



Linda S. Adams
 Secretary for
 Environmental
 Protection

California Regional Water Quality Control Board Central Valley Region

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**Arnold
 Schwarzenegger**
 Governor

TO: Charlie Hoppin, Chair
 State Water Resources
 Control Board

FROM: Pamela C. Creedon
 Executive Officer

DATE: 18 March 2009

SIGNATURE: _____

REPORT FOR MEMORANDUM OF UNDERSTANDING (MOU) PILOT PROGRAM

The Memorandum of Understanding (MOU) between the California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board), the State Water Resources Control Board (State Water Board), the California Department of Pesticide Regulation (DPR), and the Agricultural Commissioners of Glenn County and Butte County requires the staff liaisons from the Central Valley Water Board and the Agricultural Commissioners of Glenn County and Butte County submit Quarterly Reports of the activities performed under the MOU Pilot Program.

The attached reports are summaries of the MOU Pilot Program activities performed to date. Recommendations for changes to the MOU and the contract are noted in each staff liaison report.

I believe the Pilot Program has been a success and has proven to be a valuable addition to our water quality protection efforts. It has helped us more effectively reach out to the agricultural community and implement the Irrigated Lands Regulatory Program. We are at an important cross-road with the Pilot Program. The State Water Board has historically funded this effort; however, they have not yet provided funding for the second year of the two-year funding commitment identified in the MOU. Since the existing contract will need to be amended, the funding will need to be identified in the near term if we are to meet our funding commitment under the Pilot Program. We will work directly with Dorothy Rice and Tom Howard regarding this issue.

More importantly, I believe we need to engage in a dialogue on our long-term vision for engaging the Agricultural Commissioners. If you agree, I will direct my staff to arrange a meeting with appropriate State Water Board, DPR, and County Agricultural Commissioner staffs to begin that dialogue.

If you have questions regarding this Report, please contact me at (916) 464-4638 or Joe Karkoski at (916) 464-4668.

cc: Ms. Dorothy Rice, Executive Director, State Water Resources Control Board
Mr. Tom Howard, Chief Deputy Director, State Water Resources Control Board
Ms. Mary-Ann Warmerdam, Director, Department of Pesticide Regulation
Mr. John Sanders, Chief, Department of Pesticide Regulation
Mr. Mark Black, Agricultural Commissioner, Glenn County
Mr. Richard Price, Agricultural Commissioner, Butte County
Mr. Johnny Gonzales, Program Manager, State Water Resources Control Board

ATTACHMENT A

MOU PILOT PROGRAM SUMMARY REPORT CENTRAL VALLEY REGIONAL WATER BOARD JANUARY 2009

Summary

This document summarizes the activities performed to date under the Memorandum of Understanding (MOU) Pilot Program initiated in December 2005 to support the Irrigated Lands Regulatory Program (ILRP). This pilot program has progressed from inspecting management practices at individual farms to surveying and mapping management practices in a watershed. When this baseline is correlated with surface water monitoring, the effectiveness of implemented management practices to improve water quality can be assessed and evaluated.

The MOU Pilot Program has also established lines of communication between the Agricultural Commissioners, the subwatershed groups, the Sacramento Valley Water Quality Coalition Group (Coalition), the Central Valley Water Board staff, and other agencies such as the County Resource Conservation Districts and the Natural Resources Conservation Service. The agricultural commissioners provide in-depth knowledge of farming practices, crops grown in the county, and pesticide use, making them a necessary part of the present ILRP and any long-term program that may be implemented.

Recommendations from the Butte County and Glenn County Agricultural Commissioners and the Central Valley Water Board staff liaisons include continuing the MOU Pilot Program and adding a provision to allow transfer of personnel funding to materials and supplies and training.

Background

The Memorandum of Understanding that established the Pilot Program was signed on 29 June 2005 by the Central Valley Regional Water Quality Control Board (Central Valley Water Board), the State Water Resources Control Board (State Water Board), the California Department of Pesticide Regulation (DPR), and the Agricultural Commissioners of Glenn County and Butte County. The MOU specifies the Central Valley Water Board contract directly with the Butte and Glenn County Agricultural Commissioners to support activities related to the ILRP. The MOU was renewed on 29 June 2007 with minor revisions to be effective for four years. At that time, the MOU will be reviewed by all parties to assess its effectiveness in addressing water quality impacts as described in the ILRP. Upon completion of the review, the MOU may be renewed, revised, or terminated.

