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Fact Sheet

February 2013

## State Actions to Address Drinking Water Quality

*In response to the need to ensure all Californians have access to safe drinking water sources, state agencies are taking a number of actions. This fact sheet summarizes key administrative actions under way, as well as actions that will begin in the near future.*

### **Current Actions**

#### **State Water Resources Control Board (State Water Board)**

The State and Regional Water Boards protect surface and groundwater resources to ensure that water quality objectives are achieved. The Water Boards do this through planning, regulatory, monitoring and financial assistance programs. Recent developments in these programs emphasize basin or watershed-wide management of our resources and include:

- State Water Board required Salt and Nutrient Management Plans (by 2014) to facilitate basin-wide management of salts and nutrients from all sources. These plans will not only implement a targeted policy to promote recycled water, but will ensure protection of the State's groundwater supply. There are more than 35 plans currently under development and several, notably in Southern California, are now being implemented.
- In October 2012, the State Water Board allocated \$2 million to assist the California Department of Public Health (CDPH) in providing interim replacement drinking water for severely disadvantaged communities that are working with CDPH to achieve a long-term solution to address the contaminated drinking water supply.
- The State Water Board recently adopted a statewide septic system policy to address, in part, direct water quality impacts due to nitrogen contamination from these systems.

- The Central Valley Regional Water Board established the Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) project, to address salinity and nitrate problems in California's Central Valley and adopt long-term solutions that will lead to enhanced water quality and economic sustainability.
- The Central Coast Regional Water Board adopted a three-pronged strategy consisting of 1) informing and protecting water users from known public health threats due to nitrate pollution, 2) implementing source control to reduce nitrate loading over time, and 3) supporting ongoing monitoring and assessment to document measurable improvements in source reduction and groundwater quality.

### **California Department of Public Health (CDPH)**

The role of the Drinking Water Program of CDPH is to assure safe drinking water is delivered to customers of public water systems, including assistance with remedies for water contaminants that pose a health risk (including nitrates). Remedies may include water treatment systems, alternative water supplies and/or infrastructure improvements as needed. Some highlights of current CDPH activities that address water impacted by nitrates include:

- Monitoring the quality of the drinking water delivered by public water systems, inspecting and permitting water systems, certifying water system operators, assisting systems in addressing contaminants such as nitrates, and taking enforcement actions when necessary.
- Making available federal and state funds to qualifying water systems for planning and construction in order to make needed and cost-effective improvements that result in delivery of safe drinking water to customers. Funding can be in the form of grants, zero interest loans or low interest loans, depending on the disadvantaged status of the community served by the system (e.g., severely disadvantaged communities, are eligible for 100% grant funding).
- Providing technical assistance to water systems with applications for funding, establishing water rate structures, and making improvements to their technical, managerial and financial capabilities as needed. This includes follow-up with non-compliant systems that don't apply for funding. To date, CDPH has provided more than \$8 million to third party contractors to provide such assistance.

- Conducting a capacity development program to assist with these and other aspects of system business and technical operations in order to assure systems will be able to operate and support a new/improved water treatment system. Federal and state funding is not available for operations and maintenance; nor can it be provided for system improvements if the system will not be able to operate and sustain it going forward. So capacity development is a critical component of the solution for many nitrate-impacted communities.
- Encouraging consolidation of water systems and regional solutions whenever that is more cost- effective than water treatment or other alternative water supplies (such as new wells or surface water). Small disadvantaged communities often do not have the economy of scale ~~rates~~ to support a water system, so consolidation with a larger system is actively promoted by CDPH whenever feasible. CDPH efforts and funding have resulted in the elimination of dozens of systems through consolidation over the last decade.
- Prioritizing systems with contaminants with potential health impacts, such as nitrates, as well as those systems that serve disadvantaged communities. CDPH has developed and implemented a *Small Water System Program Plan* (see also <http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Smallwatersystems.aspx>). This plan prioritizes small water systems with contaminants, frequently nitrates, and it has a stated goal of bringing the compliance rate of small systems up to the same rate as large systems.
- Making (as of January 2013) Proposition 84 emergency funds available when there is an urgent need for interim water supplies to public water systems that serve severely disadvantaged communities and lack the technical and financial capability to deliver water that meets primary safe drinking water standards (see also <http://www.cdph.ca.gov/services/funding/Pages/Prop84.aspx> ).

