffic

Determination

The Central Coast Regional Water Quality Control Board has reviewed the proposed project and has determined that the project, based on the Initial Study attached hereto, will not have a significant effect on the environment. An environmental impact report is not required pursuant to the California Environmental Quality Act of 1970 (CEQA). This environmental review process and negative declaration is done in accordance with CEQA (PRC 21000 et seq.) and the CEQA Guidelines (14 CCR 15000 et. Seq.)

Based on the findings of the Initial Study, the project would not:

- Degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of California history or prehistory.
- Achieve short-term, to the disadvantage of long-term, environmental goals.
- Have impacts that are individually limited, but cumulatively considerable.
- Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly.

On the basis of this initial evaluation:

☒ I find that the Proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the Proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made by or agreed to by the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

- ❑ I find that the Proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

- ❑ I find that the Proposed Project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect: 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

- ❑ I find that although the Proposed Project could have a significant effect on the environment because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the Proposed Project, nothing further is required.

No potentially significant impacts were identified.

Signature	Date
Printed Name	Organization

1 Initial Study

1.1 Project Purpose

The purpose of the project is to adopt an Order approving a "Conditional Waiver of Waste Discharge Requirement for Discharges from Irrigated Lands" (Waiver). (See attached Order and Waiver) that would regulate the discharge of waste from irrigated lands, including commercial nurseries and soil-floored greenhouses, consistent with the California Water Code and other goals, policies and objectives of the State of California.

1.2 Location

The Waiver applies to all of the irrigated land within the jurisdiction of the Central Coast Regional Water Quality Control Board.

1.3 Background

Regulatory Requirements

Although discharges that constitute "agricultural return flows" are exempt from regulation through the National Pollutant Discharge Elimination System (NPDES) permit program of the federal Clean Water Act, they are not exempt from the California Water Code. Any discharge from irrigated agricultural activities to surface water or to land, that impacts or threatens to impact water quality, is subject to regulation under Porter-Cologne Water Quality Control Act.

CWC Section 13260 requires persons who are discharging or who propose to discharge waste where it could impact the quality of waters of the State to submit a Report of Waste Discharge. The Regional Board uses the Report of Waste Discharge in preparing Waste Discharge Requirements that regulate the discharges of waste in compliance with the CWC and other applicable laws and regulations. The purpose of this regulatory program is to protect the beneficial uses of the waters of the State.

CWC Section 13269 authorizes the Regional Board to waive Waste Discharge Requirements for a specific discharge or specific type of discharge if the waiver is in the public interest. The waiver must be conditional and may be terminated at any time. The Regional Board may also waive the requirement to submit a Report of Waste Discharge. In 1999, Senate Bill 390 amended CWC Section 13269. CWC Section 13269 now specifies that all waivers in effect on January 1, 2000, were terminated on January 1, 2003, unless renewed following a hearing. All waivers must be reviewed and renewed or revised at least every five years.

In 1983, the Regional Board approved a list of categories of discharge for which waste discharge requirements could be waived, including discharge of irrigation return flows (tailwater) and non-NPDES stormwater runoff. When waivers for discharges from irrigated agriculture were adopted in 1983, little was known about the potential impacts of irrigation tail water and other runoff or the magnitude of groundwater impacts from the use of inorganic fertilizers. Regional Board regulatory effort at that time was largely focused on addressing point source discharges such as wastewater treatment plants and industrial dischargers, and cleanups from spills and leaks. Even though the waiver policy included agricultural tail water as appropriate for waivers, the Regional Board did not issue individual formal waivers for these discharges. The 1983 waivers pertaining to irrigated agriculture were not renewed before January 1, 2003, and have now terminated.

In 1987, Section 319 was added to the Clean Water Act to address nonpoint source pollution, and subsequently the State of California adopted its Nonpoint Source Program in 1988. Although staff resources were extremely limited, the Regional Board began to work with agriculture through the Nonpoint Source (NPS) Program and later the State's Watershed Management Initiative. Since the inception of the NPS program, the Regional Board's emphasis in working with agriculture has been on encouraging proactive efforts to address water quality concerns, and supporting such cooperative partnerships as Monterey Bay National Marine Sanctuary's Plan for Agriculture. The Regional Board has directed grant funding toward increasing educational outreach, and has encouraged efforts toward self-determined compliance with water quality regulations through promotion of ranch and farm water quality management planning short courses throughout the region.

The State's NPS Plan identifies waivers (Tier 2, "Regulatory Encouragement") as an appropriate regulatory tool available to protect water quality from NPS pollution, recognizing the challenges involved in regulating a large number of individual dischargers.

Agriculture in the Central Coast Region

Irrigated agriculture in the Central Coast Region comprises approximately 600,000 acres and more than 100 different crops. There are about 2500 agricultural operations in the region that would be enrolled under this program. Operations range in size from less than ten acres to more than 2000; however, approximately two-thirds of all operations are less than fifty acres. About one-third are less than ten acres. Fewer than 200 operations (less than 8%) exceed 2000 acres. Major crops include vegetable crops (such as lettuce, broccoli, cauliflower, celery, cabbage and spinach), fruits (such as strawberries and wine grapes), cut flowers, and potted plants. Other crops include mushrooms, artichokes, raspberries, asparagus, carrots, onions, snap peas, and many more.

Agriculture is concentrated in several major drainages, including the Salinas Valley and upper Salinas watershed, the Pajaro Valley, the lower Santa Maria River, the Santa Ynez

Valley and the Santa Barbara coastal area, as well as in numerous small drainages throughout the region.

A number of factors make agriculture in the Central Coast region unique. In general, farming is on a smaller scale than in the Central or Imperial Valleys. The Central Coast climate is unique in California and comprises a "niche" in the agricultural industry that distinguishes Central Coast farm products from other areas. The majority of operations are less than 50 acres. There are no large irrigation districts since most operations use groundwater as their water source. Many properties have been held in families for generations and are leased out rather than sold. The area is considered highly desirable, and growth pressures drive up the price of agricultural rents. There is a mixture of owned and leased lands and many operators own some ranches and lease others. Leases can be either short or long term (one year or more than five years), resulting in varying incentive by lease-holders to implement water quality protection.

Crop prices are primarily controlled by the existing market structure. Consolidation in the food industry has resulted in a smaller group of buyers, giving corporate retailers more bargaining power. In addition, local farmers often compete with products from other countries, where the costs of production may be substantially less. The result is that growers often have little control over the price they are paid even though the costs of producing and delivering products continues to rise. Additionally, issues of food safety are increasingly dictating practices growers must use in order to sell crops, and some recommended food safety practices may run counter to water quality protection practices. Because of these and other factors, the agricultural industry is extremely sensitive to cost increases and management practice requirements.

Existing Water Quality in Agricultural Areas

Information available to the Regional Board, including information used in identifying impaired water bodies within the Region in accordance with Clean Water Act section 303(d), indicates that irrigation return water and storm water runoff from irrigated lands contains waste that has impacted water quality in the waters of the State within the Region.

Over the past five years, the Regional Board's Central Coast Ambient Monitoring Program (CCAMP) has provided information to characterize water quality, support waterbody beneficial use determinations, support waterbody listings for impairment, and to evaluate regional priorities. Under CCAMP, the Region has been divided into five rotational monitoring areas, based on hydrologic units such as the Pajaro River, Salinas River and Santa Maria River. Each rotational area is monitored once every five years. CCAMP performs tributary-based, in-stream monitoring at fixed sites throughout the rotational area on a monthly basis. The same sites are monitored again during the next rotational cycle.

CCAMP data, as well as other data sources, have shown that waterbodies in areas of intensive agriculture often have high levels of nutrients. For example, nitrate in some surface waters is present at levels far in excess of the drinking water standard of 10 mg/L as N (nitrogen). Persistent toxicity has also been documented in some areas of intensive agricultural operations, with its cause being traced to currently applied pesticides. Many surface waterbodies are on the Clean Water Act Section 303(d) list of impaired waters for pollutants associated with agricultural activities, and are scheduled for development of Total Maximum Daily Loads. Of the region's 178 currently listed waterbodies, about 75 designate agriculture as a potential source. In addition, many groundwater basins underlying agricultural areas in

the Central Coast Region show elevated nitrate concentrations, in some cases well over the drinking water standard.

Existing Efforts by the Agricultural Industry to Address Water Quality Issues
The Central Coast Region has benefited from the proactive approach taken by several segments of the agricultural industry. Notable examples include the Agricultural Water Quality Program of the Coalition of Central Coast County Farm Bureaus (Farm Bureau Coalition) and efforts to promote sustainable wine growing practices by the Central Coast Vineyard Team and the Central Coast Winegrowers Association. Efforts are also underway to promote sustainable practices by Spanish-speaking farmers through the Rural Development Center and the Agricultural Land-Based Training Association (ALBA) in Monterey County.

The Farm Bureau Coalition has been working to address agricultural water quality impacts in areas that drain to the Monterey Bay National Marine Sanctuary, which represents approximately two-thirds of the region. This is a broadly supported cooperative effort that is implementing the Sanctuary's Plan for Agriculture and Rural Lands. The Sanctuary Plan was developed in cooperation with the California State Farm Bureau Federation and the Coalition of Central Coast County Farm Bureaus, the Regional Board and numerous other partners, including University of California Cooperative Extension, the Natural Resource Conservation Service and local Resource Conservation Districts.

Key components of the Sanctuary Plan implementation strategy include formation of grower working groups, and development and implementation of farm water quality management plans. Technical assistance is provided by Farm Bureau watershed coordinators active in each county, as well as all of the other partners listed above. Farm Bureau watershed coordinators provide the Regional Board with annual reports summarizing practice implementation and self-monitoring results by grower watershed working groups.

A small but significant (and increasing) percentage of growers on the Central Coast are participating in the Farm Bureau Coalition's program. As of March 2004, there were 17 active grower watershed working groups and another 17 in the process of organizing. The Regional Board estimates that active participants represent approximately 10% of operations in the region. Participants are often industry leaders who have chosen to be proactive in addressing water quality concerns.

In 1999, the University of California Cooperative Education and the Natural Resources Conservation Service developed and piloted a Farm Water Quality Planning short course in the Central Coast, to provide farmers with the information and resources needed to address water quality issues on their farms. The course provides farmers with information on water quality management practices for irrigation, pesticides, nutrients, and erosion control. Course participants are able to complete a farm water quality management plan by the end of the 15-hour course. In 2001, UC Cooperative Extension and the Farm Bureau Coalition teamed up to offer the short course to members of grower working groups that are implementing the Sanctuary Plan for Agriculture. As of May 2004, more than 500 Central Coast farmers will have completed the course. Funding to support farm water quality planning has come from a variety of sources, including a current Clean Water Act Section 319(h) grant from the Regional Board. The Regional Board has been closely involved in the development of the short course. Regional Board staff, along with UC Cooperative Extension, NRCS, local Resource Conservation Districts, California Department of Fish and Game and others, participate in teaching the classes.