Program Support from Agricultural Commissioners and Their Staff

Outreach and communication

As the pilot program progressed, one goal for the MOU Pilot Program agreed upon between Central Valley Water Board and the Agricultural Commissioners was to integrate the program into the Coalition monitoring and outreach programs by offering support services and information.

The Agricultural Commissioners' staff was asked to inform growers about the ILRP during mandatory training meetings and when growers applied for pesticide permits. The staff was tasked to provide pesticide use information, as requested by the Coalition or subwatershed groups, whenever monitoring showed pesticide exceedances. They participated in meetings with the subwatershed groups and Coalition regarding the ILRP, and provided updates on the MOU Pilot Program and what services they could provide to comply with ILRP requirements.

The Agricultural Commissioners and their staff also established lines of communication with other Agricultural Commissioners, subwatershed groups outside their counties, and other agencies and stakeholders, such as the County Resource Conservation Districts, the Natural Resources Conservation Service, and the County Farm Bureau. These lines of communication ensure that stakeholders can be informed about the ILRP and that a point of contact is established.

Both counties have made grower presentations, in PowerPoint and geographical information system software (ArcGIS), using information on crop types, farm layout, and pesticide use to show the relationship of an observed water quality problem (pesticide exceedance) to geography, irrigation management, and practices in pesticide application. These presentations have been successful in convincing growers to be more attentive to pesticide applications and, in some cases, have stopped further exceedances.

Attachment A-1 is a letter sent to growers in the Walker Creek watershed regarding an exceedance of the chlorpyrifos water quality objective. The Glenn County staff presented the mapping of Walker Creek using ArcGIS to show parcels with crop types and drainage systems. The growers were then shown which parcels within a mile or so of Walker Creek had applied chlorpyrifos within a two week window before the sampling date. Growers were actively engaged, questioning how the data were collected and its accuracy. One grower indicated that aerial application of chlorpyrifos on his property may have caused the exceedance and to remedy the issue he would inform the applicator of the creek and drain locations.

Attachment A-2 is a follow-up letter from the Colusa Glenn Subwatershed to the growers reminding them what they can do to prevent another exceedance. To date, no further exceedances of chlorpyrifos have occurred in the Walker Creek subwatershed.

Management practices

The 2005 contract with the Agricultural Commissioners specified farm inspections to document management practices related to water quality, and to inspect and assess Coalition monitoring or proposed monitoring sites as being representative of agricultural discharges. Later, the Agricultural Commissioners' staff would work closely with the subwatersheds to select monitoring sites and tie the monitoring data collected with management practice surveys in the watershed.

The MOU Pilot Program participants realized that the management plan, triggered when a water quality objective for a constituent was exceeded twice in a three year period at a site, would be one performance measure for the ILRP. The management plan lays out the actions and schedules to identify the agricultural source of the exceedance, and any subsequent actions, such as implementing management practices, that would improve water quality.

Under the MOU Pilot Program, two subwatersheds -- Pine Creek in Butte County and Walker Creek in Glenn County -- were surveyed by county staff to identify the management practices in place. These surveys started at the end of 2006 and extended through 2007. During this period, the Coalition monitored both watersheds as part of the ILRP monitoring program.

The management practices survey demonstrated how a baseline survey could be performed and provided an estimate of the time involved to complete a survey. Documenting the baseline for each subwatershed was dependent on the resources and expertise available to the Agricultural Commissioners' staff. The results of the baseline survey -- the forms used, the database developed and the means of obtaining the management practices baseline (survey forms and observations) -- have been relayed to the subwatershed groups and Coalition. Variations of the survey forms used for the creek walk-through are now being used by the East San Joaquin Coalition for counties in their area. The forms are serving as a model and will save time and money for the subwatersheds and coalition groups that want to document management practices.

Interaction with other agencies

In 2008, the survey for Pine Creek was extended to its headwaters in Tehama County. Communications and contact with the Tehama County Agricultural Commissioner's office was made, as well as with other Tehama County agencies such as the County Assessor's Office and Planning Department. These agencies were informed about the ILRP and the MOU Pilot Program, and how their agencies and resources could be of use to the Coalition and subwatershed groups.

