

## APPENDIX B

### PRINCIPAL SAMPLING AGENCIES

The principal agencies contributing groundwater monitoring data for this annual Well Sampling Report are DPR, SWRCB, and USGS. Unique regulatory responsibilities define for each agency the pesticides selected for monitoring, type and sensitivity of laboratory analyses, well types sampled, sampling locations, and sampling frequency. For instance, DPR primarily samples shallow, domestic wells in areas where agricultural pesticides are used, while the SWRCB assesses the overall quality of groundwater used for consumption (regardless of the frequency or intensity of pesticide use near sampled wells).

#### DEPARTMENT OF PESTICIDE REGULATION

DPR's Groundwater Protection Program samples groundwater as a function of its responsibilities under the PCPA. (See the **Background** section of this report for a detailed description of DPR's program.)

#### STATE WATER RESOURCES CONTROL BOARD

The SWRCB is responsible for enforcement of the federal and California Safe Drinking Water Acts. To meet the goal of ensuring delivery of safe drinking water, SWRCB's Division of Drinking Water (DDW) oversees approximately 7,500 [public water systems](#) and establishes health protective drinking water standards. These standards, known as [maximum contaminant levels](#) (MCL), are developed by evaluating not only the health risks presented by a chemical, but by assessing the technical and economic factors related to its use (such as treatment efficacy and cost). SWRCB establishes a contaminant's MCL at a level as close to the [public health goal](#)<sup>27</sup> (PHG) established by the Office of Environmental Health Hazard Assessment (OEHHA) as is technically and economically feasible, placing primary emphasis on the protection of public health (see [the MCL process](#)).

- The [Division of Drinking Water](#) (DDW) regulates public water systems to ensure the delivery of safe drinking water; oversees water recycling projects; issues permits for water treatment devices; supports and promotes water system security; and performs a number of other functions. DDW consists of two field operations branches and a Program Management Branch. The Northern and Southern California field operations branches are responsible for the enforcement of the federal and California Safe Drinking Water Acts, and for regulatory oversight of public water systems. The Program Management Branch includes the Data/Toxicology Office which compiles, evaluates, and reports public water system drinking water quality data.

The DDW performs a role that was until recently performed by the California Department of Public Health (CDPH); this role includes reporting pesticide detections in drinking water wells to DPR.

The SWRCB also monitors groundwater as a function of its Groundwater Ambient Monitoring and Assessment Program (GAMA).<sup>28</sup> This program is designed to improve groundwater quality and

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<sup>27</sup> Public Health Goals are concentrations of drinking water contaminants that pose no significant health risk if consumed for a lifetime, based on current risk assessment principles, practices, and methods.

<sup>28</sup> For more information about SWRCB's GAMA Program, go to <http://www.waterboards.ca.gov/gama/>

increase public availability of information about groundwater quality. The SWRCB expanded the GAMA Program following implementation of the [Groundwater Quality Monitoring Act of 2001](#) (Part 2.76 [commencing with section 10780], Division 6 of the Water Code). This law resulted in a [publicly accepted plan](#) to monitor and assess “priority basins”— basins that account for over 90 percent of the groundwater used in California. The GAMA Program includes four projects:

- The [GAMA Priority Basin Project](#) monitors dozens of chemicals at very low detection limits. Monitoring and assessment of priority basins is completed every ten years; trend monitoring is performed every three years. SWRCB is collaborating with the USGS and Lawrence Livermore National Laboratory (LLNL) to implement the GAMA Priority Basin Project.
- The [GAMA Domestic Well Project](#) samples multiple areas in coordination with county environmental health departments. It also provides water quality information to domestic well users.
- The [GAMA Special Studies Project](#) partners with LLNL to conduct groundwater studies that evaluate nitrate, wastewater, and groundwater recharge. LLNL scientists use tools that include Tritium-Helium age dating and computer modeling. The University of California, Davis, also contributes to the GAMA Special Studies Project.
- The [GeoTracker GAMA](#) information management system enables users (scientists, regulators, water managers, educators, and the public) to access millions of data records from the SWRCB and Regional Water Quality Control Boards, Department of Water Resources, DPR, and USGS. GeoTracker GAMA provides access to a Google map-based database that provides the results of groundwater quality testing, groundwater level evaluations, environmental monitoring well logs, and links to published reports.

#### **UNITED STATES GEOLOGICAL SURVEY**

The USGS compiles surface water, groundwater, and water quality data from local databases to develop a national information system. The USGS groundwater database contains records compiled from about 850,000 wells studied over the past 100 years. This well information is available via the Internet through NWISWeb, the National Water Information System Web Interface.

- The USGS [Office of Groundwater](#) maintains the **Groundwater Watch** program. This program compiles data from active well networks.

#### **CALIFORNIA DEPARTMENT OF PUBLIC HEALTH**

The CDPH no longer provides DPR with well sampling information for drinking water wells; this role has been assumed by the SWRCB’s DDW (see program description above).

#### **OTHER SAMPLING AGENCIES**

Other agencies that sample for pesticides in the environment and may contribute groundwater data include the U.S. Environmental Protection Agency and state agencies such as the Air Resources Board and Department of Fish and Wildlife.