Another industry-led effort has been underway for several years to promote sustainable practices by wine grape growers. There are approximately 100,000 acres of grapes in the Central Coast, representing about 16% of the irrigated croplands in the region. Many of the growers have undertaken an evaluation process to assess irrigation, nutrient management, pest management, and erosion control practices through the Positive Point System developed by the Central Coast Vineyard Team (CCVT). CCVT estimates that approximately 75-100 operations have completed the Positive Point System evaluations and are using them to evaluate management practices and identify opportunities for improvement.

Agricultural Advisory Panel Recommendations

In beginning to develop a replacement for the old waivers, Regional Board staff held a number of informal discussions with several agricultural and environmental groups throughout the Region. After hearing comments during several such meetings, staff concluded that the interests of all concerned would be best served by face-to-face meetings among all parties. The Central Coast Region is relatively small, at least compared to the Central Valley Region, California's other major agricultural Region. This feature made it feasible to convene an advisory group of agricultural and environmental representatives from across the Region. Participants included the Ocean Conservancy, the Central Coast Coalition of County Farm Bureaus, Monterey County Farm Bureau, Jefferson Farms, Santa Cruz County Farm Bureau, San Benito County Farm Bureau, the Environmental Center of San Luis Obispo (ECOSLO), the Environmental Defense Center, Monterey Bay National Marine Sanctuary, the Agricultural Land-Based Training Association (ALBA), the Central Coast Winegrowers Association, San Luis Obispo County Farm Bureau and Cattlemen's Association, Santa Barbara County Farm Bureau, Grower Shipper Vegetable Association of Santa Barbara, and Santa Barbara Channel Keeper. Several other organizations that were contacted felt that their interests were adequately represented but expressed a desire to be kept informed.

Panel meetings were conducted as facilitated discussion sessions. The group adopted ground rules and spent time hearing about the interests and concerns of each of the participants. In this way, a foundation of understanding was built that allowed the participants to discuss ideas and propose solutions in a respectful environment. At the second meeting, the panel agreed on a mission statement, which reads, "The goal of the panel is to assist staff in developing recommendations to the Regional Board for a replacement to the expired waivers that will be protective of water quality, the viability of Central Coast agriculture, and comply with state law."

All panel recommendations were developed by consensus. Although the panel did not have consensus on all aspects of the proposed program, considerable progress was made during the year of panel meetings. The input provided by the panel has been very valuable in helping staff develop the proposed Waiver program. Perhaps even more importantly, a foundation has been laid for future communication between the agricultural and environmental communities across the Central Coast Region, as well as with the Regional Board.

Among the recommendations of the panel are the education and farm water quality plan development requirements, management practice implementation and reporting through a checklist format, and the tiered structure of the waivers, which offer reduced reporting requirements for those meeting all the requirements by the enrollment deadline. The panel also recommends that monitoring focus on currently applied agricultural constituents, make use of existing monitoring resources wherever possible, and be structured on a regionwide, cooperative basis rather than on individual discharge monitoring.

Program Implementation Costs
The Regional Board has attempted to consider costs to both the Regional Board and the regulated community in developing the conditional waivers. Anticipated program implementation costs to the agricultural community include potential fees, management practice implementation, monitoring costs and costs for education. Costs to the Regional Board include staff time for program development, outreach to the regulated community, submittal review, program oversight and enforcement.

The Regional Board has endeavored to develop a cost-effective approach to water quality protection, by focusing on management practice implementation and by developing a regionalized monitoring option that will focus monitoring resources on currently applied agricultural constituents and concentrate monitoring in areas where data already indicates problems associated with agricultural activities. Primary focus during the first waiver cycle will be on performance requirements and use of water quality information to adjust practice implementation. To reduce administrative costs, staff is exploring such data management options as direct monitoring data submittals, web-based enrollment and practice reporting, and coordination with pesticide use reporting.

1.4 Project Description

The Regional Board proposes to adopt a conditional waiver of waste discharge requirements and a waiver of the requirement to submit a report of waste discharge for discharges of waste from irrigated lands. Irrigated lands are lands where water is applied for producing crops and, for the purpose of this program, include, but are not limited to, land planted to row, vineyard, field and tree crops as well as commercial nurseries, nursery stock production and greenhouse operations with soil floors that are not currently operating under Waste Discharge Requirements (WDRs). Fully contained greenhouse operations (those that have no groundwater discharge due to impervious floors) are not covered under this Conditional Waiver and must either eliminate all surface water discharges or apply for Waste Discharge Requirements.

Discharges include surface discharges (also known as irrigation return flows or tailwater), subsurface drainage generated by installing drainage systems to lower the water table below irrigated lands (also known as tile drains), discharges to groundwater, and storm water runoff flowing from irrigated lands. These discharges can contain wastes that could affect the quality of waters of the state.

Discharger means the owner and/or operator of irrigated cropland on or from which there are discharges of waste that could affect the quality of any surface water or groundwater.

Tiered Waiver Structure
Two categories of conditional waivers are proposed, in acknowledgement that a significant number of farmers in the Central Coast Region have already begun to actively address water quality protection by obtaining water quality education, developing farm plans or completing practice assessment tools, and changing their practices to protect and improve water quality.

Tier 1(five-year) waivers are intended for those dischargers that have already completed a minimum of fifteen hours of farm water quality training, have completed farm water quality plans, and have begun the process of implementing management practices to protect water

quality. Tier 1 waivers are valid for five years or the length of time remaining in the five-year waiver cycle.

Tier 2 (one-year) waivers are intended for those dischargers that cannot meet all requirements of Tier 1 by the enrollment deadline of December 1, 2004. Tier 2 waivers are renewable annually for a maximum of three years. A discharger may move from Tier 2 to Tier 1 at any time during the three year period. Tier 2 dischargers that have not met all requirements for a Tier 1 waiver by the end of three years may be required to apply for waste discharge requirements unless they can demonstrate progress toward meeting Tier 1 requirements as well as extenuating circumstances, such as lack of available training classes, that prevented them from meeting all requirements within the allotted time period.

Tiered conditional waivers will provide increased regulatory oversight and focus attention on those dischargers that have not begun to address water quality issues, while allowing those dischargers that are already working toward full compliance with water quality objectives to devote their time and resources to implementing management practices. The time schedule will allow a limited amount of time to meet requirements for education and planning, and allow time for implementation and adjustment of management practices. Dischargers will report current and planned management practice implementation upon enrollment and during the five-year waiver cycle through annual or biennial reports. Waste discharge requirements and enforcement will be reserved for non-compliant dischargers, or if water quality does not improve.

Enrollment
All applicants will be required to submit the following information as part of their Notice of Intent (NOI) to enroll:

- Completed application form
- Copy of map of operation (map should be the same as the one submitted to the County Agricultural Commissioner for Pesticide Use Reporting, or equivalent)
- Completed management practice checklist/self assessment form
- Certificates of attendance at Regional Board-approved farm water quality education courses, if applicable
- Statement of farm water quality plan completion, if applicable
- Election for cooperative or individual monitoring

Waiver Conditions
All waiver holders will be required to meet the following conditions:

1. The Discharger shall not cause or contribute to conditions of pollution or nuisance as defined in CWC Section 13050.
2. The Discharger must comply with all requirements of applicable water quality control plans.
3. The Discharger shall not cause or contribute to exceedances of any Regional, State, or Federal numeric or narrative water quality standard.
4. Wastewaters percolated into groundwater shall be of such quality at the point where they enter the ground so as to assure the protection of all actual or designated beneficial uses of all groundwaters of the basin.

5. Wastes discharged to groundwater shall be free of toxic substances in excess of maximum contaminant levels (MCLs) for primary and secondary drinking water standards established by the United States Environmental Protection Agency or California Department of Health Services, whichever is more stringent; taste, odor, or color producing substances; and nitrogenous compounds in quantities which could result in a groundwater nitrate concentration (as NO3) above 45 mg/l.
6. The Discharger shall comply with each applicable Total Maximum Daily Load (TMDL), including any plan of implementation for the TMDL, commencing with the effective date or other date for compliance stated in the TMDL. If an applicable TMDL does not contain an effective date or compliance date, the Discharger shall commence compliance with the TMDL's implementation plan no later than twelve months after USEPA approves the TMDL.
7. The Discharger shall allow Regional Board staff reasonable access onto the subject property (the source of runoff and percolating water) whenever requested by Regional Board staff for the purpose of performing inspections and conducting monitoring, including sample collection, measuring, and photographing to determine compliance with conditions of the waiver.
8. The Discharger shall comply with applicable time schedules.
9. This Conditional Waiver does not authorize the discharge of any waste not specifically regulated under this Order. Waste specifically regulated under this Order includes: earthen materials, including soil, silt, sand, clay, rock; inorganic materials including metals, salts, boron, selenium, potassium, nitrogen, phosphorus, etc.; and organic materials such as pesticides that enter or threaten to enter into waters of the state. Examples of waste not specifically regulated under this Order include hazardous materials, and human wastes.
10. Objectionable odors due to the storage of wastewater and/or stormwater shall not be perceivable beyond the limits of the property owned or operated by the Discharger.

Water Quality Monitoring

Water quality monitoring is a requirement of the waiver program. Dischargers will be required to elect a monitoring option during enrollment. They may choose individual monitoring or join a cooperative agricultural water quality monitoring program. The cooperative monitoring program will focus on currently applied agricultural constituents and is designed to provide information on in-stream water quality and detect trends over time. The cooperative monitoring option is proposed as an efficient way to determine the effectiveness of the waiver program at a reasonable cost, as well as to manage large amounts of monitoring data and ensure data quality.

Cooperative monitoring represents a watershed-based approach to meeting monitoring requirements. Fifty sites will be selected throughout the agricultural areas of the region, on main stems of rivers and on tributaries entering the rivers. These sites will be monitored on a regular basis, to see whether implementation of management practices as the result of adoption of the waiver is improving water quality. Sites will be selected in areas where the Regional Board's Central Coast Ambient Monitoring Program and other data have identified water quality problems from nutrients and other constituents that are likely attributable to irrigated agriculture. The cooperative monitoring program allows dischargers to pool resources in order to accomplish required monitoring at a lower cost than individual monitoring. Costs will be distributed based on a number of factors, including type and quantity of discharge, which will be determined by an Agricultural Monitoring Committee working with the Regional Board. The cooperative monitoring approach will also allow for additional resources, such as grant funds, to be utilized to reduce costs to dischargers.

Broad objectives of the cooperative monitoring program are to:

Short Term Objectives

- Assess status of water quality and associated beneficial uses in agricultural areas
- Identify problem areas associated with agricultural activities, where Basin Plan objectives are not met or where beneficial uses are impaired
- Conduct focused monitoring to further characterize problem areas and to better understand sources of impairment.
- Provide feedback to growers in problem areas; require additional monitoring and reporting as necessary to address problems

Long Term Objective

- Track changes in water quality and beneficial use support over time.