The Glenn County Agricultural Commissioner's staff started the survey and mapping of Logan Creek which starts in Glenn and crosses into Colusa County. Again, lines of communications were established between the Agricultural Commissioners and other county agencies.

Program Status

Funding for the current contract is through 30 June 2009. Although the 2007 MOU states the program should be under a two-year contract, future funding for the MOU Pilot Program is uncertain due to the budget situation.

Documentation of baseline and implemented management practices within a watershed is continuing. Two additional watersheds, Freshwater Creek for Glenn County and Honcut Creek for Butte County, are being surveyed and mapped in cooperation with other counties under the MOU Pilot Program. Monitoring by the Coalition in these watersheds will occur in 2009 and will be used to assess the effectiveness of the management practices in place.

Consistent with the MOU (per item II.B.1.), the Butte and Glenn County Agricultural Commissioners intend to subcontract with neighboring counties to accomplish the goals of the MOU. These subcontracts will help the Water Boards, DPR and the Agricultural Commissioners determine how the program can be expanded, should a decision be made to do so. Funding for the subcontracts would be provided from the allocations to Glenn and Butte Counties.

The subcontracts would assist the local subwatershed groups by providing information on pesticide use and field crops that could be tied into monitoring results, and establish lines of communication between the Agricultural Commissioners, the subwatershed, the Coalition, and the ILRP. The Glenn and Butte County staff will then train others in the techniques used to gather information for the management practices survey.

Recommendations

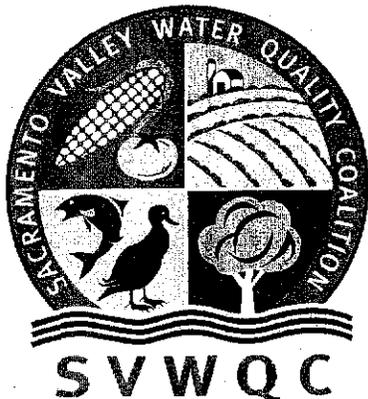
Funding

The unique position of the Agricultural Commissioners, being a regulatory body with direct access to growers and information on pesticide use and field crops, makes them an important part of any long-term program that will regulate and monitor discharges from irrigated agriculture. Continuation of the MOU Pilot Program is recommended as the role of the Agricultural Commissioners are explored and integrated into alternatives for the long-term ILRP.

A means of obtaining secure funding will also allow the Agricultural Commissioners to plan and dedicate the resources and manpower that would be required in a long-term program.

Changes in MOU

The MOU currently funds for personnel time only. The option to convert a portion of the funds to non-personnel time, such as materials and supplies and training, would better serve the goals of the MOU Pilot Program. The option to transfer no more than 10% of the funding for materials and supplies (such as paper for outreach and surveys, printing costs, and postage), or training for sampling of surface water, would greatly enhance the program and expand its effectiveness.



EXCEEDANCE NOTICE

from

Sacramento Valley Water Quality
Coalition and
Colusa Glenn Subwatershed Program

WALKER CREEK WATERSHED

Enclosures

1. Advisory Notice of Exceedances
2. Workshop Notice

December 21, 2007

Water quality testing of the Walker Creek Watershed is currently being performed by the Sacramento Valley Water Quality Coalition (SVWQC), with the assistance of your local subwatershed group, the *Colusa Glenn Subwatershed Program*. The Event 23 (August 2007) and Event 24 (September 2007) irrigation samplings showed exceedances of state water quality objectives for chlorpyrifos (trade names include Lorsban 4E, Lorsban 4E-HF, Whirlwind, Nufos 4E, Govern 4E, Chlorpyrifos 4E). As a result of these exceedances, the Central Valley Regional Water Quality Control Board (Water Board), under the Irrigated Lands Regulatory Program, is requiring that the SVWQC notify landowners upstream of the sampling site about the water quality exceedances and potential causes. In addition, a Management Plan is required to be developed in order to address this problem. You can help correct the water quality problem, and potentially keep monitoring to a minimal, by doing the following:

Attend a workshop on January 16, 2008. The workshop will describe the test results, possible causes, and research and implementation of Best Management Practices (BMPs).

