Agriculture and Environmental Results in the Pacific Southwest Region

Region 9 Agriculture Status Report

FY2005

May 2006

Contents

Agriculture, Environment, and EPA

Agriculture provides the livelihoods of thousands of farm workers, pumps billions of dollars into the economy, and produces an abundance of the commodities that feed and clothe us. It occupies a full quarter of the land area of the Pacific Southwest region of the United States. However, agricultural activities on these lands may have detrimental effects on environmental conditions, for people in agricultural communities and for natural communities. The agricultural practices that provide economic benefits for some can, in the short term, inflict illness on others and, in the long term, damage the very environmental conditions and ecosystem processes that make agriculture possible. The U.S. Environmental Protection Agency's Pacific Southwest Region is working to address the negative environmental effects of agricultural practices while enhancing the long-term viability *and sustainability* of the agriculture sector.

Regional Mission on Agriculture

The Region's mission on agriculture is to facilitate measurable improvements in the environmental effects of agriculture in the Pacific Southwest region, as mandated by Congress through EPA's authorizing statutes and as directed by EPA policy, primarily in the Agency and Regional strategic plans. These laws and planning documents provide the policy context for the Region's agriculture strategy. The Region 9 Agriculture Strategic Plan describes this framework, including the Region's overarching values and goals and the results the program expects to achieve. The Region 9 Agriculture Operating Plan describes the activities that the Region will undertake and the issues the Region will address during the two-year planning period to pursue EPA's strategic goals and carry out its mission.

In its strategic plan for agriculture, the Region lists the following objectives:

Clean Air: To reduce agriculture's contribution to non-attainment of Clean Air Act standards for particulate, and for volatile organic compounds and nitrogen oxides that are precursors to ground-level ozone pollution.

Clean Water: To reduce the impairment of water bodies due to agriculture.

Healthy Communities: To reduce the impacts of pesticides and pollutants on farm workers and rural communities.

Healthy Ecosystems: To reduce the environmental effects of agricultural inputs and practices and to encourage the use of the most environmentally sound alternatives.

In keeping with the Pacific Southwest Region's Strategic Plan, the Region will focus its efforts on agriculture in the San Joaquin Valley, while supporting our partners throughout the region.

This status report describes the Region's activities and accomplishments on agriculture for the reporting period as well as the measures of environmental conditions targeted by the program's activities.

U.S. EPA Pacific Southwest Region

States
Arizona
California
Hawaii
Nevada

Tribes
146 federally recognized tribes

Pacific Islands
American Samoa
Commonwealth of the Northern Marianas
Guam
Other U.S. islands and freely associated island groups

Strategies, Activities, and Outputs

The Region employs three basic strategies in its work on agriculture, with characteristic activities under each strategy, as shown below.

Collaboration and Funding	Regulation and Policy Development	Communication and Information Management
Funding	Leadership	Media relations
Technical assistance	Drafting and commenting	Programmatic reporting
Internal coordination	Compliance and enforcement support	Web site content
Inter-agency coordination		Data management
On-the-ground collaboration		

This report describes the results of these activities during FY2005.

Strategy One: Collaboration and Funding

The Region focuses federal, state, and private resources on priority environmental issues, by supporting efforts across EPA's media programs and with key agency and external partners to prioritize and address the most significant environmental effects of agriculture.

Funding

Region 9 awards and administers grants that affect agriculture under several programs, as described in more detail in the Region 9 Agriculture operating plan. The Region manages grants for agriculture under several programs.

- **Air** Division: Funds grants for the West Coast Collaborative for diesel emissions reduction
- **Water** Division: Funds the *States'* non-point source pollution programs under Clean Water Act Section 319.
- **Pesticides** Program: Manages grants under the Worker Protection Standards Program
- **Agriculture** Program: Manages Strategic Agriculture Initiative grants under the Food Quality Protection Act and Pesticide Environmental Stewardship Program

These grants support projects that address priorities of the media programs and promote long-term economic viability, social equity, and environmental health of agriculture. Appendix A provides detailed lists of Agriculture Program grants initiated, in progress, and completed.