The focus of the cooperative monitoring program is on beneficial use protection and waterbody health as opposed to individual discharge (effluent) monitoring. Most of the major creeks and rivers of the Central Coast have designated beneficial uses that include cold and warm water fish habitat, agriculture, wildlife habitat, commercial and recreational fishing, and municipal and domestic supply. Other beneficial uses may also apply. Waterbodies which are not specifically identified in the Basin Plan also have designated beneficial uses, including municipal and domestic supply, recreation, and aquatic life (either for cold or warm water, whichever is applicable).

Impairment to beneficial uses in surface waters may result from conditions including nitrate concentrations which exceed the drinking water standard, toxic chemicals which exceed levels which are safe for human consumption or which cause toxicity or alterations in aquatic community structure, excessive buildup of salts to levels which create problems for irrigation and other uses, low dissolved oxygen levels which are harmful to aquatic life, and algal growth which may cause nuisance or otherwise impair beneficial uses. Some of these impairments are readily assessed through exceedance of numeric criteria. Others are assessed through narrative criteria (e.g. causing nuisance); in these cases a "weight of evidence" approach is desirable, where multiple measures of impairment are employed to determine if narrative objectives are met.

Assessing Program Effectiveness

The Regional Board will use a variety of tools to evaluate the overall effectiveness of the waiver program. Tasks and milestones will include enrollment levels in the two tiers, levels of farm water quality plan completion, levels and types of management practice implementation, and submittals of required reports according to the time schedule established in the waiver order. It is expected that most dischargers will have completed farm water quality plans and be implementing management practices by the end of the first waiver cycle (five years).

Water quality monitoring will be used in conjunction with management practice implementation to determine progress toward meeting waiver conditions. The cooperative monitoring program is designed to detect trends and allow the Regional Board to determine whether water quality is improving. Monitoring program milestones include establishment of a cooperative monitoring entity, development of a Quality Assurance Project Plan,

monitoring program enrollment levels and establishing adequate funding, and submittal of monitoring reports according to the time schedule established in the waiver order.

Staff will review progress on an on-going basis. At the end of the first waiver cycle, the program will be evaluated and revised as necessary as part of the waiver review process.

1.5 Environmental Setting

The project encompasses all of the irrigated land in the Central Coast Region, including the Salinas River, Pajaro River, Santa Maria River, and Santa Ynez River Basins, and smaller coastal streams. Agricultural production is a major land use in the Central Coast Region, with more the 600,000 acres of irrigated agriculture and more than 100 different crops produced.

The Central Coast Regional Water Quality Control Board has jurisdiction over a 300-mile long by 40-mile wide section of the State's central coast. Its geographic area encompasses all of Santa Cruz, San Benito, Monterey, San Luis Obispo, and Santa Barbara Counties as well as the southern one-third of Santa Clara County, and small portions of San Mateo, Kern, and Ventura Counties. Included in the region are urban areas such as the Monterey Peninsula and the Santa Barbara coastal plain, prime agricultural lands in the Pajaro, Salinas, and Santa Maria, Valleys, National Forest lands, extremely wet areas like the Santa Cruz mountains, and arid areas like the Carrizo Plain. Some physical characteristics of the Region are listed below:

CENTRAL COAST REGION[11]

CHARACTERISTICS	NUMBER	MEASURE
Area of Region	11,274 square miles	
Streams	Unknown	2,360 miles
Lakes	99	25,040 acres
Ground Water Basins	53	3,559 square miles
Mainland Coast -	378 miles	
Wetlands and Estuaries	59	8,387 acres
Areas of Special Biological Significance	9	235,825 acres

Topographic features are dominated by a rugged seacoast and three parallel ranges of the Southern Coast Mountains. Ridges and peaks of these mountains, the Diablo, Gabilan, and Santa Lucia Ranges, reach to 5,800 feet. Between these ranges are the broad valleys of the San Benito and Salinas Rivers. These Southern Coast Ranges abut the west to east trending

[1] Water Quality Assessment for Water Years 1986 and 1987, Water Quality Monitoring Report No. 88-1 Water Quality, Division of Water Quality, State Water Resources Control Board, July, 1988.

Santa Ynez Mountains of the Transverse Ranges that parallel the southern exposed terraces of the Santa Barbara Coast.

The trend of the mountain ranges, relative to onshore air mass movement, imparts a marked climatic contrast between seacoast, exposed summits, and interior basins. Variations in terrain, climate, and vegetation account for a multitude of different landscapes. Seacliffs, sea stacks, white beaches, cypress groves, and redwood forests along the coastal strand contrast with the dry interior landscape of small sagebrush, short grass, and low chaparral.

2 Environmental Significance Checklist

This Environmental Checklist has been prepared in compliance with the requirements of CEQA relating to certified regulatory programs.

IMPACT	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
2.1 *Aesthetics*				
Would the Project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒
2.2 *Agriculture Resources*				
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the Project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☒	☐

IMPACT	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
2.3 *Air Quality*				
Where available, the significance criteria established by the applicable air quality management or air pollution control the District may be relied upon to make the following determinations. Would the Project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	☒
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	☒
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒
2.4 *Biological Resources*				
Would the Project:				
a) Have a substantial adverse effect, either directly, or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulators, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒

IMPACT	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

2.5 Cultural Resources

Would the Project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☒
c) Directly or indirectly destroy a unique paleontological resource of site or unique geological feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒

2.6 Geology and Soils

Would the Project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☐	☒
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒

IMPACT	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
2.13 Public Services				
a) Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒
2.14 Recreation				
a) Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒
2.15 Transportation/Traffic				
Would the Project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio to roads, or congestion at intersections?	☐	☐	☐	☒
b) Exceed, either individually or cumulatively, a level of service standard established by the	☐	☐	☐	☒

IMPACT	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
county congestion/management agency for designated roads or highways?				
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Result in inadequate parking capacity?	☐	☐	☐	☒
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒

2.16 Utilities and Service Systems

Would the Project?

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒

IMPACT	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
f) Be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?	☐	☐	☐	☒
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

2.17 Mandatory Findings of Significance

a) Does the Project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number of restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☒
b) Does the Project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probably future projects)?	☐	☐	☐	☒
c) Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

3 Thresholds of Significance

For the purposes of making impact determinations, potential impacts were determined to be significant if the Proposed Project would result in changes in environmental condition that would, either directly or indirectly, cause a substantial loss of habitat, substantial conversion of prime agricultural lands, or substantial degradation of water quality or other resources.

Discussion of Environmental Impacts

The analysis of potential environmental impacts is based on possible changes in irrigation management methods and other approaches to controlling agricultural discharges taken in response to the proposed Conditional Waiver of Waste Discharge Requirements for irrigated agriculture. The proposed project will result in more widespread implementation of management practices for irrigation management, erosion control, pesticide management and nutrient management. Potential impacts to biological, agricultural and water resources are discussed below, but are generally found to be of no significance.

2.1 Aesthetics

None of the potential practices described above would alter any scenic vistas, damage scenic resources, degrade the visual character of any site, or adversely affect day or nighttime views.

2.2 Agricultural Resources

The purpose of the Conditional Waiver is to increase the use of management practices that will protect water quality. In some cases, the water quality benefits of a practice are well documented, but in other cases, the effectiveness of a given practice, especially in coastal California crops, is not known. Regional Board has in the past, and will continue, to support research into the effectiveness of various practices. However, there are currently many practices available to growers which will have a beneficial impact on water quality by reducing erosion, improving irrigation efficiency to reduce the amount of water entering state waters from agricultural lands, and reducing the total amount of fertilizer and pesticides applied to crops. The following is a list of typical practices often recommended by University of California Cooperative Extension, Resource Conservation Districts and USDA's Natural Resources Conservation Service to protect water quality by reducing erosion, reducing the amount of fertilizer or pesticides applied, or preventing such constituents from entering waterways or groundwater. Many of these practices may actually improve agricultural resources by reducing the loss of topsoil or improving soil quality, and are likely to be implemented on a more widespread basis than currently, as a result of implementation of the Conditional Waiver:

- Vegetating roads to reduce erosion (cost-benefit analysis available from UCCE; net benefit in representative case due to reduced maintenance costs)
- Planning row arrangements to reduce runoff and erosion (cost-benefit analysis available from UCCE; net benefit in representative case)
- Underground outlet to transport water to bottom of steep slope and reduce erosion (cost-benefit analysis available from UCCE; initial outlay offset by increased yield within about 3 years)
- Tailwater recovery to eliminate surface water discharges of tailwater
- Vegetating waterways (ditches, drainage swales) (cost-benefit analysis available from UCCE; net cost in first year, little cost thereafter)
- Water and sediment control basins (cost-benefit analysis available from UCCE; net cost due to installation cost plus loss of acreage)
- Cover crops to reduce erosion during the rainy season and improve soil quality
- Filter strips (vegetation planted between crops and waterways to remove sediment and other pollutants)
- Hedgerow (a "living fence" of trees and shrubs planted around a field to attract beneficial insects, reduce erosion, stabilize banks and provide wildlife with food and cover)
- Irrigation water management to control the volume, frequency, and application rate of irrigation water in order to optimize the use of water, reduce erosion and decrease pollution of surface and groundwater
- Nutrient management to supply plant nutrients in the right amounts and at the right times to optimize crop yields and minimize loss of nutrients to surface and groundwater by developing a crop nitrogen budget
- Pest management practices to reduce pesticide applications by monitoring pest populations, promoting beneficial insects and other Integrated Pest Management techniques

Conservation practices that could affect the amount of land used for producing crops include vegetating farm roads, installing vegetated filter strips along creeks and at the ends of field rows, planting cover crops, and installing sediment detention basins. The Regional Board has reviewed the potential cost of some commonly used practices that might be employed by growers. Practices vary widely in both their initial installation costs and in long-term costs associated with maintenance and reduced cropping area. In some cases practices can result in improved productivity that will offset costs associated with taking some land out of production for conservation practices. Some practices, such as improved irrigation efficiency and nutrient management, can result in cost savings over time.

The practices described above, or other potential strategies that could be pursued by growers, are unlikely to lead to a conversion of prime agricultural farmland to other uses. Although some land may be vegetated for erosion control rather than planted to crops, the overall land use is still agricultural.

Growers have a wide range of options available to minimize or eliminate water quality impacts. Based on the range of options available, growers should be able to choose an

approach appropriate to their crops and fields that will minimize cost and allow them to continue farming. The availability of federal and state government funds for environmental conservation, as well as settlement funds (e.g. USDA's Environmental Quality Incentives Program, Proposition 40 and 50 funds, and PG&E and Guadalupe settlement funds) should allow growers to offset some of their costs, if they choose an approach that requires a greater capital investment.

2.3 Air Quality

Implementation of some alternative pest management strategies could lead to a reduction in aerial drift, and therefore an improvement in air quality.

2.4 Biological Resources

The proposed Conditional Waiver is designed to improve water quality through the widespread implementation of on-farm management practices that will reduce the amount of sediment, pesticides and nutrients entering the region's waterbodies. Growers must identify practices to address sediment, nutrients, pesticides, and irrigation efficiency in their farm water quality management plans. The goal of the associated monitoring program is to assess beneficial use protection in the agricultural areas of the region. Increased regulation of agriculture through the Conditional Waiver program will reduce impacts to biological resources by reducing exposure to agricultural pollutants.

