Central Valley Dairy Community

Much-needed changes to water quality regulations are coming

In California’s Central Valley, cities, food processors, farms, and businesses all depend on a safe and abundant water supply. Farmers use water to grow food for millions of families in California and around the nation and world. Meanwhile, the state, via the Central Valley Regional Water Quality Control Board (Water Board), is responsible for regulating “discharges” of water. A discharge occurs when water is used for a beneficial purpose, such as farming, and then returned to the environment.

Much of the water farmers use goes into their crops, while some evaporates or seeps into the soil. Whether pumped from below ground or drawn from canals, irrigation water carries trace amounts of minerals and salts, and these can concentrate in the soil as water moves below the soil, to underground aquifers. Plant nutrients, such as nitrogen fertilizers and other soil amendments used by farmers to grow crops, can add to the accumulation of natural salts and other minerals in soil and groundwater. Virtually all crops today are grown using irrigation water and additional soil nutrients, making some seepage of salts and nitrates inevitable, even with the technological advancements made over the past century.

Current regulations are intended to protect water quality now and for future use. These rules require that discharges seeping below the surface and into the groundwater meet strict drinking water drinking standards. Yet this may not be practical with current technology.

What can be done to ensure that Californians enjoy both safe drinking water and crop production that creates hundreds of thousands of jobs and nutritious food for millions of Americans?

Even with the implementation of best practices, under the current nitrate and salt regulations, many dairy farmers are faced with a tough choice:

(a) Keep farming, knowing they may be deemed out of compliance, and subject to enforcement, such as fines, cease-and-desist orders, or lawsuits, or
(b) Close their dairies or move to other states.

Meanwhile, regulators are forced to make a similar, equally difficult choice:

a) Require dairy farmers to meet standards now even when meeting these standards are impractical, even impossible standards with today’s best practices and technologies, or
b) Order farmers to stop discharging, which is equivalent to telling them to stop operating their dairies.

We can do better. Changes in the regulatory process to provide more options to the regulators are needed. And the good news is, those changes are on the way.

A plan for a better future

A plan allowing farmers and other dischargers to work with their neighbors to ensure safe drinking water—without putting farms out of business—is now being considered. Change won’t be easy (change rarely is), but the new regulatory policies and recommendations developed and presented in the January 2017 CV-SALTS Salt and Nutrient Management Plan (SNMP) will provide dairies and other farmers in the nation’s top agricultural state a more sensible, balanced approach.

The SNMP calls for major restructuring of how water discharges are regulated. Its recommendations result from 10 years of scientific study and extensive collaboration among regulators and the regulated...
community (e.g., agriculture, cities, food processing, oil and gas), as well as environmental justice advocates.

Flexible regulatory options coming

Current regulations contain stringent water quality objectives that define when a use of a water body, such as drinking water, are met. Compliance with these objectives are currently determined using a conservative methodology that is applied to all dischargers in a similar manner and rarely accounts for site size, the size and vulnerability of aquifers, crops, and farming practices. The SNMP proposes more locally flexible, balanced regulatory solutions for nitrate and salt management that will allow dairies and other farms to remain in business while being provided a longer time period to achieve compliance with the objectives.

The SNMP charts a future where farmers must implement current best management practices to minimize groundwater impacts. Where safe drinking water is not available for everyone, farmers and other dischargers will contribute to solutions that provide treatment or other actions needed to ensure drinking water for all. To combat the salt problem, long-term planning will begin for infrastructure changes needed to remove more salt from the Valley, returning it to the ocean or otherwise safe storage.

Instead of asking farmers to do the impossible—to either grow crops without fertilizer or to meet drinking water standards immediately below their crops—the SNMP asks everyone to do their best now and continue to improve to eventually meet objectives, while moving quickly to make sure all Valley communities have a safe drinking water supply.

No immediate changes in dairy regulations

The current Waste Discharge Requirements (WDRs) for dairy operations will remain in effect. The new regulation prioritizes areas of the Valley with serious drinking water issues for early action. These “high priority” areas will be the first focus of implementation. In these areas, dairy operators and other dischargers will be given a choice to:

- Remain under the current regulatory scheme and comply with regulations by meeting all water quality objectives now, or
- Participate in a local or regional “management zone” by working collaboratively with others to provide drinking water, while employing reasonable management practices, even if water quality standards cannot be met immediately.

Benefits of participating in the new “management zone” option include being provided significant more time to determine and implement best practices, reduced risk of enforcement, lower cost for replacement water (due to economy of scale from sharing costs with others), and reduced pressure for additional regulation.

Why do dairy operators need to know about this now?

In coming months, the Water Board will take the concepts in the SNMP and amend them into the existing Water Quality Control Plans (Basin Plans). For this bold new vision to work, cost sharing must be equitable, with everyone doing their part. Dairy operators can support the move toward more local control and a flexible regulatory process, with cost-effective solutions to address community drinking water. Farmers’ involvement will make a difference in determining everything from cost shares for drinking water solutions, to what constitutes reasonable management practices.

Success is essential for everyone in the Valley; from farmers who use water resources to grow crops and feed cattle, to their neighbors who depend on them to create jobs for hundreds of thousands of Valley...
residents and food for millions of Americans. Most importantly, success is essential for everyone who depends upon the Valley’s water resources for health and prosperity.