Measures: Funding

Grants Awarded, Agriculture Program, FY2005

Proposals: 7

Awards: 3

Total amount: $352,000

Grants Completed, Agriculture Program, FY2005

Number:

Total amount:

Air Quality Grants

Agriculture equipment often uses older inefficient diesel engines burning high-sulfur fuel, leading to significant emissions of pollutants to air. In FY2005, the Region funded two projects in California to address this problem, through the multi-agency West Coast Collaborative for diesel emissions reduction. The Region provided $100,000 of a $260,000 grant to Sustainable Conservation, a non-profit working to merge business and government agendas on the environment, to test an additive for biodiesel fuel. This project promises to demonstrate the elimination of the increased emissions of nitrogen oxides typical of biodiesel. The Region also provided $50,000 of a $75,000 grant to California State University, Fresno's Center for Irrigation Technology to demonstrate the effectiveness of retrofitting older diesel engines in agricultural equipment to reduce emissions of nitrogen oxides, a constituent of smog.

Expected results for FY2005 West Coast Collaborative grants for agricul-ture -- emissions reductions

Carbon monoxide, hydrocarbons: 10%

Particulates: 15%

Sulfur dioxide: 20%

Nitrogen oxides: 20 tons/year

Water Quality Grants

In FY2005, the Region awarded $125,000 of Section 104(b)(3) money to Sustainable Conservation to demonstrate and evaluate a reciprocating biofilter system for removing nitrogen, organic matter, and pathogens from dairy lagoon water in the San Joaquin Valley. The Region expects this project to demonstrate the feasibility of preventing nitrate contamination of groundwater.

The Region also made CWA Section 319 funds available through a State *consolidated grants* solicitation focused on irrigated agriculture. This Agricultural Water Quality Grant Program made available $46 million for grants *(Props 40 and 50 bond funds)* for projects that define, reduce, or eliminate the discharge of polluted runoff from irrigated agricultural lands.

Agriculture Grants

For 2005, the Agriculture Program issued its sixth annual request for proposals under the Food Quality Protection Act (FQPA) and evaluated applications from seven respondents before awarding three grants for a total of $352,000.

In addition to allocating its own funding, Region 9 has strongly promoted a nation-wide sustainable agriculture grant program managed from EPA headquarters, with funding for minor and specialty crop growers working to use integrated pest management to address significant pest issues. The request for proposals under this program is scheduled for release in January 2006.

The Agriculture Program also awards and manages grants under the Pesticide Environmental Stewardship Program and the Regional Geographic Initiative. Funds from these programs support research on dairy air emissions and on specific agricultural pests as well as outreach to farm communities and to the broader agriculture sector.

Expected result for FY2005 FQPA grants

Reduce pesticide use and set grower standards for environmental certification on 700 acres of strawberries on California's central coast

Reduce high-risk pesticides on table grapes in four counties by 30 percent one year after project completion

Reduce use of organophosphate and carbamate pesticides in Central Valley orchards near water bodies by 10 percent

Technical assistance

The Agriculture Program provides technical assistance to the agricultural community to promote sustainable agricultural practices, including integrated pest management, conservation tillage, and nutrient management, under the Strategic Agriculture Initiative.

Measures: technical assistance

Commodity group meetings and field visits attended: 8

Presentations to local and national stakeholder groups: 5

Stakeholder meetings attended: 10

Internal coordination

The Program coordinates EPA air, water, and pesticide program priorities at the Regional level, and with the national EPA Strategic Agriculture Initiative and Pesticide Environmental Stewardship Program on pest management funding priorities.

Highlight: Aligning ORD Research with Agriculture Policy and Regulatory Needs for Animal Feeding Operations

EPA Office of Research and Development (ORD) is developing a broad research plan to characterize environmental problems associated with animal feeding operations. The Region began in 2003 to work with ORD to focus research on environmental and regulatory needs of the Pacific Southwest and other regional offices. The Pacific Southwest Region needs additional research and monitoring on the impacts of dairies on:

- contamination of ground water with salts and nitrates
- emissions to air of VOCs (ozone precursors) and particulate matter
- the environmental benefits of various manure treatment technologies.