It is possible that greatly improved irrigation efficiency in some areas will result in reduced flows during the summer. However, many Central Coast streams and rivers would not flow during the summer under natural conditions, and reductions in summer flows will not affect migration and spawning of fish, which are adapted to such hydrologic regimes. Reduced withdrawals of water for irrigation uses in some locations will allow surface and groundwater flows to return to, or more closely approximate, natural flows and will either cause no impact or improve habitat by allowing it to return to a natural state. Improved irrigation efficiency will generally improve habitat conditions for migration and spawning of fish, because of the low overall water quality of irrigation return flow. It is not expected that the Conditional Waiver will result in significant loss of habitat for threatened or endangered species. Practices such as vegetated waterways, hedgerows, and riparian restoration will likely result in increased habitat for many species.

2.5 Cultural Resources

Implementation of the proposed Conditional Waiver is not likely to affect cultural resources. None of the potential practices that growers might implement are likely to change the significance of any historical or archaeological resource, destroy a unique paleontological resource or geologic feature, or disturb any human remains.

2.6 Geology and Soils

Implementation of the proposed Conditional Waiver will not affect the geology of the region and will not expose people to additional geologic hazards. Growers may plant cover crops or buffer strips to increase soil infiltration and reduce runoff, which will likely reduce soil erosion.

2.7 Hazards and Hazardous Materials

The Department of Pesticide Regulation examines hazards posed by pesticides to workers and the public during its regulatory process. Each product is evaluated for potential hazards and any conditions necessary for the safe use of the material are required on the label or in specific regulations. Some of these requirements include use of protective clothing and respirators, use of a closed system for mixing and loading, or special training requirements for workers applying the pesticide. Implementation of the Conditional Waiver should not result in any increased exposure to hazards or hazardous material and may reduce exposure as growers implement pest management techniques that reduce applications in order to minimize potential runoff.

2.8 Hydrology and Water Quality

None of the management practices implemented to reduce discharges of agricultural constituents are likely to result in changes in drainage patterns that would increase erosion or siltation, increase the rate or amount of surface runoff, increase the risk of flooding, contribute to increases in storm water runoff that would exceed the capacity of stormwater drainage systems, or increase the chance of inundation by seiche, tsunami, or mudflow. Management practices will be implemented with the aim of improving water quality by reducing the amount of nutrients and pesticides applied to and/or discharging from agricultural lands. The requirement for all agricultural operations to have a farm plan is intended to ensure that operations are aware of the potential impacts of various practices and to ensure that reducing surface water discharges does not result in increasing groundwater discharges. Growers are required to have nutrient management plans to address both surface and groundwater impacts.

If dischargers elect to implement practices such as sediment detention basins, which could potentially fail and cause downstream problems, the management practices must meet local design standards. Practices designed to slow stormwater runoff and increase filtration by maintaining vegetation may increase recharge and increase stream flow in some areas. Improved irrigation efficiency will also reduce pumping and may reduce overdraft and seawater intrusion in some areas.

2.9 Land Use and Planning

Implementation of the proposed Conditional Waiver should not result in any changes in land use or planning. See discussion of Agricultural Resources, Section 9.4.2, above.

2.10 Mineral Resources

The effect of the proposed Conditional Waiver should be limited to land currently under agricultural production, and there should be no impact to mineral resources.

2.11 Noise

The proposed Conditional Waiver should have no impact on noise in the project area.

2.12 Population and Housing

The proposed Conditional Waiver will likely result in changes in on-farm management practices. Those changes in practices would not directly or indirectly induce population growth in the area, displace existing housing, or displace people. The proposed Conditional Waiver should not have an impact on population and housing.

2.13 Public Services

The proposed Conditional Waiver will not have an impact on public services.

2.14 Recreation

There should be no increase in use of parks or recreational facilities or the need for new or expanded recreational facilities as a result of this proposed Conditional Waiver.

2.15 Transportation/Traffic

The proposed Conditional Waiver will not have an impact on transportation/traffic.

2.16 Utilities and Service Systems

The proposed Conditional Waiver will likely result in changes in on-farm management practices. No wastewater treatment requirements for runoff from agricultural lands have been established by the Regional Water Quality Control Boards. The proposed Conditional Waiver should not result in changes in wastewater treatment requirements.

The proposed Conditional Waiver does not require and should not result in the construction or expansion of new storm water drainage facilities. The most feasible practices for the control of discharges from farms are on-field practices. It is unlikely that alterations in storm drainage facilities would be an effective means of reducing runoff from agricultural areas.

The proposed Conditional Waiver should not result in significant changes in water supply. One of the potential alternative practices that could be used by growers would be the use of cover crops to increase infiltration and reduce surface runoff of water, which may contain contaminants. The use of cover crops may require additional irrigation water, but may also result in reduced evaporation from soil surfaces, resulting in no or

little net change in irrigation water needs. Improved irrigation efficiency, one of the principle means of reducing agricultural discharges, will likely result in water savings.

The proposed Conditional Waiver should not require any changes in wastewater treatment services. The potential practices that could be applied by growers should not result in any changes in the generation of solid waste and therefore should not impact landfill capacity. The potential practices that could be applied by growers should not result in any changes in the generation of solid waste and therefore should not affect compliance with federal, state, or local statutes and regulations related to solid waste.

2.17 Mandatory Findings of Significance

The Conditional Waiver is designed to reduce discharges of agricultural pollutants and improve water quality. The Conditional Waiver does not require or allow any changes in practices that could degrade the quality of the environment or have environmental effects that could cause substantial indirect or direct adverse effects on human beings.

The proposed Conditional Waiver represents the establishment of a comprehensive program to address the impacts of agricultural discharges throughout the Central Coast Region. There are no probable future changes in Regional Board programs that would lead to cumulatively significant impacts when combined with likely impacts from the proposed Conditional Waiver.

Public Participation and Agency Consultation

Interested parties, agencies and the public have been consulted throughout the development of the proposed Conditional Waiver. Regional Board staff met with, or contacted by phone or email, agricultural industry representatives, environmental groups and local entities such as county Resource Conservation Districts and Agricultural Commissioners. The Agricultural Advisory Committee, made up of agricultural and environmental representatives, met for a year to assist staff in developing the program. Staff has consulted with the Department of Pesticide Regulation, University of California Cooperative Extension, and USDA Natural Resources Conservation Service. In addition, the Board held three public workshops at locations throughout the region to hear public testimony prior to completing the draft proposed Conditional Waiver and Initial Study.

References

Bianchi, M., A. Jones, D. Mountjoy. Farm Water Quality Plan. ANR Publication 9002. Accessed via website http://anrcatalog.ucdavis.edu/merchant.ihtml?pid=5604&step=4.

Bianchi, M., D. Mathes. Farm Water Quality Planning 319(h) Contract #01-051-253-0 Quarterly Report, January 2004.

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Resource Conservation District of Monterey County, 2003. Technical Tool Kit of Agricultural Conservation Practices. MCRCD. Salinas, CA.

State Water Resources Control Board, 2002. Clean Water Act Section 303(d) List of Impaired Water Bodies. Accessed via website http://www.swrcb.ca.gov/tmdl/docs/2002reg3303dlist.pdf.

State Water Resources Control Board, 2003. Policy for Implementation and Enforcement of the NPS Pollution Control Program, Draft, December 2003. Accessed via website. http://swrcb.ca.gov/nps/docs/functional_equivalent_doc.pdf.

State Water Resources Control Board, 2004. Policy for Implementation and Enforcement of the NPS Pollution Control Program, May 20, 2004. (Approval by Office of Administrative Law pending.)

LAW OFFICES OF
PATRICK J. MALONEY

2425 WEBB AVENUE, SUITE 100
ALAMEDA ISLAND, CALIFORNIA 94501-2922

PATRICK J. "MIKE" MALONEY

(510) 521-4575
FAX (510) 521-4623
e-mail: PJMLAW@pacbell.net

THOMAS S. VIRSIK

August 27, 2010

Via email and post
California Regional Water Quality Control Board
Central Coast Region
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401-7906
Attention: Shanta Keeling
AgOrder@waterboards.ca.gov

Re: California Environmental Quality Act (CEQA) Scoping Meeting for the Regulation of Waste Discharges from Irrigated Lands

Dear Gentlepersons:

This office represents one or more parties interested in the above matter. This comment is being made in response to the Notice of Scoping Meeting pursuant to 14 CCR § 15082. The purpose of said section is to determine what should be in the Environmental Impact Report. The nature and scope of how environmental review is to be conducted is being further clarified through the comment and review period for the SWRCB regulations. NOTICE OF MODIFICATION TO TEXT OF PROPOSED REGULATIONS, dated August 24, 2010 (Title 23, Division 3, Chapter 27)

It is essential before any modifications to the existing Agricultural Order and its antecedent appropriate Environmental Review that (1) the SWRCB complete its implementation of Water Code sections 5100 et seq. and (2) the Legislature receive its Report being prepared by the University of California at Davis pursuant to Water Code section 83002.5. The scope of work and time frame of the UC Davis effort is more particularly described in the project contract, to wit:

> 3. Scope and Objectives
>
> Senate Bill 2X1 (SB 2X1), section 83002.5, requires the State Water Board, in consultation with other agencies, to develop pilot projects in the Tulare Lake Basin and the Salinas Valley that focus on nitrate contamination. The objectives of the work to be conducted within the pilot project basins by UCD are:

- Identify source(s) of nitrate contamination in groundwater

- Estimate proportionate nitrate contributions to groundwater by source and category of discharger

- Identify and analyze options for reducing and preventing nitrate contamination of groundwater

- Identify costs associated with the identified options for reducing and preventing nitrate contamination of groundwater

SWRCB/UC Davis Contract No. 09-122-250. The UC Davis efforts (budgeted for $1.7M) appear to duplicate what any thorough environmental review would need to address ahead of any substantive decision on a new or modified Agricultural Order. The UC Davis Report is due in December 2011.

Modification of the existing Agricultural Order or the preparation of environmental documentation prior to the completion of the UC Davis study of nitrate pollution would be a waste of state resources. In addition, without a comprehensive understanding of their affect on agricultural production, employment, and resources in the central coast, any modification in the existing regulation or any adoption of new regulations by the Regional Water Quality Control Board would be irresponsible.