### **California Department of Food and Agriculture (CDFA)**

CDFA has taken a number of steps to prevent groundwater contamination including:

- Advancing Solutions Through its Fertilizer Research and Education Program (FREP): Twenty years of research and experience providing growers, technical professionals, regulators and stakeholders the science to support and advance real, on-farm solutions. Two examples:

- The launch of a searchable database of FREP research (160 projects and growing) including crop-specific nutrient guidance for growers.
  - Funding targeted projects in nitrate high risk areas, i.e. in the Salinas Valley and Tulare Lake Basin (began January 1, 2013) to demonstrate proof of the “pump and fertilize” concept.
- Increasing FREP Mill Assessment: The FREP Mill Assessment was recently increased from \$ 0.0005 to \$ 0.001 (maximum authorized) for new initiatives. The additional revenue will be used for developing the Certified Crop Advisor Training and Education Program and new research to understand nitrogen movement below the crop root zone
  - Conducting a FREP Annual Conference: Scientific and technical information on nitrogen fertilizers and nitrates from fertilizing materials is shared with growers and agricultural support services. The 2012 conference focused on nitrogen management practices that reduce nitrogen loss to water and air.
  - Providing Education, Outreach and Technical Assistance: CDFA and University of California’s Institute for Water Resources are hosting a series of forums in 2012 and 2013, titled “Managing Agricultural Nitrogen” that: focus on nitrogen management on farms, explore solutions to nitrate in groundwater, and identify needs for further research and education. CDFA also engages with regional water boards on nitrate management and groundwater quality regulations, providing scientific expertise on potential solutions.
  - Working with Farmers on Solutions: Scientific data document that, over the last two decades, California growers are using the same rate of nitrogen fertilizer and crop acreage to produce significantly more food. Farmers and ranchers have recognized and responded to the issues of nitrates and groundwater quality with improved technologies and methods that allow fertilizer to be applied more precisely than ever before. However, much more needs to be done.

## **Department of Water Resources (DWR)**

DWR is working to improve the Bond Law application process to help communities, especially small disadvantaged communities, obtain the financial assistance necessary to have adequate supplies of safe drinking water.

## **Future Actions**

In addition, the departments are implementing administrative recommendations of the report: “*Addressing Nitrate in Groundwater*” released to the Legislature on February 20, 2013. These include:

- The Water Boards will identify nitrate high-risk areas so regulatory oversight and assistance efforts can be prioritized on these areas first.
- The Water Boards, in coordination with CDFA, will convene a stakeholder/expert group to review existing agriculture best practices concerning nitrates, and develop recommendations in an effort to further protect groundwater quality through practices and existing regulatory programs.
- DWR should require that Integrated Regional Water Management (IRWM) plans for regions in nitrate high-risk areas include an evaluation of nitrate impacts and potential solutions as part of their critical water supply and water quality needs analysis. DWR and IRWM groups should target funding for potential solutions in nitrate high-risk areas.
- CDFA will immediately establish an interagency task force in collaboration with the State Water Resources Control Board to assess nitrogen management tracking and data needs in nitrate high risk areas.
- CDFA, in partnership with UC Cooperative Extension and other experts, will develop additional nitrogen management technical training programs to provide growers with on-the-ground tools and to facilitate regulatory compliance.
- CDFA will work with experts to identify research gaps in understanding the movement of nitrogen and other nutrients through soil and groundwater systems, and establish a research collaborative to pursue funding sources for this research.
- CDPH will create a Pre-Planning and Legal Entity Formation Assistance Program under an SRF Local Assistance Set-aside to assist small communities disproportionately affected by drinking water contaminants, such as nitrates, in accessing the project funding process. Funded pre-planning activities may include improving or establishing governance, formation of public water systems, or consolidation efforts.

- CDPH has proposed a Change to the SRF Process for Emergency Projects that would allow public water systems with emergencies requiring system repair or replacement to avoid serious health effects to immediately apply and be prioritized for funding. This change will expedite the use of SRF funds for such emergencies, augmenting the existing Proposition 84 emergency funding.
- CDPH will incorporate its recent Small Water System Program Implementation Plan into its Capacity Development Strategy with USEPA, allowing the use of SRF funds for some of the activities in this plan. CDPH's overarching goal is to bring the proportion of small systems that meet all health-based standards to 95% within three years, reaching parity with large water systems.
- CDPH will continue to promote Consolidation in planning and construction projects, including new incentives that will be implemented to encourage large water systems to consolidate with small systems that have safe drinking water compliance challenges – consolidation can be the most cost-effective and expeditious solution to these challenges.