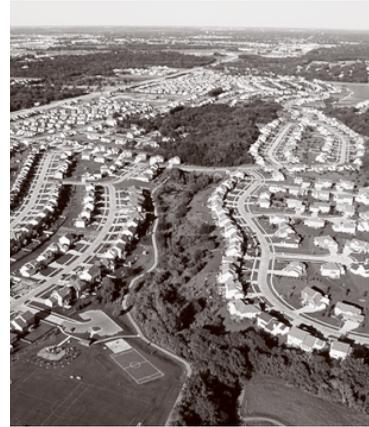




practices and geographic regions, are Colusa, Kern, Kings, San Diego, San Joaquin, San Luis Obispo, Shasta, Stanislaus, Tulare and Ventura. Because counties use this database to help record and validate pesticide use reports, we expect the new system to improve the accuracy of use data.

A much bigger project coming online later this year is known as CalPIP — short for California Pesticide Information Portal. CalPIP will give visitors to our Web site easy access to the world's best and most extensive database of pesticide use information. Web surfers will be able to ask the database for use statistics categorized by pesticide name, or by crop, with results available as graphs, tables, or maps (down to an area as small as one square mile). They will also be able to link to sites with more information on potential health and environmental effects.

CalPIP will also let them tie the use data in with our database of labels for the 11,000 or so pesticide products registered in California. This includes such information as the manufacturer, pesticide type (for example, herbicide, insecticide, disinfectant), active ingredient, target pests, sites where the product can be applied (for example, a crop, roadside, or structure), and certain chemical and environmental characteristics.



## We're developing a bird's eye view of pesticide use

California already has the world's best system for keeping track of agricultural pesticide use, but that isn't stopping us from trying to make it better.

The County Agricultural Commissioners collect reports on all pesticide use in agriculture. The reports themselves are location-specific, but with 2.5 million reports coming in each year, and with nearly 200,000 different fields or application sites in the state, a better way was needed to record information. Saying that the application occurred on a field one-quarter mile west of the intersection Posthole Road and Noble Plow Drive isn't very instructive.

Enter GIS, short for "geographic information systems." GIS permits geographic- and location-related data to be stored on a computer, spatially referenced to coordinates on the earth. GIS is to geographical analysis what the microscope was to biology, or the telescope to astronomy. GIS allows digital mapping of landscape features such as roads, rivers, land use (including agricultural fields and buildings), sensitive sites (for example, schools and endangered species habitats), and county lines and other political boundaries. Putting maps and other information into digital form provides us a consistent framework for recording, analyzing, and telling you about the location of pesticide use. Without GIS, the location information in electronic pesticide use data is only accurate to one square mile; with GIS, the computer can record it down to a specific agricultural field. This significantly improves the ability of County Agricultural Commissioners and state pesticide regulators to responsibly oversee pesticide use. GIS is also improving our ability to analyze trends in pesticide use, and will make it possible for us to provide much more detailed pesticide use information via our Web site.

By 2001, more than a third of the counties were using GIS to manage pesticide use data. DPR provides project coordination and technical support, but the real work is done by the Commissioners in getting the system running and keeping it up to date. To help smooth the transition, DPR contracted with the Kern County Agricultural Commissioner's Office to develop a standard plan for implementing GIS in any county. Kern uses GIS not only for use reporting, but also for issuing pesticide use permits and for other pesticide-related applications. Eventually, we hope to make the Kern system available to Commissioners' offices throughout the state.