Sincerely,

Patrick J. Maloney
Patrick J. Maloney

Enclosure
SWRCB/UC Davis Contract No. 09-122-250

c. Senator Tony Strickland (via U.S. Mail)
Senator Sam Blakeslee (via U.S. Mail)
Senator Elaine Alquist (via U.S. Mail)
Senator Jeffery Denham (via U.S. Mail)
Assembly Member Anna M. Caballero (via U.S. Mail)
Assembly Member Pedro Nava (via U.S. Mail)
Assembly Member William W. Monning (via U.S. Mail)
Dr. Thomas Harter, UC Davis (via U.S. Mail)
Charles R. Hoppin, Chair, SWRCB (via U.S. Mail)

STATE WATER RESOURCES CONTROL BOARD Form WRCB 3-020 Rev. 1/08

CONTRACT REQUEST

1. DATE RECEIVED BY CONTRACT SECTION (Contracts Section Use) APR - 8 2010

2. CONTRACTOR NAME
University of California, Davis
Office of Research Sponsored Programs

3. CONTRACT NUMBER (Leave Blank For New Contracts)
09-122-250

3A. AMENDMENT #

4. ADDRESS (Street) / (P.O. Box)
1850 Research Park Drive, Suite 300
University of California

ORIGINATING ORGANIZATION INFORMATION

5. E-mail Address (if available)
awards@ucdavis.edu

6. DIVISION/REGION
Division of Water Quality

7. (City) Davis (State) CA (Zip Code) 95618-6153

8. CONTRACT CONTACT (Type or Print and Sign)
Marco Meza
TELEPHONE (916) 341-5821
Date: 4/8/10

9. CONTRACTOR'S PROJECT DIRECTOR
Dr. Thomas Harter
thharter@ucdavis.edu
TELEPHONE (530) 752-2709

10. CONTRACT MANAGER (Type or Print and Sign)
Lisa Babcock
TELEPHONE (916) 341-5687
Date: 4/8/10

11. CONTRACTOR'S ADMINISTRATIVE REPRESENTATIVE
Ahmad Hakim-Elahi, PhD, JD
awards@ucdavis.edu
TELEPHONE (530) 754-7700

12. REG. E.O./DIV. CHIEF (Type or Print and Sign)
I have reviewed this request and determined that it meets current program policy.
James Giannopoulos
Date: 4/7/10

13. FEDERAL EMPLOYER ID NUMBER (N/A for State, Fed. & Local Govt.)
94-6036464

14. DVBE ☐ YES ☐ NO x N/A

15. SMALL BUSINESS ☐ YES ☐ NO x N/A

16. RESOLUTION NUMBER
2009-0049

17. TYPE OF REQUEST
NEW CONTRACT: ☒ Standard ☒ Interagency ☐ Reimbursable ☐ Loan ☐ IPA ☐ **Renewal/Prior Contract No.** _____
AMENDMENT: ☐ Add Funds ☐ Add Funds-Extend Time ☐ Reduce Funds ☐ Add Work ☐ Decrease Work ☐ Extend Time ☐ Other _____

18. PROJECT TITLE AND REASON FOR CONTRACT OR AMENDMENT (LIMIT REMARKS TO 3 TYPED LINES)
Implementation of Senate Bill X2 1, "Tulare Lake Basin and Salinas Valley Nitrate Pilot Projects"

19. AMOUNT OF CONTRACT OR AMENDMENT
$ 1,700,000

20. TERM OF CONTRACT (Month/Day/Year - Month/Day/Year)
6/1/2010 – 3/31/2013

21. AMENDED END DATE

22. FUNDING / INFO								F.Y. TOTALS
PCA NUMBER	Org 0250 – 418 15522							
FUNDING SOURCE	R(SB X2 1)							
F.Y. 09/10	$56,210	$	$	$	$	$	$	$56,210
F.Y. 10/11	$1,643,790	$	$	$	$	$	$	$1,643,790
F.Y.	$	$	$	$	$	$	$	$
F.Y.	$	$	$	$	$	$	$	$
TOTALS	$1,700,000.	$	$	$	$	$	$	$1,700,000

●●●●●● FOR OFFICE / SECTION USE ONLY ●●●●●●

APPROVALS	INITIALS	DATE	APPROVALS	INITIALS	DATE
PERSONNEL OFFICE			OFFICE OF CHIEF COUNSEL		
DIVISION OF INFORMATION TECH.			ACCOUNTING		4/9/10
CONTRACTS ANALYST	RGF	4/12/10	DAS DEPUTY DIRECTOR	MS	5-26-10
CONTRACTS CHIEF		4/21/10	BUDGETS OFFICE:		4/8

AGREEMENT SUMMARY

STD 215 (Rev 4/2002)

☒ **CHECK HERE IF ADDITIONAL PAGES ARE ATTACHED**

AGREEMENT NUMBER	AMENDMENT NUMBER
09-122-250	

1. CONTRACTOR'S NAME: The Regents of the University of California, Davis
2. FEDERAL I.D. NUMBER: 94-6036464
3. AGENCY TRANSMITTING AGREEMENT: State Water Resources Control Board
4. DIVISION, BUREAU, OR OTHER UNIT: Division of Water Quality
5. AGENCY BILLING CODE: 079250
6. NAME AND TELEPHONE NUMBER OF CONTRACT ANALYST FOR QUESTIONS REGARDING THIS AGREEMENT
Randal G. Indvik (916) 324-6341 email: RIndvik@waterboards.ca.gov
7. HAS YOUR AGENCY CONTRACTED FOR THESE SERVICES BEFORE?
☒ NO ☐ YES (*If YES, enter prior contractor name and Agreement Number*)
8. BRIEF DESCRIPTION OF SERVICES - LIMIT 72 CHARACTERS INCLUDING PUNCTUATION AND SPACES
Implementation of Senate Bill X2 1. Tulare Lake Basin and Salinas Valley Nitrate Pilot Projects
9. AGREEMENT OUTLINE *(Include reason for Agreement: Identify specific problem, administrative requirement, program need or other circumstances making the Agreement necessary; include special or unusual terms and conditions.)*
Senate Bill 2X1 (SB X2 1) added Sections 83000 and 83002.5 to the Water Code. These sections require the State Water Board develop pilot projects, with a focus on nitrate contamination, for the Tulare Lake Basin and the Salinas Valley. The project objectives are to improve understanding of the causes of groundwater contamination, identify potential remediation solutions and funding sources to recover costs expended by the state for the purposes of this section to clean up or treat groundwater, and ensure the provision of safe drinking water to all communities. Senate Bill 2X1, requires the State Water Board to prepare and submit a report to the Legislature on the scope and findings of the pilot projects, including recommendations, within two years of receiving funding. This contract is necessary for the State Water Board to meet this mandate. SWRCB Resolution 2009-0049 Attached.
10. PAYMENT TERMS *(More than one may apply.)*
☐ MONTHLY FLAT RATE ☐ QUARTERLY ☐ ONE -TIME PAYMENT ☐ PROGRESS PAYMENT
☒ ITEMIZED INVOICE ☐ WITHHOLD ____ % ☐ ADVANCED PAYMENT NOT TO EXCEED
☐ REIMBURSEMENT/REVENUE $ ____ or ____ %
☒ OTHER (*Explain*) Monthly

11. PROJECTED EXPENDITURES

FUND TITLE	ITEM	F.Y.	CHAPTER	STATUTE	PROJECTED EXPENDITURES
USTCF	3940-001-0439	09/10	1	2009	$ 56,210
USTCF	3940-001-0439	10/11	BA	2010	$1,643,790

OBJECT CODE 0250-418.01-15522

AGREEMENT TOTAL $ 1,700,000

OPTIONAL USE Ultimate Fund: 0439

AMOUNT ENCUMBERED BY THIS DOCUMENT $ 56,210

I CERTIFY upon my own personal knowledge that the budgeted funds for the current budget year are available for the period and purpose of the expenditure stated above.

PRIOR AMOUNT ENCUMBERED FOR THIS AGREEMENT $

ACCOUNTING OFFICER'S SIGNATURE: SRSamant

DATE SIGNED: 4-19-10

TOTAL AMOUNT ENCUMBERED TO DATE $ 56,210

12.

AGREEMENT	TERM From	TERM Through	TOTAL COST OF THIS TRANSACTION	BID, SOLE SOURCE, EXEMPT
Original	06/01/10	03/31/13	$ 1,700,000	Exempt
Amendment No. 1				
Amendment No. 2			$	
Amendment No. 3			$	
		TOTAL	$ 1,700,000	

(Continue)

STATE OF CALIFORNIA

AGREEMENT SUMMARY

STD. 215 (Rev 04/2002)

13. BIDDING METHOD USED:

☐ REQUEST FOR PROPOSAL (RFP) *(Attach justification if secondary method is used)* ☐ INVITATION FOR BID (IFB) ☐ USE OF MASTER SERVICE AGREEMENT

☐ SOLE SOURCE CONTRACT *(Attach STD. 821)* ☒ EXEMPT FROM BIDDING *(Give authority for exempt status)* ☒ OTHER *(Explain)* SCM 3.06 [CSU / UC / CSU Foundation]

NOTE: *Proof of advertisement in the State Contracts Register or an approved form STD. 821, Contract Advertising Exemption Request, must be attached*

14. SUMMARY OF BIDS *(List of bidders, bid amount and small business status) (If an amendment, sole source, or exempt, leave blank)*

15. IF AWARD OF AGREEMENT IS TO OTHER THAN THE LOWER BIDDER, PLEASE EXPLAIN REASON(S) *(If an amendment, sole source, or exempt, leave blank)*

16. WHAT IS THE BASIS FOR DETERMINING THAT THE PRICE OR RATE IS REASONABLE?

Rates do not exceed those of State employees. The Contractor's rates are set according to State University pay schedule.

17. JUSTIFICATION FOR CONTRACTING OUT *(Check one)*

☐ Contracting out is based on cost savings per Government Code 19130(a). The State Personnel Board has been so notified.

☒ Contracting out is justified based on Government Code 19130(b). Justification for the Agreement is described below.

Justification:

18. FOR AGREEMENTS IN EXCESS OF $5,000, HAS THE LETTING OF THE AGREEMENT BEEN REPORTED TO THE DEPARTMENT OF FAIR EMPLOYMENT AND HOUSING?

☐ NO ☒ YES ☐ N/A

19. HAVE CONFLICT OF INTEREST ISSUES BEEN IDENTIFIED AND RESOLVED AS REQUIRED BY THE STATE CONTRACT MANUAL SECTION 7.10?

☐ NO ☐ YES ☒ N/A

20. FOR CONSULTING AGREEMENTS, DID YOU REVIEW ANY CONTRACTOR EVALUATIONS ON FILE WITH THE DGS LEGAL OFFICE?

☐ NO ☐ YES ☐ NONE ON FILE ☒ N/A

21. IS A SIGNED COPY OF THE FOLLOWING ON FILE AT YOUR AGENCY FOR THIS CONTRACTOR?

A. CONTRACTOR CERTIFICATION CLAUSES ☐ NO ☐ YES ☒ N/A

B. STD. 204, VENDOR DATA RECORD ☐ NO ☐ YES ☒ N/A

22. REQUIRED RESOLUTIONS ARE ATTACHED

☐ NO ☐ YES ☒ N/A

23. ARE DISABLED VETERANS BUSINESS ENTERPRISE GOALS REQUIRED? *(If an amendment, explain changes, if any)*

☒ NO *(Explain below)* ☐ YES *(If YES complete the following)*

DISABLED VETERAN BUSINESS ENTERPRISES: _____ % OF AGREEMENT

☐ Good faith effort documentation attached if 3% goal is not reached.

☐ We have determined that the contractor has made a sincere good faith effort to meet the goal.