Following extensive meetings with ORD in spring and summer 2003, the Agriculture Program presented Pacific Southwest Region issues to the Executive Committee of the EPA Science Advisory Panel in September 2004 and to a joint EPA/USDA conference in December 2004.

Result: Until the Assistant Administrators for air and water request ORD's help, ORD considers research on AFOs a lower priority.

Inter-agency coordination

The Agriculture Program collaborates on several grant proposal reviews with key external partners to influence funding decisions towards environmental issues in the San Joaquin air basin and the San Joaquin/Tulare and Imperial watersheds (see Appendix A for details). Grant reviews include:

- U.S. Department of Agriculture
- the Western IPM Center
- the California State Water Resources Control Board's Agriculture Water Quality Program ($47 million in total funding in FY2005 cycle)
- the University of California's statewide IPM program
- UC Davis' Sustainable Agriculture Research and Education program
- West Coast Diesel Collaborative ($1 million in total funding 1n FY2005 cycle)

The Region also participates in work groups that coordinate priorities among agencies.

Measures: inter-agency coordination

EPA funding processes with external partner collaboration: 1

External partner funding processes with EPA collaboration: 2

Total amount: approximately $49 million

Highlight: Agriculture Workgroup of the West Coast Diesel Emissions Reduction Collaborative

The Region's Air Division is leading a project to reduce air impacts from diesel engines. Called the West Coast Collaborative on diesel emissions reduction, it is an effort to use federal funds to leverage state, local, and private funding to accelerate diesel emission reductions in California, Oregon, Washington, and Alaska. Canada and Mexico have also joined the collaborative. The collaborative structure includes five sector-specific workgroups to identify projects for funding, including on for agriculture. The membership of the agriculture sector workgroup is diverse, with groups representing agriculture, environmental, and industry (such as fuels and engines) interests, and federal, state, and local governmental.agencies.

Agricultural diesel at work

Expected result: Significant reduction in diesel engine emissions that contribute to air quality problems

In FY2005, the West Coast Collaborative funded two projects to address the environmental effects of San Joaquin Valley agriculture, one to demonstrate the air quality benefits of using cleaner biodiesel fuel in farm equipment, and one to retrofit agricultural diesel pump engines to increase their efficiency.

Highlight: EPA-NRCS Senior Management Dialogue on Environmental Priorities

In August 2004, Wayne Nastri convened a meeting with the USDA Natural Resource Conservation Service's State Conservationists in Region 9 states, to improve dialogue between EPA and NRCS on shared environmental priorities, resulting in better communication, collaboration, *leveraging of resources* and decision-making. *This* meeting set the stage for *future* meetings of state *and federal* environmental and agricultural agencies to improve coordination and *collaboration* on Farm Bill conservation programs, environmental *program priorities*, and technical *and financial* assistance. In FY2005, follow-up meetings covered California's *irrigated lands* conditional waiver program, the State agriculture water quality grants awarded this year, dairy *regulatory compliance* issues, and joint priorities for FY2006. Quarterly meetings will continue in FY2006.

Result: Shared understanding of state and federal environmental concerns and priorities

On-the-ground collaboration

The Program works with commodity groups, non-profit organization, and growers to promote and reward grower adoption of environmentally preferable practices (e.g., eco-labeling, bio-intensive IPM, conservation tillage, dairy waste management technologies) to protect air and water quality. Targeted commodities are dairy, stone fruit, walnuts, processing tomatoes, and strawberries (see Appendices D and E for descriptions of two such projects).

Measures: On-the-ground collaboration

Commodity group and stakeholder meetings attended: 15

Pest Management Strategic Plans completed for California commodities: 10

Highlight: California Minor Crops Council

The Agriculture Program has engaged the California Minor Crops Council, which represents several commodity groups, to determine how to anticipate regulatory issues and support transitions to better crop management practices for minor crops

that will address environmental issues. Following up on our first annual meeting in August 2004, we met in February 2005 to talk about future funding opportunities. The California Minor Crops Council has asked to meet again in 2006 to continue the information exchange.