Monday Afternoon Club
120 North Lassen Street, Willows
9:00 a.m. to 10:30 a.m.
Refreshments provided

Who is attending? All growers in the Walker Creek Watershed that have Almonds, Alfalfa, and transplant nursery crops. All Pest Control Advisors and Commercial applicators of the growers

Why should I bother? Grower, PCA, and PCO participation at workshops, growers completing Management Practice surveys and more importantly, adopting BMPs on lands contributing to farm runoff problems, are key success measures for you, the SVWQC, and Colusa Glenn Subwatershed Program to comply with the Irrigated Lands Regulatory Program. Failure to solve water quality problems through watershed-wide efforts will eventually lead to regulations requiring individual permitting of each farm operation by the Water Board.

If you are a grower and have not received and returned a Management Practice Survey from the Glenn County Department of Agriculture during your last pesticide permit renewal, please contact Lester Messina, Glenn County Department of Agriculture at 934-6501.

Larry Domenighini
Colusa Glenn Subwatershed Program, President
(530) 934-8036

Mark Black
Agricultural Commissioner
(530) 934-6501

County of Glenn Department of Agriculture

Mark D. Black, Agricultural Commissioner
Sealer of Weights & Measures

Jean S. Miller, Assistant Agricultural Commissioner
Sealer of Weights & Measures

With technical assistance from:

Sacramento Valley Water Quality Coalition
&
Colusa Glenn Subwatershed Program

**WALKER CREEK WATERSHED
WATER QUALITY WORKSHOP**

When: Wednesday, January 16, 2008

Where: Monday Afternoon Club
120 North Lassen Street
Willows, CA 95988

Time: 9:00 AM to 10:30 AM

Questions? Please call (530) 934-8036 for more information.

With technical assistance from:

County of Glenn Department of Agriculture

Mark D. Black, Agricultural Commissioner
Sealer of Weights & Measures

Jean S. Miller, Assistant Agricultural Commissioner
Sealer of Weights & Measures

Colusa Glenn

Subwatershed Program

P.O. Box 1205, Willows, California 95988 - Phone (530) 934-8036 - Email cgsubwatershed@sbcglobal.net

May 21, 2008

Dear Landowners, Ag Dealers, PCA's, and Operators:

Please read this carefully.

This letter serves as a reminder that you, or your clients, participate in the local subwatershed group, the *Colusa Glenn Subwatershed Program*, to meet requirements under the Irrigated Lands Regulatory Program (ILRP). The ILRP is a mandated program through the California Regional Water Quality Control Board, Central Valley Region for growers within the Central Valley who have irrigation water and/or stormwater leaving their irrigated lands.

As spring has come and summer is almost here, we know that it is time to begin using Chlorpyrifos (trade names include Dursban, Lorsban 4E, Lorsban 4E-HF, Whirlwind, Nufos 4E, Govern 4E, Chlorpyrifos 4E) on your crops. Application of these products may be by ground or air and include most tree crops and alfalfa.

We strongly encourage that you be very aware of water quality issues with this insecticide and utilize any and all Best Management Practices (BMPs) that are available to you and your operation. For example, control drift when applied, do not over-apply, and most of all be aware that if an exceedance in run-off waters occur, then the local subwatershed group will be forced to conduct additional outreach to its participants, using membership fees. *NOTE:* There have already been two exceedances of this nature within the Walker Creek Watershed area. As a response to these exceedances we held a grower workshop in January 2008 and as required by the Conditional Waiver we now have to prepare a management plan. At this time it is not clear what will be required to comply with these requirements.

For more information in using Chlorpyrifos appropriately to reduce chances of an exceedance, please contact our office at (530) 934-8036 or your local Ag Commissioners office to receive Best Management Practice ideas.

Thank you,

Kandi Manhart
Outreach & Education

More information on the Irrigated Lands Regulatory Program (ILRP) may be found at:
www.waterboards.ca.gov/centralvalley/programs/irrigated_lands/index.html

More information on the Sacramento Valley Water Quality Coalition may be found at: www.svwqc.org

Board of Directors

Colusa County Farmers: Denise Carter, Joe Carrancho, John Garner
Glenn County Farmers: Larry Domenighini, Greg Overton

ATTACHMENT B

MOU PILOT PROGRAM SUMMARY REPORT BUTTE COUNTY DEPARTMENT OF AGRICULTURE JANUARY 2009

As required by contract # 07-079-150-0, the Butte County Department of Agriculture is to provide the Regional Water Quality Control Board (Central Valley Water Board) with an annual report of activities as it relates to the scope of work for the Irrigated Lands Regulatory Program (ILRP) contract.

