

Central Valley Water Board
Long-Term Irrigated Lands Regulatory Program
Questions and Answers

Current Irrigated Lands Regulatory Program

How are discharges from irrigated agriculture currently regulated?

Of the estimated 35,000 growers in the Central Valley, there are about 25,000 landowners/operators, with a total of nearly 5 million acres of land, who are currently regulated by the Water Board and are part of water quality coalition groups. The coalition groups conduct surface water monitoring and prepare regional plans to address water quality problems. The growers are required to implement management practices to protect surface waters, such as creeks and rivers. The focus of these efforts is in areas where monitoring has identified problems.

What have the monitoring efforts shown, so far?

The monitoring of rivers and streams has identified problems in some areas clearly associated with irrigated agriculture (for example, the pesticides chlorpyrifos and diazinon) and water quality problems that need additional study to identify sources (for example, e. coli, which is an indicator of potential pathogens).

Has the existing program improved surface water quality?

There is evidence of improvement in some cases, but it is too soon to tell whether those improvements will be sustained or whether improvements are wide spread. Coalitions are required to prepare Water Quality Management Plans anytime water quality objectives have been exceeded more than once in three years. Plans have been prepared to address over 600 combinations of water bodies and parameters. For some problems it is not clear if the identified problem was caused by agriculture, so further investigation is being conducted. For other water quality problems, there are clear agricultural sources and the plans include implementation of improved practices, as well as education and outreach to growers.

How have the requirements of the current program been enforced?

There have been two primary areas that have been the focus of our enforcement efforts: 1) ensuring growers who are required to have regulatory coverage have proper coverage; and 2) addressing site-specific water quality problems. Through public outreach and use of enforcement tools, the Board has identified growers who could discharge to surface waters and ensured they are properly regulated by joining a Coalition. Site-specific water quality problems have been addressed by working with Coalitions and using the Water Board's enforcement authority. In one case, discharges of sediment resulted in a settlement requiring a landowner to pay a \$300,000 fine.

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Why are changes to the existing program needed?

When the Board adopted the current program in 2003 (and renewed it in 2006), it recognized that an important element needed to be added – regulation of discharges of irrigated agricultural waste to groundwater. The Board directed staff to develop a program that addressed both groundwater and surface water. In addition, the Board told staff to prepare a Program Environmental Impact Report to comply with the California Environmental Quality Act. Adding discharge to groundwater to the program could result in the regulation of a total of 35,000 growers and more than 7 million acres of irrigated agricultural land.

Proposed Long-Term Irrigated Lands Regulatory Program

What may be some of the key elements of the Long-term Program?

Ultimately the Central Valley Water Board will decide what will be in the Long-term Irrigated Lands Regulatory Program; however, Board staff has identified the following key elements they will recommend to the Board for their consideration and approval:

- 1) Expand the program to include dischargers to groundwater. This is especially critical to protect sources of drinking water from contaminants such as nitrate, which can come from fertilizer application.
- 2) Base regulatory requirements on what is known about threats to water quality from irrigated agricultural discharges. Known high threats have more regulatory requirements, low threats have fewer requirements.
- 3) Tailor requirements to the setting and issues relevant to specific geographic areas or commodities. This will result in the Board issuing 7 to 8 general waste discharge requirements. .
- 4) Increase grower and Coalition (or third party) accountability by identifying specific expectations that must be met to avoid individual regulation by the Board.
- 5) Require growers to conduct evaluations of their management practices to ensure they are protecting groundwater and surface water. In areas impacted, or potentially impacted, by nitrates, requiring growers to develop individual nutrient management plans certified by a qualified crop advisor.
- 6) Require third parties to develop regional water quality management plans for areas where irrigated agriculture is contributing to water quality problems. Growers will need to implement practices consistent with those plans to address the identified problems.
- 7) Conduct monitoring to fill data gaps (e.g., determining whether agriculture is contributing to a problem), determine the effectiveness of management practices, and track water quality trends.

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- 8) Focus on areas where irrigated agriculture is contributing to a water quality problem that is impacting the beneficial uses of water.

How much flexibility will growers have in meeting water quality standards?

Growers will determine what practices they use to protect water quality. However, third parties and their grower members must demonstrate to the Water Board that those practices are effective in protecting water quality. If implemented practices aren't protective, growers will need to implement improved practices that will achieve water quality goals.

What will growers be required to do?