Explain:

N/A – CSU or UC campus.

24. IS THIS A SMALL BUSINESS CERTIFIED BY OSBCR?

☒ NO ☐ YES *(Indicate Industry Group)* _____

SMALL BUSINESS REFERENCE NUMBER

25. IS THIS AGREEMENT (WITH AMENDMENTS) FOR A PERIOD OF TIME LONGER THAN ONE YEAR? *(If YES, provide justification)*

☐ NO ☒ YES

Multi-year term for State entity is permitted per SCM 7.80

I certify that all copies of the referenced Agreement will conform to the original Agreement sent to the Department of General Services.

SIGNATURE/TITLE		DATE SIGNED
Olivia Rice	Olivia Rice, Manager Contracts Unit	4/21/10

STATE WATER RESOURCES CONTROL BOARD
RESOLUTION NO. 2009-0049

AUTHORIZING THE EXECUTIVE DIRECTOR TO EXECUTE INTERAGENCY AGREEMENTS AND CONTRACTS TO IMPLEMENT SENATE BILL X2 1 (SB X2 1) (PERATA, 2008-WATER CODE SECTION 83002.5) TULARE LAKE BASIN AND SALINAS VALLEY NITRATE PILOT PROJECTS

WHEREAS:

1. SB X2 1 requires the State Water Resources Control Board (State Water Board) to implement Water Code section 83002.5 to:

   a) Develop pilot projects in the Tulare Lake Basin and the Salinas Valley focused on nitrate contamination "to improve understanding of the causes of groundwater contamination, identify potential remediation solutions and funding sources to recover costs expended by the state for the purposes of this section to clean up or treat groundwater, and ensure the provision of safe drinking water to all communities"; and

   b) Submit a report to the Legislature reporting on findings and recommendations within two years after the funding is received by the State Water Board.

2. Funding in the amount of $2 million from Proposition 84 is identified in Water Code section 83002(b)(2)(D) to implement Water Code section 83002.5, and expenditure authority for contracts in the amount of $1.7 million are included in the Governor's Budget for Fiscal Year 2009-10.

THEREFORE BE IT RESOLVED THAT:

The State Water Board authorizes the Executive Director or designee to enter into and amend as necessary:

1. An interagency agreement with the California Department of Public Health for reimbursement of up to $2 million; and

2. Any contracts for activities necessary to implement Water Code section 83002.5) up to $1.7 million.

CERTIFICATION

The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on June 16, 2009.

AYE:	Chairman Charles R. Hoppin Vice Chair Frances Spivy-Weber Board Member Arthur G. Baggett, Jr. Board Member Tam M. Doduc
NAY:	None
ABSENT:	None
ABSTAIN:	None

Jeanine Townsend

Jeanine Townsend
Clerk to the Board

STATE OF CALIFORNIA
STANDARD AGREEMENT
STD 213 (Rev 06/03)

AGREEMENT NUMBER
09-122-250
REGISTRATION NUMBER

1. This Agreement is entered into between the State Agency and the Contractor named below:

STATE AGENCY'S NAME (Also referred to as SWRCB or the State)
State Water Resources Control Board

CONTRACTOR'S NAME (Also referred to as Contractor)
The Regents of the University of California, Davis

2. The term of this Agreement is: **06/1/2010 03/31/2013

3. The maximum amount of this Agreement is: $1,700,000
One Million Seven Hundred Thousand Dollars.

4. The parties agree to comply with the terms and conditions of the following exhibits, which are by this reference made a part of the Agreement.

Exhibit A – Scope of Work	6 pages
Exhibit B – Budget Detail and Payment Provisions	5 pages
Exhibit B, Attachment I – Budget	4 page
Exhibit C* - General Terms and Conditions	GIA 101
Exhibit D – Additional Provisions	4 pages

**(Contract effective upon contract start date or approval by DGS, whichever is later, and no work shall begin before contract effective date.)

Items shown with an Asterisk (*) are hereby incorporated by reference and made part of this agreement as if attached hereto. These documents can be viewed at www.ols.dgs.ca.gov/Standard+Language

IN WITNESS WHEREOF, this Agreement has been executed by the parties hereto.

CONTRACTOR	California Department of General Services Use Only
CONTRACTOR'S NAME *(if other than an individual, state whether a corporation, partnership, etc.)* The Regents of the University of California, Davis	GUX
BY *(Authorized Signature)* Sandra M. Stevens — DATE SIGNED *(Do not type)* 5/12/10	
PRINTED NAME AND TITLE OF PERSON SIGNING Sandra M. Stevens, Associate Director, Sponsored Programs	
ADDRESS 1850 Research Park Drive, Suite 300, Davis, CA 95618	APPROVED JUN 10 2010 DEPT OF GENERAL SERVICES
STATE OF CALIFORNIA	
AGENCY NAME State Water Resources Control Board	
BY *(Authorized Signature)* — DATE SIGNED *(Do not type)* 5-26-10	
PRINTED NAME AND TITLE OF PERSON SIGNING Esteban Almanza, Deputy Director, Division of Administrative Services	
ADDRESS 1001 I Street, 18th Floor, Sacramento, CA 95814	

Exhibit A
Scope of Work

1. Service Overview

Contractor agrees to provide to the State Water Resources Control Board (State Water Board) work described herein:

Contractor shall identify sources of groundwater contamination due to nitrate in Tulare Lake Basin and Salinas Valley (pilot project basins). Contractor will estimate proportionate nitrate contributions to groundwater contamination by sources and category of discharger. Contractor will identify and analyze options to reduce current nitrate levels and prevent continuing nitrate contamination of the pilot project basins, including estimating associated costs.

2. Project Representatives

A. The project representatives during the term of this agreement will be:

State Water Resources Control Board	**The Regents of the University of California, University of California, Davis**
Lisa Babcock Contract Manager	Thomas Harter, Project Director
Telephone: (916) 341-5687	Telephone : (530) 752-2709
Fax: (916) 341-5709	Fax:
E-mail: lbabcock@waterboards.ca.gov	E-mail: thharter@ucdavis.edu

B. Direct all inquiries to:

State Water Board	**The Regents of the University of California, University of California, Davis**
Division of Water Quality	Section/Unit: Sponsored Programs Office
Attention: Marco Meza, Contract Contact	Attention: Ahmad Hakim-Elahi, PhD, JD Administrative Representative
1001 I Street, 16th Floor	1850 Research Park Dr. Suite 300
Sacramento, CA 95814	University of California Davis, CA 95618-6153
Telephone: (916) 341-5821	Telephone: (530) 754-7700
Fax: (916) 341-5709	Fax:
E-mail: momeza@waterboards.ca.gov	E-mail: awards@ucdavis.edu

C. Either party may make changes to the contact information above by giving ten (10) days written notice to the other party. Said changes shall not require an amendment to this agreement.

Exhibit A
Scope of Work

3. Scope and Objectives

Senate Bill 2X1 (SB 2X1), section 83002.5, requires the State Water Board, in consultation with other agencies, to develop pilot projects in the Tulare Lake Basin and the Salinas Valley that focus on nitrate contamination. The objectives of the work to be conducted within the pilot project basins by UCD are:

- Identify source(s) of nitrate contamination in groundwater
- Estimate proportionate nitrate contributions to groundwater by source and category of discharger
- Identify and analyze options for reducing and preventing nitrate contamination of groundwater
- Identify costs associated with the identified options for reducing and preventing nitrate contamination of groundwater

Services to be Performed

The Contractor shall be responsible for the performance of tasks as set forth herein, and for the preparation of products as specified in this Exhibit. The Contractor's Project Director shall promptly notify the State Water Board's Contract Manager of events or proposed changes that could affect the scope, budget, or schedule of work performed under this Agreement. All deliverables shall be provided to the State Water Board Contract Manager.

Task 1 Project Management and Administration

1.1 Provide project management and administrative services as needed for contract completion; monitor, supervise, and review all work performed; and coordinate budgeting and scheduling to assure the contract is completed within budget, on schedule, and in accordance with approved procedures, applicable laws, and regulations.

1.2 Produce summary progress reports on a semi-annual basis as described in Section 5 of this scope of work. The progress reports will describe status of progress of tasks and problems encountered in the performance of the work under this agreement.

1.3 Progress meetings between the Contractor and the State Water Board will be held bi-monthly or more frequently as required for the project. Activities and findings completed to date will be discussed as well as any problems encountered or anticipated for the scope of work under this agreement.

1.4 Data collected for the project will be submitted electronically over the Internet to the State Board's GeoTracker system in conformance with data dictionaries found in Title 27, Division 3, Subdivision 2 and specifications contained in the EDF Guidelines and Restrictions (version 1.2i) and Survey XYZ Guidelines and Restrictions (Version 6).

Exhibit A
Scope of Work

These data dictionaries and documents are available through links provide at http://www.waterboards.ca.gov/ust.

Task 1 Deliverables

1A. Semi-annual summary progress reports to be submitted to State Water Board
1B. Quarterly progress meetings
1C. Electronic data submittal

Task 2 Identify sources, contributions, and reduction/prevention options for nitrate in groundwater

2.1 Identify sources, by category of discharger, of groundwater contamination due to nitrate in the Tulare Lake Basin and the Salinas Valley (pilot project basins). For the Salinas Valley pilot project State Water Board shall consult with the Monterey County Water Resources Agency.

2.2 Estimate proportionate contributions to groundwater contamination by source and category of discharger.

2.3 Identify and analyze options to reduce current nitrate levels and prevent continuing nitrate contamination of the pilot project basins and estimate the costs.

Task 2 Deliverables

2A. The report outlined in Task 7 will include a description of the work performed and a summary of the findings from Task 2.

Task 3 Identify methods and costs associated with treatment or alternative water supply for nitrate contaminated groundwater

3.1 Identify methods and costs associated with the treatment of nitrate contaminated groundwater for use as drinking water.

3.2 Identify methods and costs to provide an alternative water supply to groundwater reliant communities in each pilot project basin.

Task 3 Deliverables

3.A The report outlined in Task 7 will include a description of the work performed and a summary of the findings from Task 3.

Task 4 Identify all potential funding sources including, but not limited to, state bond funding, federal funds, water rates, and fees or fines on polluters

4.1 Identify funding sources to provide resources for the cleanup of nitrate in groundwater.

4.2 Identify funding sources to provide resources for the treatment of nitrate in groundwater.

Exhibit A
Scope of Work

4.3 Identify funding sources to provide resources for the provision of alternative drinking water supply of nitrate in groundwater.

Task 4 Deliverables

4.A The report outlined in Task 7 will include a description of the work performed and a summary of the findings from Task 4.

Task 5 Develop recommendations for groundwater cleanup programs

5.1 Identify recommendations for developing a groundwater cleanup program for the Central Valley Water Quality Control Region based upon pilot project results.

5.2 Identify recommendations for developing a groundwater cleanup program for the Central Coast Water Quality Control Region based upon pilot project results.

Task 5 Deliverables

5A. The report outlined in Task 7 will include a description of the work performed and a summary of the findings from Task 5.