Strategy Two: Regulation and Policy Development

Many of the Region's activities to implement the Clean Air Act, Clean Water Act, and Federal Insecticide, Fungicide, and Rodenticide Act apply to agriculture. The Agriculture Program tracks, coordinates, and participates in these activities as necessary. While the Agriculture Program and its media program partners are not directly responsible for setting national policy, they actively contribute to the development and implementation of agriculture policy and regulation at the Regional and national levels and track relevant State policy and regulation.

Leadership

The Agriculture Program convenes stakeholder groups to provide perspective and advice to the EPA on policy and regulation development, and provides Regional perspective, technical assistance, and leadership to national policy development and rule-making processes.

Highlight: Compliance Assistance for the Biotechnology Industry

Agriculture Program staff coordinated, hosted, and facilitated a first field-compliance workshop targeting plant-incorporated protectants (PIPs), genetic modifications that enable plants to produce pesticides internally. PIPs are EPA's most active area of responsibility in the federal Coordinated Framework for Regulating Biotechnology. The cross-training workshop, held in San Francisco at the Region 9 office on March 17 and 18, 2005, resulted from continuing dialog with PIP registrants prompted by the Region's enforcement actions for non-compliance with Experimental Use Permit regulations and focused on field issues. Field and regulatory affairs staff and senior managers represented Pioneer Hi-Bred/Dupont, which emerged as the most interested registrant; other attendees included local, state, and federal regulatory colleagues, led by Regional Administrator Wayne Nastri.

Result: Highlighted areas needing clarification, gaps in policy, and differences in priorities of industry and regulatory stakeholders in the field. Participant reviews were strongly favorable.

Drafting and Commenting

The Region provided substantive, region-specific information on pesticides pertinent to the Region, to support stronger label language to protect workers and water quality and to improve enforceability. For example, Region 9 staff worked with the Office of Pesticides Programs to evaluate the stone fruit industry's request for an exemption to the label requiring use of enclosed cabs when applying diazinon products. Staff surveyed UC Davis agricultural engineers, UC extension agents, and Department of Pesticides Regulation staff and provided evidence to counter the industry's claims. Based on this information, OPP denied the exemption.

Result: OPP cancelled use of DCPA (Dacthal) on cotton and changed labeling of 2,4-D products to address airborne drift and water quality issues

Compliance and enforcement support

The Region media programs implement regulatory program goals with respect to agriculture, including compliance assistance, inspections, and enforcement actions. The Agriculture Program provides technical and policy support as necessary.

Highlight: Eliciting participation in the Consent Agreement on Animal Feeding Operations

On Jan. 21, 2005, EPA announced a national air quality compliance agreement for collection of data on emissions from certain animal feeding operations, and the Air Division invested significant effort in outreach to the Region's agricultural stakeholders, especially the dairy industry, on the agreement. Although applications for coverage under the agreement are still being processed, over 120 dairies in California, the majority in the San Joaquin Valley, had signed compliance agreements as of October 1, 2005. Nationally, applicants come from 37 states and from the pork, egg layer, meat bird, and dairy industries. After the Agency determines that the response is adequate and the Environmental Appeals Board approves, a monitoring study will begin. This is expected in early 2006.

Expected result: Availability of air quality monitoring data specifically from dairies in the San Joaquin Valley

Highlight: Ensuring Proper Use of Pesticides

Region 9's Pesticide Program's Worker Safety Team completed a comprehensive review of Priority Pesticide Illness reports from California that involved agricultural use pesticides and resulted in human health effects. This review highlighted improvements in communication with the State needed to strengthen enforcement of pesticide use regulations and help deter preventable exposure. The Team negotiated procedural improvements with the State and incorporated them into the annual cooperative agreement.

Result: Improved procedures for coordination with Department of Pesticides Regulation incorporated into cooperative agreement.