On June 29, 2005 the Butte County Agricultural Commissioners Office (BCACO) entered into a Memorandum of Understanding with the Department of Pesticide Regulation (DPR), the Glenn County Agricultural Commissioners Office, the Central Valley Water Board, and State Water Resources Control Board (State Water Board) and agreed to provide program support necessary to the ILRP.

A contract / agreement for services between the Central Valley Water Board and BCACO began July 1, 2005. From that date many events have transpired and much work has been completed in support of, and to promote the development of the ILRP.

The County Agricultural Commissioners have provided the Central Valley Water Board staff access to the Commissioner's office facilities and contracted their agricultural biologist staff to support the Central Valley Water Board staff and carry out the activities necessary for the evolution of the ILRP. This support has extended beyond agreement activities and periodic meetings with the Commissioners, their staff and SWRCB Liaison.

The BCACO has gathered the most current available electronic map data from a number of county departments and special districts, this data delineating natural water bodies, constructed water ways and canals, agricultural drainage and irrigation districts and many other water features. The data set is, however, incomplete and BCACO continues to provide updated map information to the Central Valley Water Board as new information is gathered or becomes available and as more undocumented detail is observed during ILRP field site investigations and inspections.

Management practices (MPs) were sought out and documented during all ILRP contract field activities by BCACO staff, particularly during agricultural pesticide use, site inspections and farm management interviews throughout the county. A management practice list was created and MP data was compiled from direct observations. This list was combined with other MP research results.

Suitable locations to perform these inspections had to be identified. Orchards located remote from creeks and streams are hydrological isolated and not a prime discharge inspection location likely to yield usable MP data. The resources of the BCACO's Pesticide Use Enforcement Program were particularly useful in this endeavor.

Methods of assessment to determine MP effectiveness were researched and expounded upon in a draft Management Practices (MP) Report.

The BCACO has, throughout the course of the contract; followed up on Central Valley Water Board initiated investigations concerning water quality and exceedance issues in Butte County including: the Biggs Dairy, E. coli discharge investigation, - in 2006. County staff provided follow-up support activities for research on area pesticide permits in the Red-leg Frog habitat core area of the upper Feather River in 2007. Additionally; BCACO responded to Coalition and sub-watershed groups concerns, and ILRP inquiries from individuals in the agricultural community.

The orchard ILRP management practice site inspections and additional best management practices (BMP) research gave rise to a more refined and extensive MP list. As the program progressed, scattered site by site inspections were now yielding duplicate data. It became clear to the county liaison that a large-scale survey of an Ag intensive watershed would demonstrate the scope to which this, now refined, list of MP's was being used by the local farming industry. There is a specific task in the contract scope of work to identify, evaluate and document management practices that are specific and appropriate to activities and operations within **watersheds.**" And so, a watershed survey procedure was developed for the Pine Creek watershed and proposed to the Central Valley Water Board liaison.

The project required that individual sites, adjacent the creek, be surveyed. Due to the limited access, most of the sites had to be surveyed on foot. Where possible a vehicle was used. Pine Creek is 24 miles long (including the Tehama County section) and both sides had to be surveyed. Observable management practices and discharge points were recorded on survey forms and the data was then organized into a table found in the MP report. The frequency of MP's use in the survey area was calculated for a base line. These results are summarized in the MP report.

Part I and II of the survey was completed in 2007. The preliminary results were presented to Central Valley Water Board staff on September 21, 2007. To complete the entire agricultural part of the watershed, the management practice survey was extended to the portion of the creek in Tehama County. Due to the July contract suspension, the field survey work was not completed until January 25, 2009. Incorporation of the Tehama County data into the draft Management Practices Final Report is not yet complete.

As it stands now the MP Report and Summary is a 15 page document describing the activities, research, finding and conclusions of the BCACO work under the contract with Central Valley Water Board for the ILRP. The MP Report is an evolving document that is continually being refined and up-dated to reflect new MP data gathered by the BCACO.