Task 6 Participate in an interagency task force

6.1 The University of California Davis will participate in the Interagency task force that includes the; State Water Board, California Department of Public Health, Department of Toxic Substances Control, California Environmental Protection Agency, Department of Water Resources, Department of Food and Agriculture, Department of Pesticide Regulation, and local public health officials.

Task 6 Deliverables

6A. Participate and contribute researched findings with the interagency task force.

TASK 7 Scope of Work and Findings Report

7.1 After Tasks 2 through 6 have been completed, Contractor will submit a report to the State Water Board that summarizes the scope of work performed and findings of all work conducted under this contract as outlined in Section 5 of this scope of work.

Task 7 – Deliverables

7A. Scope of Work and Findings Report

Exhibit A
Scope of Work

4. Schedule of Deliverable Due Dates

TASK #	DELIVERABLES	ESTIMATED DUE DATE
1A	Semi-annual Progress Reports	Nov 1, 2010, May 1, Nov 30, 2011
1B	Quarterly progress meetings	June 1, Sept 1, Dec 1, 2010; Mar 1, June 1, Sept 1, Dec 1, 2011;
1C	Electronic data submittal	Ongoing
2A	Draft Chapter on Task 2 scope	Sept 1, 2011
3A	Draft Chapter on Task 3 scope	Sept 1, 2011
4A	Draft Chapter on Task 4 scope	Sept 1, 2011
5A	Draft Chapter on Task 5 scope	Sept 1, 2011
6A	Participation in interagency task force and stakeholder process	Ongoing
7A	Scope of Work and Findings Report	Dec 1, 2011
7B	Summary of Final Products	Mar 1, 2013

5. Reports

A. The Project Director shall provide progress reports to the Project Coordinator describing status of progress of tasks and any problems that affect product delivery for this agreement. Project progress reports will be submitted to the State Water Board as provided in Section 4 of this scope of work.

B. No later than September 1, 2011 the Project Director shall submit to the Contract Manager one (1) copy of the draft chapters for the "Report for State Water Board Report to Legislature" that incorporates the Task 2, 3, 4, and 5 deliverables from the work performed pursuant to Section 3 of this Exhibit A for review and comment.

C. Within four (4) weeks of receipt of the draft report, the Contract Manager shall submit final comments to the Project Director.

D. No later than December 1, 2011, the Project Director shall submit to the Contract Manager one (1) reproducible master of the final "Report for State Water Board Report

Exhibit A
Scope of Work

to Legislature" that includes the challenges overcome and recommendations for future studies as well as addressing the comments submitted to the Project Director by the Contract Manager on the draft chapters.

E. The report shall not be considered final until accepted by the Contract Manager.

F. No later than March 1, 2013, the Project Director shall submit to the Contract Manager a report "Summary of Final Products" that lists final product deliverables resulting from the work performed pursuant to Section 3 of this Exhibit A

Exhibit B
Budget Detail and Payment Provisions

1. Invoicing and Payment

A. For services satisfactorily rendered in accordance with Exhibit A, Statement of Work, and upon receipt and approval of the invoices, the State agrees to compensate the Contractor for actual expenditures incurred in accordance with the budget(s) attached hereto.

B. Invoices shall include the Agreement Number and shall be submitted in triplicate not more frequently than monthly in arrears to:

Marco Meza
Division of Water Quality
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-0100

C. Invoices shall:

1) Be prepared on agency letterhead. If invoices are not on produced letterhead, invoices must be signed by an authorized official, employee, or agent certifying that the expenditures claimed represent actual expenses for the service performed under this Agreement.
2) Bear the Contractor's name as shown on this Agreement.
3) Identify the billing and/or performance period covered by the invoice.
4) Itemize costs for the billing period in the same or greater level of detail as indicated in this Agreement. Subject to the terms of this Agreement, reimbursement may only be sought for those costs and/or cost categories expressly identified as allowable in this Agreement and approved by the State Water Board.

2. Budget Contingency Clause

A. It is mutually agreed that if the Budget Act of the current year and/or any subsequent years covered under this Agreement does not appropriate sufficient funds for the program, this Agreement shall be of no further force and effect. In this event, the State shall have no liability to pay any funds whatsoever to Contractor or to furnish any other considerations under this Agreement and Contractor shall not be obligated to perform any provisions of this Agreement.

B. If funding for any fiscal year is reduced or deleted by the Budget Act for purposes of this program, the State shall have the option to either cancel this Agreement with no liability occurring to the State, or offer an agreement amendment to Contractor to reflect the reduced amount.

3. Budget Flexibility Clause

A. Subject to the prior review and approval of the Contract Manager, line item shifts of up to $25,000 or 10% of the annual Agreement total, whichever is less, may be made up to

a cumulative maximum of $25,000 or 10%, whichever is less, for all line item shifts over the life of the Agreement.

B. There must be a substantial business justification for any shifts made. Fund shifts which increase Indirect, Overhead or General Expense line items are prohibited.

C. Line item shifts may be proposed/requested by either the State Water Board or the Contractor in writing, and must not increase or decrease the total Agreement amount allocated. Any line item shifts must be approved in writing by the Deputy Director of Water Quality or his/her designee, and must be sent to the Contracts Office within 10 days of approval for inclusion in the Agreement folder.

D. If the Agreement is formally amended, any line item shifts agreed to by the parties must be included in the amendment.

4. **Payment**

A. Costs under this Agreement shall be computed in accordance with State Administrative Manual Sections 8752 and 8752.1.

B. Unless otherwise negotiated and specified herein, nothing shall preclude advance payments pursuant to Article 1, Chapter 3, Division 3, Title 2 of the Government Code Section 11257 with reimbursement not more frequently than monthly in arrears thereafter. Advance payments are subject to the conditions specified herein.

5. **Prompt Payment Clause**

Payment will be made in accordance with, and within the time specified in, Government Code Chapter 4.5, commencing with Section 927.

6. **Amounts Payable**

A. The amounts payable under this Agreement shall not exceed:

1) $1,700,000 for the budget period of 6/1/10 or DGS approval to 3/31/13

B. Reimbursement shall be made for allowable expenses up to the amount annually encumbered commensurate with the State fiscal year in which services are performed and/or goods are received.

7. **Timely Submission of Final Invoice**

A. A final undisputed invoice shall be submitted for payment no more than ninety (90) calendar days (change to 30 days if grant or appropriation expires 6/30) following the expiration or termination date of this Agreement, unless a later or alternate deadline is agreed to in writing by the Contract Manager. Said invoice should be clearly marked

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"Final Invoice", thus indicating that all payment obligations of the State under this agreement have ceased and that no further payments are due or outstanding.

B. The State may, at its discretion, choose not to honor any delinquent final invoice if the Contractor fails to obtain prior written State approval of an alternate final invoice submission deadline. Written approval shall be sought from the Contract Manager prior to the expiration or termination date of this Agreement.

8. Expense Allowability/Fiscal Documentation

A. Invoices received from a Contractor and accepted and/or submitted for payment by the State, shall not be deemed evidence of allowable agreement costs.

B. The Contractor shall maintain for review and audit and supply to the State Water Board upon request, adequate documentation of all expenses claimed pursuant to this agreement to permit a determination of expense allowability.

C. If the allowability or appropriateness of an expense cannot be determined by the State because invoice detail, fiscal records, or backup documentation is nonexistent or inadequate according to generally accepted accounting principles or practices, all questionable costs may be disallowed and payment may be withheld by the State. Upon receipt of adequate documentation supporting a disallowed or questionable expense, reimbursement may resume for the amount substantiated and deemed allowable.

D. If travel is a reimbursable expense, receipts must be maintained to support the claimed expenditures.

E. Costs and/or expenses deemed unallowable are subject to recovery by the State Water Board. See provision 9 in this exhibit entitled, "Recovery of Overpayments" for more information.

9. Recovery of Overpayments

A. The Contractor agrees that claims based upon a contractual agreement or an audit finding and/or an audit finding that is appealed and upheld, will be recovered by the State and/or Federal Government by one of the following options:

1) Contractor's remittance to the State of the full amount of the audit exception within 30 days following the State's request for repayment;
2) A repayment schedule which is agreeable to both the State and the Contractor.

B. The State reserves the right to select which option will be employed and the Contractor will be notified by the State in writing of the claim procedure to be utilized.

C. Interest on the unpaid balance of the audit finding or debt will accrue at a rate equal to the monthly average of the rate received on investments in the Pooled Money

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Investment Fund commencing on the date that an audit or examination finding is mailed to the Contractor, beginning 30 days after Contractor's receipt of the State's demand for repayment.

D. If the Contractor has filed a valid appeal regarding the report of audit findings, recovery of the overpayments will be deferred until a final administrative decision on the appeal has been reached. If the Contractor loses the final administrative appeal, Contractor shall repay to the State, the over-claimed or disallowed expenses, plus accrued interest. Interest accrues from the Contractor's first receipt of State's notice requesting reimbursement of questioned audit costs or disallowed expenses.

10. Travel and Per Diem Reimbursement

For Universities Only - Travel and per diem reimbursement shall be in accordance with University travel regulations and rates. Reimbursement for out-of-state travel requires prior written authorization by the State Water Board Project Director who may either approve said travel in a budget exhibit or issue a letter of approval if such travel was not previously specified in an approved budget. A copy of the Contractor's approved travel rates shall be provided to the State Water Board upon request.

11. Subcontract Requirements

As a requirement of this Agreement (and any amendments thereto), subcontracting is limited to $50,000 or 25% of the total contract, whichever is less. If the total of all subcontracts exceeds the limitation, all subcontracts must be in accordance with the following conditions:

A. Subcontracted service(s) must be selected by the primary contractor pursuant to a bidding process requiring at least three bids from responsible bidders. A bidding process is not required when a subcontractor(s) is one of the following entities:

Entities excluded from bidding:

1) Another state entity, including:
   a) A governmental agency from any state (Public Contract Code § 10340)
   b) A state college or state university from any state
2) A local governmental entity or agency, including those created as a Joint Powers Authority (JPA)
3) An auxiliary organization of the California State University (CSU), or a California community college
4) The Federal Government
5) A foundation organized to support the Board of Governors of the California Community Colleges, or
6) An auxiliary organization of the Student Aid Commission established under Education Code § 69522.

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Exhibit B
Budget Detail and Payment Provisions

B. By signing this Agreement, the Contractor is certifying selection of a non-excluded subcontractor(s) was pursuant to a bidding process requiring at least three bids from responsible bidders.

C. In the event subcontracted service(s) cannot be selected through the bidding process as described in paragraph A above, the contractor then must submit to the State Water Board, in advance, name(s) of the subcontractor(s), services being provided, an explanation outlining the subcontractor(s) unique qualifications that qualified them to be selected through a non-competitive bid process, and the number of contracts awarded to them by the primary contractor in the last twelve months.

In this occurrence, the State Water Board must, in accordance with State guidelines, obtain approval that the primary Contractor's selection of the particular subcontractor(s) without competitive bidding was necessary in order to promote the State Water Board's program needs and was not done for the purpose of circumventing competitive bidding requirements (Public Contract Code § 10410).