Using pesticides according to label directions prevents unreasonable risks to human health and the environment, and enforcement of use per labeling is necessary to ensure proper use. In FY2005, the Pesticides Program fined an aerial applicator for improper application of two pesticides which drifted onto a residential property adjacent to agricultural fields in Casa Grande, Arizona, killing fish in a small pond. In a more comprehensive effort, the Region provided technical assistance the Hawaii Department of Agriculture for farm inspections and for sampling and analysis of various food crops on American Samoa. Results showed illegal pesticide residues, indicating over-application of approved pesticides or use of pesticide products not approved for food crops. In response to these findings, American Samoa Environmental Protection Agency issued a general warning through the press to farmers to observe approved uses and application rates, issued a specific warning to one farm, and banned sales of produce from two farms.

Result: Outreach and education on pesticide use in American Samoa, Guam, and the Northern Marianas will be a priority

Strategy Three: Communication and Information Management

The Agriculture Program works to provide information to the public on the Region's plans, activities, and results for its efforts on agriculture, as well as information for management decision-making both to the Region's programs with responsibilities affecting agriculture and to external stakeholders in the agriculture community.

Media relations

Pressing environmental, regulatory, and legal issues in agriculture often draw

significant media attention. The Agriculture Program is working with the Region's press liaisons toward a communications strategy that will engage and motivate the agricultural community to comply with environmental regulations and voluntarily increase human health and environmental protection in the agriculture sector. The Region's media programs and the Agriculture Program work with the Region's press liaisons to respond to inquiries from and disseminate information to the media regarding the Region's activities and accomplishments on agriculture.

Highlight: Protected Harvest Processing-Tomato Grower-Certification Grant Announcement

The Region's Office of Planning and Public Affairs supported the announcement in August 2005 of a large State grant to Protected Harvest, a non-profit that promotes sustainable farming practices, to develop standards for sustainable tomato farming in Central Valley. EPA Administrator Stephen L. Johnson keynoted the presentation as part of an effort to promote "cooperative conservation" in agriculture.

Program accountability

The Agriculture Program works to keep EPA management, stakeholders, and the public informed of Program plans, projects, and results. In FY05, this effort included working internally and on HQ-sponsored workgroups to develop program performance measures. Agriculture Program staff also contributed program planning and accomplishment information for the Communities and Ecosystems Division operating plan for FY2006 and end-of-year report for FY2005 and briefed Division and Regional management on dairy, FQPA implementation, and national agriculture strategy issues.

Measures: communication

Program accountability

Program management documents developed: 3

Management briefings: 4

Highlight: Program Management Documentation

The Agriculture Program invested considerable effort in FY05 in reviewing its strategy and operations and developing indicators and results measures. The results of this program review are incorporated into the basic program management documents: strategic plan, operating plan, and annual status report for agriculture (which you are reading). Agriculture Program staff also served on national workgroups to develop outcome measures for EPA's pesticides programs, many of which apply to agriculture.

Result: Coordination of regional and national program review efforts to ensure consistency in measures

Information management

The Agriculture Program helps develop information systems and maintain databases to provide access to information on agriculture efforts for both internal and external stakeholders.

Highlight: Strategic Agriculture Initiative Web Site

The Agriculture Program supported the national Strategic Agriculture Initiative (SAI) and the American Farmland Trust in developing a web-based toolbox for grant applicants and recipients who are proposing or implementing projects to transition agricultural practices in certain commodities toward sustainability. The toolbox contains integrated pest management resources and outcome measures for grant applicants and grantees and a grants management database with project reports and other outcome information for SAI regional representatives to help standardize grants management across the regions. The Region 9 Agriculture Program's SAI

coordinator has provided subject-matter expertise to the developers on both grants management business processes and sustainable agriculture content.

Highlight: Protecting Endangered Species from Pesticides

The Endangered Species Project at the California Department of Pesticide Regulation (CDPR) completed development of a web application that informs California pesticide users of limits on pesticide use to protect listed species. Developed over several years with ongoing support from EPA Region 9, the application allows pesticide users to specify which pesticide products they plan to use and where they plan to apply it and provides information on any applicable use restrictions designed to protect listed species as well as supporting information on species recognition and the life histories.