The primary responsibility of growers is to implement management practices and verify their practices are effective - meaning they protect water quality. All growers may be required to conduct a farm evaluation to determine what farm practices are currently being implemented and to determine whether any improvements can be made to protect water quality. Nutrient management is a recommended key element for all growers; however, growers in areas where groundwater is known to be severely impacted by nitrates, pesticides or other constituents associated with agriculture will be required to have a certified nutrient management plan. Water quality monitoring will be a key element of the Program. Water quality monitoring may involve contributing to regional efforts and participating in studies to evaluate how effective management practices are.

What is the role of the third-party or Coalition?

A key element of the recommended Long-Term Program is to maintain the ability of individual growers to join third-party or coalitions groups. The third-parties or coalitions will work directly with their member growers to assist them in complying with Central Valley Water Board requirements. Third-parties may:

- assess fees,
- conduct education and outreach to inform growers of requirements and practices to protect water quality;
- prepare and implement regional water quality management plans and regional water quality monitoring plans; and
- report to the Board on the results of the monitoring efforts and the effectiveness of the plans.

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Board staff is recommending changes to the roles and responsibilities of the third-parties or Coalitions to increase accountability and transparency of this process to the growers and Board.

Will growers have any direct interaction with the Board?

Growers that are currently members of third-parties or Coalitions, and are complying with Water Board requirements, will have little or no direct interaction from the Board. Growers who are not currently enrolled in a Coalition will need to apply to the Board to join. For example, growers who do not have surface water runoff would need to join a Coalition, since the new requirements will likely address discharge to groundwater. Irrigating a crop typically results in water going past the crop root zone to the underlying groundwater aquifer. The results of farm self-evaluations may be reported to the Board, if an electronic data submittal system is established. Any growers who are not part of a Coalition or do not meet their obligations in the Coalition will be directly regulated by the Board.

How might requirements be tailored for differences in agricultural operations?

The Board may issue 7 to 8 geographic or commodity-specific Orders containing requirements tailored to the issues relevant to the geographic area or commodity. In addition, Board staff will develop draft Orders that tailor requirements based on water quality threats, and whether an area is vulnerable to discharges from irrigated lands.

How might the threat/vulnerability assessment work?

Board staff will evaluate available data for a given area to determine the threat or vulnerability. The evaluation will be conducted for different constituents. For example, a given area may have a problem with nitrates in groundwater (high threat/vulnerability); pathogens in surface water with an unknown agricultural contribution (unknown threat/vulnerability); and no pesticide residues in groundwater (low threat/vulnerability). Growers, third-parties or Coalition representatives and the public will be engaged in this process with staff prior to staff developing its recommended approach.

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How might requirements differ?

Some irrigated lands will be defined as low threat/vulnerability areas where it has been demonstrated that agriculture is not causing or contributing to a water quality problem for a given constituent in an area. Requirements for these lands may include a farm self-evaluation, nutrient management, erosion and sediment controls and participating in a regional plan developed by a third-party that describes the management objectives that will be established to maintain the water quality protection efforts.

Some irrigated lands will be defined as unknown threat/vulnerability areas where there are not enough data for a given constituent to determine whether there are water quality problems or if there are problems that are attributed to irrigated agriculture. Requirements for these lands may include a farm self-evaluation, nutrient management, erosion and sediment controls and participating in a monitoring program to address data gaps or source identification studies. If the studies demonstrate no agricultural contribution, then low threat vulnerability requirements would apply. If the studies demonstrate an irrigated agricultural contribution, then high threat/vulnerability requirements would apply.

Some irrigated lands will be defined as high threat/vulnerability areas where there are enough data for a given constituent to indicate that irrigated agriculture is causing or contributing to a water quality problem. Requirements for these lands may include a farm self-evaluation, certified nutrient management plan, erosion and sediment controls, and participation in regional water quality management plans; monitoring efforts to evaluate management practice effectiveness and water quality trends, and implementation of improved practices by growers.

What opportunities will the public have for input as the Program is implemented?

As the Board considers issuing the waste discharge requirements to implement the Long-term program, there will be an opportunity for the public to provide comments as part of the hearing process. In addition, interested parties will be able to provide input on an administrative draft of the waste discharge requirements. When final draft regional water quality management plans are submitted by third-parties or Coalitions to the Water Board for approval (or changes to existing plans are made), the public will have an opportunity to provide comments on those plans prior to the approval decision.

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What is the schedule for developing the Waste Discharge Requirements?

The schedule can be found at:

http://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/long_term_program_development/2011aug10_saw_mtg/ilrp_sched.pdf