An additional watershed on the southern boarder of Butte County, Honcut Creek Watershed, was chosen as the next agricultural drainage to be surveyed. This creek has many of the same water quality issue as Pine Creek. Due to the August 2008 contract suspension, the Honcut Creek watershed survey for existing management practices is not likely to be complete during the remainder of the present contract.

Copies of the entire management practice survey program, all survey documents and the power point presentation for the Pine Creek survey, were provided to the Glenn County Agricultural Commissioners Office, the Butte-Yuba-Sutter (BYS) Watershed in 2007. The Yuba County Agricultural Commissioner, the Yuba-Sutter Resource Conservation District (RCD), the Tehama County Agricultural Commissioners Office and the Executive Director of the Coalition for Urban/Rural Environmental Stewardship (CURES) received the information on October 10, 2007.

BCACO staff inspects all Butte County sampling points designated in Sacramento Valley Water Quality Coalition (SVWQC) and the California Rice Commission (CRC) Monitoring and Reporting Programs (MRPs) in order to determine whether representative samples of agricultural wastewater discharges can be obtained at the designated sample points and at specified sampling times. These sampling locations include: Pine Creek, Butte Creek, and Hamlin Slough. Additionally the UC Davis TMDL water monitoring locations on Edgar Slough, Comanche Creek, Little Dry Creek and the DPR water monitoring sites were added to the county ILRP digital map data base.

In 2008, three new up-stream sample locations for the Honcut Creek sub-watershed in the BYS watershed were evaluated as potential monitoring sites. Based on BCACO staff evaluation data, the new monitoring site was placed at the junction of Hwy 70 and Honcut Creek for the 2008-09 monitoring program.

As the ILRP continued to develop, BCACO staff provided outreach activities, support and information updates to irrigators / growers at many sponsored events and meetings throughout the years, including; the "Butte County Continuing Education Annual Grower Meeting", Big Valley Chemical Grower meeting, the Walnut Day annual growers meeting and Almond Institute grower meetings attended by hundreds of participants.

Handouts and brochures that explain the ILRP and Coalition efforts and activities within sub-watersheds continue to be provided to the agricultural permit holders at individual annual pesticide permit appointments.

To further the implementation of the ILRP, the BCACO coordinated with many other agencies associated with the local agricultural industry concerned with and exploring management practices that protect water quality.

Butte County has continued coordination with the of Glenn, Tehama, Yuba and Sutter Agricultural Commissioners Offices and with members of the Butte-Yuba-Sutter watershed, the Resource Conservation Districts of Butte and Yuba County, the Natural Resources Conservation Service (NRCS) and many other agencies, regarding various aspects of the ILRP and activities that address and explore issues and promulgate knowledge concerning water quality and the agricultural industry.

BCACO staff has attended ILRP / TIC committee meetings and presented a county ILRP activity updates in Power Point and shared information, future strategies and alternatives concerning county level issues of management plan implementation.

BCACO involvement in ground and surface water quality issues and collaboration with Central Valley Water Board under the ILRP has generated interest and inquiry from other organization. The Agricultural Departments' comments, input and evaluation (with respect to the ILRP and the departments regulatory functions) have been sought on various water-related issue including: NPDES permits, local flood control policy, drainage and irrigation district disputes and local land development drainage and water resource issues.

Butte County staff attended the Nielsen Water Sampling Field Course, 15 thru 18 October 2007. Knowledge and experience gained in this training directly supported the Central Valley Water Board and ILRP activities under a number of contract tasks.

Recommendations:

Local watershed organizational issues:

Certain watershed administrations do not appear to have a clear understanding of the present program direction, watershed management functions and responsibilities or appropriate interaction with other stakeholders under the ILRP and its various MOUs. Likely this is a result of not having a full-time coordinator that would anchor the institutional memory of the watersheds development and its function within the ILRP. Or maybe they just don't care.

At the August 28, 2008 Central Valley Water Board /TIC committee meeting, a list of frequently asked questions concerning the ILRP and management practices was presented to the attendees (listed below). Many of the issues at the root of these questions are fundamental to the program.

- What are the definitions, types, and categories of management practices?
- How to identify management practice's in place, if you have them?
- How / who documents the existing MP's?
- Which MP's should be used?
- How are Ag MP's evaluated?
- How is the Ag operation credited for using MP's?
- What about adjacent neighbors discharging onto one another?
- What about urban pesticide use and discharge?