Result: Internal and external stakeholders will have much improved access to information on pesticides and sustainable agriculture on the web.

Goals, Issues, and Outcomes

The Region addresses agricultural issues under four of EPA's strategic goals and across multiple goals, as shown in the table below.

Goal 1: Clean Air	**Goal 2: Clean and Safe Water**	**Goal 4: Communities and Ecosystems**	**Goal 5: Compliance and Stewardship**	**Cross-Goal Issues**
Volatile organic compounds (VOCs) and ground-level ozone	*Agriculture-related TMDLs*	Integrated pest management	Market-based incentives for sustainable agriculture	Multi-media effects of dairies and dairy manure
Particulate matter	Nonpoint source pollution	Biotechnology		
Diesel engine emissions	*NPDES permit for pesticides*			
Pesticide drift				

This report describes these issues, results, and outcome measures.

Key Issues: Goal 1 -- Clean Air

Agricultural production is the most significant economic activity in the San Joaquin Valley of California, with 25,000 farms housing 1.25 million dairy cows and using over 5,000 diesel engines to power irrigation pumps. Air quality in the San Joaquin Valley ranks with the worst in the nation, reflecting both the economy and the Valley's geography, and fifteen percent – three times the national average – of Valley children have asthma. The Region has made improving air quality in the Valley a top priority.

Objective 1.1: Healthier Outdoor Air

Sub-objective 1.1.1: More People Breathing Cleaner Air

Ozone

Agricultural practices produce several types of emissions to air that contribute to ground-level ozone, a major cause of respiratory distress. While the number of days per year that the level of ozone in ambient air exceeded the 8-hour ozone standard has declined since peaking in 2003, the San Joaquin Valley is still classified as a serious non-attainment area for ozone. The San Joaquin Valley Air Pollution Control District is working to control ozone precursors, including volatile organic compounds from wineries and nitrogen oxides from stationary engines. The air district submitted implementation plans to the Region in November 2004 that demonstrate progress by 2008 and attainment by 2010, and is currently revising rulemaking schedules.

Result: Successful defense of San Joaquin Valley PM-10 lawsuit allowing for implementation of Comprehensive Management Plans

Particulate matter

After a decade of PM-10 plans and litigation, California submitted the PM-10 Plan for the San Joaquin Valley in 2003. This comprehensive plan includes an agricultural measure, the Conservation Management Practices (CMP) Program, which requires farmers with 100 or more acres of contiguous land to implement conservation management practices using a flexible, menu-driven approach to obtaining emission reductions from farms. In FY2005, the local air district received roughly 6,400 applications covering about 3.2 million acres of San Joaquin Valley farmland, indicating that the Valley will meet its PM-10 reduction target of 34 tons per day (over 50% of the reduction necessary to meet air quality standards) by 2010. Cooperation among state and federal agencies and the agricultural community produced this result.

Result: As of early November, the San Joaquin Valley had experienced no exceedances of the 24-hour PM-10 standard in 2005

In FY2005, Air Division staff continued to work with the California Air Resources Board and the San Joaquin Valley air district on implementing the PM-10 plans rulemaking commitments and finalized the serious non-attainment designation of the San Joaquin Valley for fine particulates (PM-2.5), making the Valley one of two air basins (with Los Angeles) in California with that status and setting the stage for PM-2.5 reduction planning.

Pesticide spray drift

In response to the Region's highlighting the issue of pesticide drift during discussion of the proposed NPDES Pesticide rule, the Office of Pesticide Programs decided in FY2005 to revisit the issue. Region 9, as Regional representative on the issue, has consulted with OPP about strategy and context and coordinated with state co-regulators in anticipation of the reopening of the issue.