D. The State Water Board will only pay overhead charges on the first $25,000 for each subcontract.

Exhibit B Attachment I
Budget
FY 09/10
(6/1/2010 through 6/30/2010)

Personnel

Position Title		Hourly Rate	# of Hours		
Analyst III	2.5 py	$28.74	435	$	12,502
Junior Specialist	6.25 py	$16.13	1088		17,549
Total Hours, Salary, and Wages			1523		30,051
Total Fringe Benefits @ 40%					12,020
Total Personal Services				**$**	**42,071**
Operating Expenses *				**$**	**1,245**
Travel				**$**	**1,652**
Indirect costs @ 25%**				**$**	**11,242**
			Total - FY 09/10	**$**	**56,210**

* Expenses such as Supplies, rental and mileage for use of University Fleet vehicles are posted to the University ledgers as "Supplies and Expense."
*The 25% IDC requested under this Contract, includes Facilities Operation, General Administration and Program Administration.

Exhibit B Attachment I
Budget
FY 10/11
(7/1/2010 through 6/30/2011)

Personnel

Position Title		Hourly Rate	# of Hours		
Analyst III	2.5 py	$28.74	5219	$	149,994
Junior Specialist	6.25 py	$16.13	13047		210,448
Total Hours, Salary, and Wages			18266		360,442
Total Fringe Benefits @ 40%					144,180
Total Personal Services				**$**	**504,622**
Operating Expenses *				**$**	**13,637**
Travel				**$**	**22,248**
Indirect costs @ 25% **				**$**	**135,127**
			Total - FY 10/11	**$**	**675,634**

* Expenses such as Supplies, rental and mileage for use of University Fleet vehicles are posted to the University ledgers as "Supplies and Expense."
* The 25% IDC requested under this Contract, includes Facilities Operation, General Administration and Program Administration.

Exhibit B Attachment I
Budget
FY 11/12
(7/1/2011 through 6/30/2012)

Personnel

Position Title		Hourly Rate	# of Hours		
Analyst III	2 py	$29.60	4176	$	123,610
Junior Specialist	5.75 py	$16.61	12006		199,420
Total Hours, Salary, and Wages			16182		323,030
Total Fringe Benefits @ 40%					129,212
Total Personal Services				**$**	**452,242**
Operating Expenses *				**$**	**13,543**
Travel				**$**	**22,472**
Indirect costs @ 25% **				**$**	**122,064**
			Total - FY 11/12	**$**	**610,321**

* Expenses such as Supplies, rental and mileage for use of University Fleet vehicles are posted to the University ledgers as "Supplies and Expense."
* The 25% IDC requested under this Contract, includes Facilities Operation, General Administration and Program Administration.

Exhibit B Attachment I
Budget
FY 12/13
(7/1/2012 through 3/31/2013)

Personnel

Position Title		Hourly Rate	# of Hours		
Analyst III	1.25 py	$30.49	2610	$	79,578
Junior Specialist	3 py	$17.11	6264		107,177
Total Hours, Salary, and Wages			8874		186,755
Total Fringe Benefits @ 40%					74,702

Total Personal Services	$	**261,457**
Operating Expenses *	$	**9,122**
Travel	$	**15,678**
Indirect costs @ 25% **	$	**71,564**
Total - FY 12/13	$	**357,821**

* Expenses such as Supplies, rental and mileage for use of University Fleet vehicles are posted to the University ledgers as "Supplies and Expense."
* The 25% IDC requested under this Contract, includes Facilities Operation, General Administration and Program Administration.

Exhibit D
Additional Provisions

1. **Contract Amendments**

Should either party, during the term of this Agreement, desire a change or amendment to the terms of this Agreement, such changes or amendments shall be proposed in writing to the other party, who will respond in writing as to whether the proposed changes/amendments are accepted or rejected. If accepted and, after negotiations are concluded, the agreed upon changes shall be made through the State's official agreement amendment process. No amendment will be considered binding on either party until it is formally approved by both parties and the Department of General Services, if such approval is required.

2. **Cancellation / Termination**
   a. This Agreement may be cancelled or terminated without cause by either party by giving thirty (30) calendar days advance written notice to the other party. Such notification shall state the effective date of termination or cancellation and include any final performance and/or payment/invoicing instructions/requirements.

   b. Upon receipt of a notice of termination or cancellation from the State Water Board, the Contractor shall take immediate steps to stop performance and to cancel or reduce subsequent Agreement costs.

   c. The Contractor shall be entitled to payment for all allowable costs authorized under this Agreement, including authorized non-cancelable obligations incurred up to the date of termination or cancellation, provided such expenses do not exceed the stated maximum amounts payable.

3. **Dispute Resolution Process**

A Contractor grievance exists whenever there is a dispute arising from the State Water Board action in the administration of an agreement. If there is a dispute or grievance between the Contractor and the State Water Board, the Contractor must seek resolution using the process outlined below.

   a. Any dispute arising under or relating to the terms of this Agreement, or related to the performance hereunder, which is not disposed of by Agreement shall be decided by the State Water Board's Project Representative, who shall reduce such decision to writing and mail or otherwise furnish a copy thereof to the Contractor. The decision of the Project Representative shall be final and conclusive unless, within fifteen (15) calendar days from the date of receipt of such copy, the Contractor mails or otherwise delivers a written appeal to the Executive Director. The decision of the Executive Director or authorized representative, on such appeal shall be final and conclusive unless determined by a court of competent jurisdiction to have been fraudulent, or capricious, or arbitrary, or so grossly erroneous as necessarily to imply bad faith, or not supported by any substantial evidence. In connection with any appeal under this Section, the Contractor shall be afforded an opportunity to be heard and to offer evidence and argument in support of the appeal. Pending final

decision on any dispute hereunder, the Contractor shall proceed diligently with the performance of the Agreement work as directed by the Project Representative unless the Contractor has received notice of termination. Decisions on any disputes hereunder may include decisions of both fact and law; provided, however, that nothing herein shall be construed as making final any decision on a question of fact or law in the event of any subsequent legal proceeding before a court of competent jurisdiction.

b. Authority to terminate performance under the terms of this Agreement is not subject to appeal under this Section. All other issues including, but not limited to, the amount of any equitable adjustment, and the amount of any compensation or reimbursement which should be paid to the Contractor shall be Subject to the disputes process under this Section. (PCC 10240.5, 10381, 22200 et seq, 40 CFR 31.70)

4. Mutual Indemnification

a. The State Water Board and the Contractor shall mutually defend, indemnify and hold each other and their respective agencies, officers, employees, and agents harmless from and against any and all liability, loss, expense, attorneys' fees, or claims for injury or damages arising out of the performance of this agreement but only in proportion to and to the extent such liability, loss, expense, attorneys' fees, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of either the State Water Board or the Regents of the University of California.

b. It should be expressly understood that the obligations hereunder shall be conditioned upon this Agreement being one that falls within the purview of Section 895 of the Government Code.

5. Confidentiality of Information

a. The Contractor and its employees, agents, or subcontractors shall protect from unauthorized disclosure names and other identifying information concerning persons either receiving services pursuant to this Agreement or persons whose names or identifying information become available or are disclosed to the Contractor, his/her employees, agents, or subcontractors as a result of services performed under this Agreement, except for statistical information not identifying any such person.

b. The Contractor and its employees, agents, or subcontractors shall not use such identifying information for any purpose other than carrying out the Contractor's obligations under this Agreement.

c. The Contractor and its employees, agents, or subcontractors shall promptly transmit to the Contract Manager all requests for disclosure of such identifying information not emanating from the client or person.

d. The Contractor shall not disclose, except as otherwise specifically permitted by this

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Additional Provisions

Agreement or authorized by the affected individual, any such identifying information to anyone other than the State Water Board without prior written authorization from the Contract Manager, except if disclosure is required by State or Federal law.

e. For purposes of this provision, identity shall include, but not be limited to name, identifying number, symbol, or other identifying particular assigned to the individual, such as finger or voice print or a photograph.

6. Avoidance of Conflicts of Interest by Contractor

a. The State Water Board intends to avoid any real or apparent conflict of interest on the part of the Contractor, subcontractors, or employees, officers and directors of the Contractor or subcontractors. Thus, the State Water Board reserves the right to determine, at its sole discretion, whether any information, assertion or claim received from any source indicates the existence of a real or apparent conflict of interest under this Agreement; and if a conflict is found to exist, to require the Contractor to submit additional information or a plan for resolving the conflict, subject to the State Water Board review and prior approval.

b. Conflicts of interest include, but are not limited to:

1. An instance where the Contractor or any of its subcontractors, or any employees, officers, or director of the Contractor or any subcontractor has an interest, financial or otherwise, whereby the use or disclosure of information obtained while performing services under this Agreement would allow for private or personal benefit or for any purpose that is contrary to the goals and objectives of this Agreement.

2. An instance where the Contractor's or any subcontractor's employees, officers, or directors use their positions for purposes that are, or give the appearance of being, motivated by a desire for private gain for themselves or others, such as those with whom they have family, business or other ties.

c. If the State Water Board is or becomes aware of a known or suspected conflict of interest, the Contractor will be given an opportunity to submit additional information or to resolve the conflict. A Contractor with a suspected conflict of interest under this Agreement will have five (5) working days from the date of notification of the conflict by the State Water Board to provide complete information regarding the suspected conflict. If a conflict of interest under this Agreement is determined to exist by the State Water Board and cannot be resolved to the satisfaction of the State Water Board, the conflict will be grounds for terminating this Agreement. The State Water Board may, at its discretion upon receipt of a written request from the Contractor, authorize an extension of the timeline indicated herein.

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7. Audit and Inspections

a. The Contractor, as indicated below, agrees to obtain one of the following audit:

1) If the Contractor is a State or Local Government entity or Nonprofit organization (as defined by the Federal Office of Management and Budget [OMB] Circular A-133) and expends $500,000 or more in Federal awards, the Contractor agrees to obtain an annual single, organization wide, financial and compliance audit according to the requirements specified in OMB Circular A-133 entitled "Audits of States, Local Governments, and Non-Profit Organizations".

b. The State and the funding agency, if any, may examine and audit all of Contractor's financial books, documents, and materials relating to this agreement, and Contractor agrees to preserve and make them available for three (3) years after final payment.

8. Documents, Publications and Written Reports

Any document, publication or written report (excluding progress reports, financial reports and normal contract communications) prepared as a requirement of this Agreement shall contain, in a separate section preceding the main body of the document, the number and dollar amounts of all contracts and subcontracts relating to the preparation of such document or report, if the total cost for work by non-employees of the State exceeds $5,000.

9. Force Majeure

Except for defaults of subcontractors, neither party shall be responsible for delays or failures in performance resulting from acts beyond the control of the offending party. Such acts shall include but shall not be limited to acts of God, fire, flood, earthquake, other natural disaster, nuclear accident, strike, lockout, riot, freight embargo, public regulated utility, or governmental statutes or regulations superimposed after the fact.