Developing answers to all of these questions is likely a far reaching process and would require significant evolution of the ILRP before complete answers can be formulated. For the present and future, however; I think it would be a good idea if the task of answering these questions became a perpetual topic on water resource board, coalition and watershed meeting agendas until satisfactory responses to the questions are formulated. From the

systematic debate and analysis on these questions and issues and also incorporating the Glenn and Butte County pilot program MP survey procedures and products, I believe a more coherent understanding of what the ILRP needs, at the watershed level, would evolve at all organizational levels.

Mid year county contract suspension and remaining work load:

Butte County ILRP program work was suspended from August 1st to October 16th. This prevented the Pine Creek / Tehama County and Honcut Creek / Butte County MP surveys from being completed. Additionally there has been a reduction in county staffing. As a result, completion of the Pine Creek survey is projected to be late January to mid February 2009. Given that Honcut Creek is not a required deliverable for the contract, and will not contribute significantly to the final report, completion of the Honcut Creek survey should be assigned a floating low priority and only worked on as the remainder of the contract time allows in the absence of high priority ILRP issues.

Contract Changes

Invoicing flexibility for services, supplies and equipment is not available in the present contract. To date these costs have not been overly burdensome to the department, however the economic posture of the county has drastically changed and department supplies and services accounts have been reduced to practically nothing. Additionally, the development and direction of the ILRP suggests that the need for this category of expenditure (services, supplies and equipment) will likely increase and must be considered in the next contract. A flexibility clause allowing fund transfer and invoicing for other than hourly work, with approval of the SWRCB contract manager, would address this issue.

A great deal of time is being spent on reporting an invoicing (monthly, quarterly and annual reports in addition to reports that document the inspections and other field activities). Streamlining or refining the reporting requirements would free up more time for field related activities.

MOU Changes:

The MOU appears to need some updating.

In Item 1, Intro., and Purpose, the MOU refers ("applies") to the program as a pilot program, however; the program is no longer referred to as a pilot program.

The Work Plan was altered for the 07-08 contract, Tasks under the scope of work were reworded, section II,C,1 may need to be updated.

Robert C. Hill
Deputy Agricultural Commissioner
Phone: 530-538-7381
Fax: 530-538-7594

ATTACHMENT C

MOU PILOT PROGRAM SUMMARY REPORT GLENN COUNTY DEPARTMENT OF AGRICULTURE JANUARY 2009

The Central Valley Regional Water Quality Control Board (Central Valley Water Board) has adopted a Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (Resolutions No. R5-2003-015 & R5-2006-0053) herein referred to as the Irrigated Lands Regulatory Program (ILRP). In an effort to integrate resources, a Memorandum of Understanding (MOU) between the California Department of Pesticide Regulation, the Agricultural Commissioners of Butte and Glenn Counties, the Central Valley Regional Water Quality Control Board (Regional Board) and the State Water Resources Control Board was developed. This MOU applies to a pilot program initiated with Glenn and Butte Counties. These two counties, under the jurisdiction of the Regional Board, initiated activities throughout the Sacramento River Basin in support of the ILRP.

The initial contract 05-182-150-0 was entered into in July 2005 following development of the initial MOU. A renewed contract 07-078-150-0 was entered into in April 2008. The MOU was renewed in June 2007. The current contract is set to terminate in June 2009. The contract is the basis for cooperation between the Regional Board and the Glenn County Agricultural Commissioner (GCAC) to perform tasks requested by the Regional Board specific to the MOU.

Initially the GCAC staff provided Regional Board staff the opportunity to interact locally with growers at recurring education and outreach meetings to explain from their point of view how and why the ILRP was developed and how enforcement would be undertaken. Prior to all MOU's and contracts, the Sacramento Valley Water Quality Coalition (Coalition) was formed in an effort to assist irrigators in the valley with meeting the compliance goals established by the Regional Board. The levels of communication between all entities seemed to benefit greatly from this interaction.

During the initial stages of the pilot program, GCAC staff's intimate knowledge of the County's agricultural activities and positive relationships with growers proved to be of great value by being the entity that acted as the intermediary between regulatory, administrative, and monitoring activities. Tasks such as overseeing monitoring, sample point selection rationale, attending meetings with sub-watershed representatives at Coalition meetings, and overall outreach and education were expanded. As new situations arose, there was a recognized pipeline to disseminate information.