Result: OPP will convene a workgroup in FY2006 to recommend an approach to regulating pesticide drift

Key Issues: Goal 2 – Clean and Safe Water

Objective 2.2: Protect Water Quality

Subobjective 2.2.1: Improve Water Quality on a Watershed Basis

Total Maximum Daily Loads

In the context of a Cal-Fed Delta Improvement Package Implementation Plan, the Region worked with the Central Valley Regional Water Quality Control Board to include water quality commitments in a San Joaquin River Salinity Management Plan, with measures to improve dissolved oxygen conditions in the Stockton Deep Water Ship Channel. These commitments reinforce the salt/boron and dissolved oxygen TMDLs.

Highlight: Nutrioso Creek, Arizona

Implementation of the TMDL Implementation Plan for Nutrioso Creek is complete, as

all grazing and bank stabilization practices have been installed. Nutrioso Creek is part of the Upper Little Colorado River Watershed Based Plan, which is approximately 50% complete. The Effectiveness Report for Nutrioso Creek is scheduled for completion by January 2006; preliminary monitoring results show water quality improvement.

Concentrated Animal Feeding Operations (CAFOs)

During FY05, Water Division CAFO staff worked with EPA HQ and other EPA regions to revise the 2003 CAFO rule to address the February 2005 2nd Circuit Court's decision (Waterkeeper Alliance Inc., et al, v. EPA). A draft rule is expected to be published in the Federal Register in 2006 (early summer).

Water Division staff assisted the Central Valley Regional Water Board with its general WDR permit for dairies. Our efforts were to ensure that once EPA's final CAFO rule was in place, any dairy requiring a NPDES permit will have addressed these requirements through the general WDR permit thereby providing a "seamless" process. Through the California Dairy Quality Assurance Partnership program, 23 workshops were held throughout the Central Valley in September 2005, to assist dairy producers with the completion of Reports of Waste Discharge (ROWD), pursuant to the Board's WDR general permitting program. The Regional Board imposed the deadline of October 17, 2005 for these ROWDs to be submitted. The results from these outreach assistance workshops resulted in 97% of those producers attending, submitting their ROWDs by the deadline. The Regional Board is expected to adopt its general permit in June 2006.

Nonpoint source pollution

Runoff from irrigated agriculture is a major source *of* surface water pollution in California. California has historically waived *imposing waste discharge requirements* (i.e., regulation) *on* agriculture*. Rather, the State imposed what is known as the ag waiver program with little follow up, monitoring or enforcement.* In 1999, state law (Porter-Cologne) was amended to require, among other things, the review and if appropriate, renewal of waivers or replacement with waste discharge requirements, and enforcement of conditions. To implement the law, the Regional Boards in the Central Coast (RB3), Central Valley (RB5), Los Angeles Basin (RB4) and San Diego (RB9) have adopted new conditional waivers for agricultural discharges. U.S. EPA Region 9's NonPoint Source Program helped RB3 develop an on-line enrollment system which indicates that to date 80% of all those covered by the waiver in RB3 have enrolled. Participation in the program requires growers to provide operational information (map and management practices), participate in farm water quality education courses, complete a Farm Water Quality Plan, and monitor discharge water quality.

NPDES Pesticides rule

During 2005, the Agriculture Program worked with the Region's Water Permits Office and Pesticides Program on the NPDES Pesticides Rule workgroup, as the proposed rule was developed toward finalization. Regional staff and senior management submitted substantial comments on various issues raised during this rule development process, including the compromise of states' abilities to manage pesticides as pollutants under the Clean Water Act, thus limiting capacity to gather and track impairment data; and the proposed rule's ambiguity in its treatment of pesticide drift. Staff also responded to numerous requests for data and background information. The NPDES Pesticides rule is anticipated to be finalized in FY06.

Result: More protective planning document

Stimulated by the NPDES Pesticides rule development process, OPP initiated an effort to develop, for the first time, a standard operating procedure for integrating water quality data into the pesticide registration review process. OPP asked for the Region's support, which staff from the Pesticides, Agriculture, and Water programs provided. The Region also provided OPP monitoring data and enforcement-related and incident information on specific chemicals for use in re-registration decisions.

Key Issues: Goal 4 – Communities and Ecosystems

Objective 4.1: Chemical, Organism, and Pesticide Risks

The Ag Program will continue to support the Pesticides Program on issues of regional and national significance for agriculture, including biotechnology (e.g., plant-incorporated protectants), and integrated pest management implementation.

Integrated Pest Management implementation

Sub-objective 4.1.1: Reduce Exposure to Toxic Pesticides

The Agriculture Program's representative to EPA's national Strategic Agriculture Initiative Program (SAI) works both regionally and nationally to identify opportunities to further integrated pest management implementation and to strengthen the ability of this national program to better serve commodity groups and growers locally. This effort includes:

- developing a web-based "toolbox" to provide grantees with specific IPM
- resources to help them better manage SAI grants,
- developing an SAI database to capture all SAI integrated pest management projects,
- standardizing the Food Quality Protection Act Grants process across the Regions,
- administering a one-time sustainable agriculture grants program initiated by EPA headquarters for minor and specialty crops critical pest issues,
- developing SAI program measures, and
- developing a five-year business plan for the national Strategic Agriculture Initiative Program to better achieve EPA's environmental goals and increase integrated pest management adoption by the agricultural community.

Measures: SAI

New grantees using SAI toolbox: 5

Region 9 grants in SAI database: 30

Regions using standard RFP: 6

Biotechnology

Sub-objective 4.1.3: Reduce Chemical and Biological Risks

Region 9 also provides a regional voice on pesticide-related biotechnology issues,

particularly those associated with compliance with field aspects of biotechnology regulation. Following up on FY2004 enforcement actions for non-compliance with experimental use permits for plant-incorporated protectants, the Agriculture Program organized a cross-training workshop for a leading biotechnology firm and state and federal agencies in FY2005. See the "Leading" section on page 7 for details.

Key Issues: Goal 5 -- Compliance and Environmental Stewardship

Objective 5.2: …Innovation

Sub-objective 5.2.4: Environmental Policy Innovation

The potential of the market to influence decision-making presents opportunities to benefit the environment. Realizing these benefits relies on providing better information to consumers on the environmental attributes of products they buy. The Agriculture Program supports projects that develop and disseminate such information.

Highlight: "Protected Harvest" Sustainable Agriculture Certification

Expected result: Sustainable prac-ices self-assessment workbook for growers; certification standards

In August 2004, Protected Harvest, a non-profit that promotes sustainable agriculture through market-based incentives, joined Unilever and key California processing-tomato growers and processors to launch a collaborative effort to establish environmental standards for tomato production and a third-party certification system. In August 2005, California's State Water Resources Control Board provided a $425,000 agriculture water quality grant to fund the effort.

Key Issues: Cross-Goal

Cross-Goal Issues: Agriculture

The Region is working to address the effects of concentrated animal feeding operations, especially dairies in the San Joaquin Valley. The animal agriculture operations can affect both air and water quality through a number of different mechanisms.

Highlight: Dairy Manure Collaborative

Result: Collaborative is ongoing; Dairy Manure Technology Feasibility Assess-ment report due fall/winter 2005.

The Agriculture Program will continue to lead the San Joaquin Valley Dairy Manure Collaborative, initiated in 2003 to address comprehensively the Valley's dairy manure issues. The goal is to manage manure as a resource, to improve the quality of soil and provide nutrients and renewable energy; while creating jobs and developing technological solutions to the regulatory challenges of reducing emissions of pollutants to air and water. In 2005 and 2006, the Agriculture Program will chair the Dairy Manure Technology Feasibility Assessment Panel. Appendix B, Dairy Manure Collaborative Accomplishments, FY2005, provides details.

Environmental Progress in FY2005

In FY2005, the Region continued its efforts to build and maintain relationships with our collaborators within EPA and with our federal, state, industry, academic, and public partners. Collaboration helps the Region to better understand and prioritize environmental challenges facing agriculture. It also provides opportunities to create and participate in multi-party efforts to move agriculture toward a more sustainable future. Some of these efforts are already beginning to produce environmental

benefits, while others will need sustained collaboration over years to generate the expected results. Much has been done; much remains to be done.