Through the pilot program, GCAC staff was afforded the opportunity to attend training that would be beneficial to the agricultural community as well as the Regional Board. At a minimum, types of training necessary would include GIS, data base development, field sampling techniques, and some form of sampling analysis. Staff assigned to participate in this type of program should become as knowledgeable as possible of the tools available to bring a sense of professionalism to the program absent a formal training organization.

One of the first tasks undertaken by the GCAC staff was to develop mapping that would assist the Regional Board with gaining a better understanding of the agricultural activities of the County. The map contained currently available information of natural water bodies, agricultural canal systems, and to the best of their knowledge, constructed agricultural drains in an Arc View® format. Additional information has been added to included property operators, parcels, cropping, drainages, irrigation type, and other information relevant to the overall activities being undertaken that were relevant to the ILRP.

As the program advanced it was recognized that management practices being utilized on agricultural fields that may have an impact to water quality needed to be quantified. This could be accomplished by having GCAC staff perform visual inspections of agricultural fields and document what practices were in place and correlate practices with monitoring results. From this concept, a proposal to initiate a Best Management Practices (BMP) evaluation was submitted to the Regional Board contract manager and was approved.

The Walker Creek Watershed was selected to initiate BMP evaluations. The watershed encompasses over 27,000 acres. Within that acreage there are approximately 140 growers identified that grow a variety of crops, similar to other diversified crop areas in the county. Baseline water samples from the newly established Coalition sampling location at the south end of Walker Creek would be used as a comparison for future sampling events. All of the information was put into Arc View® and linked to an Access® database. This type of evaluation demonstrated its success as an outreach tool for the local Subwatershed as they worked towards determining a possible cause for two separate exceedances from monitoring events. During the outreach meeting specific for the exceedances, growers were able to see the relationship of pesticide use and the geographic relationship from application to detection. Growers, pest control advisors, and others in attendance took a proactive approach to mitigate further exceedances. Once addressed by the Subwatershed, no additional exceedances of pesticides have been detected.

From that point, the value of this type of information gathering and presentation ability would certainly work towards the effectiveness of management practices in place and the positive relationship to water quality. Since that time, additional visual Best Management Practice type evaluations have been initiated; Logan Creek in Glenn and Colusa Counties and with the assistance of GCAC staff, Colusa County Agricultural Commissioner staff has taken on the Freshwater Creek watershed in Colusa County. The size and complexity of these watersheds are comparable to the initial evaluation performed in Glenn County's Walker Creek. It is anticipated the Logan Creek evaluation will be completed in the spring of 2009 and the Freshwater Creek evaluation will be completed in the fall of 2009. The Commissioners of Glenn and Colusa Counties have initiated a successful partnering relationship that crosses administrative and financial barriers.

The effectiveness of this type of evaluation should be the primary tool in assessing outreach and education efforts. As the ILRP looks into the long-term, it is clear that there needs to be local input as well as local resources available to provide the necessary information to all

involved. For a functional and successful program, the local people being held accountable need to play a greater role in developing the framework. The direct route to these individuals is through the County Agricultural Commissioners (CAC) offices.

In a recent study performed by Professor Hoosein Farzin of UC Davis, it was concluded that agriculture may be an easy target for those looking to place blame for poor water quality, but improvements can be made through identifying problems and implementing management practices to target their impacts.

It has been established that the most effective framework for successes in this program would be through the CAC offices along with collaborative efforts with Resource Conservation Districts (RCD). Recognizing this as a good partnership, through the pilot program, GCAC staff was able to coordinate the local RCD into a position of leading the Subwatershed in outreach efforts. To date this has been very successful relationship and should be encouraged in other areas.

Recommendations/Comments:

- Continue to perform larger scale watershed evaluations for management practices, similar to the Walker Creek, Logan Creek, and Freshwater Creek studies and incorporate them into an Arc View® data base.
- If the ILRP moves into the groundwater arena, take into consideration ongoing groundwater related activities in all Counties.
- Continue to play a lead role for the ILRP providing necessary water quality related services on a local and regional basis as requested.
- Programs such as this will not be successful if sustainable funding is not identified.
- When future contracts are entered into, consider changes that would include funding for services and supplies.