



DPR's Surface Water Database (SURF)

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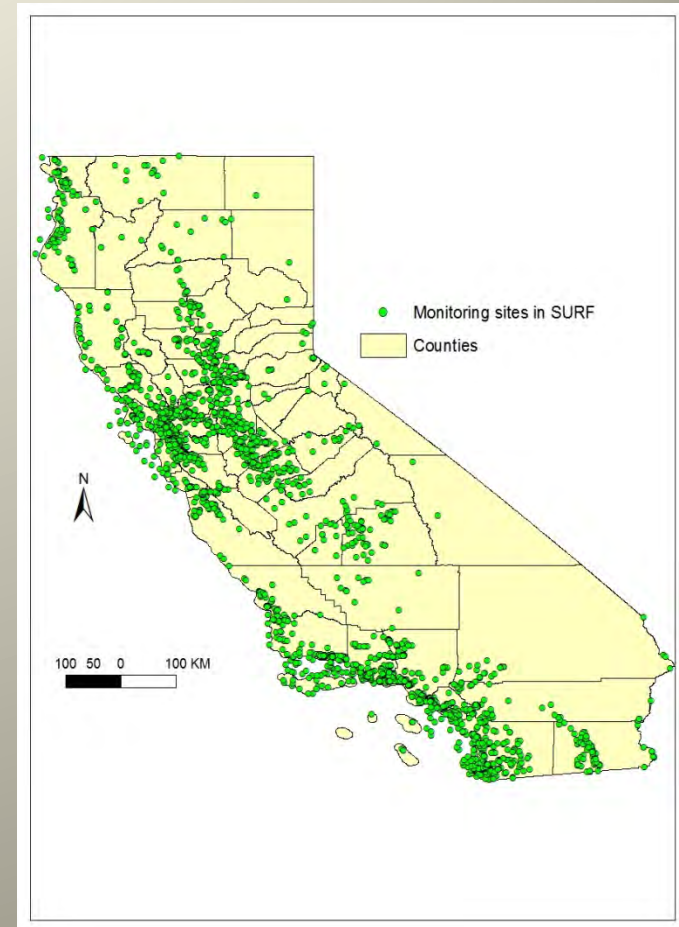
What is in the database?

- Monitoring results for pesticides in California's surface water (and sediment).
- Data sources:
 - DPR urban and ag monitoring
 - CEDEN
 - USGS
 - USEPA
 - Open literature
- Data fields include:
 - When, where, how, and who collected the samples ?
 - How were the samples analyzed (method MDL, RL etc.)?
 - What and how much?



What is in the database?

- Updated annually
 - last update in June 2015
- Data from 1990 – 2015
- Over 3,000 sites in 58 counties
- Over 300 studies
- Over 500 analytes
- Water table: 480,000+ records
- Sediment table: 70,000+ records



How to access the data?

- Download .csv files from DPR website:

<http://www.cdpr.ca.gov/docs/emon/surfwtr/surfddata.htm>

CA.GOV California Department of Pesticide Regulation

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Surface Water Database (SURF)
Access to the Data

Back to Surface Water Database (SURF)

Pesticide monitoring results from Department of Pesticide Regulation's (DPR) Surface Water Database (SURF) are available through on-line query/export or as downloadable comma delimited (.csv) files. All the chemical analysis results from DPR's surface water database as of June 2015 are available.

Information on DPR's Surface Water Database

General Description of the Database
Metadata for studies in the Database, PDF (241 kb)

Accessing the Data

The data can be queried on-line. Query results can be viewed on-line, or exported and saved to your own computer.

- Guide to querying the data, PDF (82 kb)
- **Query surface water monitoring data**
- Query sediment monitoring data

Note: Google Fusion Table is an experimental online application. If the application does not work for you, you may download the data directly as described in the section below.

The data can also be downloaded as comma-delimited files for import into spreadsheet and database programs. Two files are available: one with all available surface water data (surf_June2015) and one with all available sediment data (sed_June2015). The files will automatically open with the proper formatting in newer versions of spreadsheet programs. Note that the surface water data file contains over 483,000 records and will not import properly into older versions of spreadsheet programs which are limited to a maximum of 65,000 records.

- **surf_June2015 (109 mb)**
- sed_June2015 (14 mb)

→ Map of all the surface water monitoring sites in the Database can be downloaded. The .kmz file can be opened in Google Earth, a free program by Google, Inc. If you do not have Google Earth on your computer, you can download it.

Once loaded into Google Earth, zoom to your area of interest. Clicking on a site point will give a pop-up box containing information about the site, including the DPR site code, the county where the site is located, a brief description of the site, the number of water column and sediment records in the database for the site and the maximum concentrations of water and sediment samples detected at the site. The latitude and longitude are also provided.

How to access the data?

- Google Fusion Table
 - Database on the cloud
 - Users can upload data, query, visualize with charts and maps and share

SURF database, Water Column Table, June 2015

CDPR Surface Water Monitoring of Domestic Database, Water Table, Reported at Tue Jun 16 14:58:00 PDT 2015

California Department of Pesticide Regulation, Environmental Monitoring Branch | Billed on August 24, 2015

File Edit Tools Help Rows 1 Filter Summary 1 Rows 2

Filter: CHEMICAL CONTAINS IGNORING CASE 'chlorpyrifos' AND COUNTY = 'Monterey' AND CONC_PPB >= 0.1. Sorted by SITE_CODE

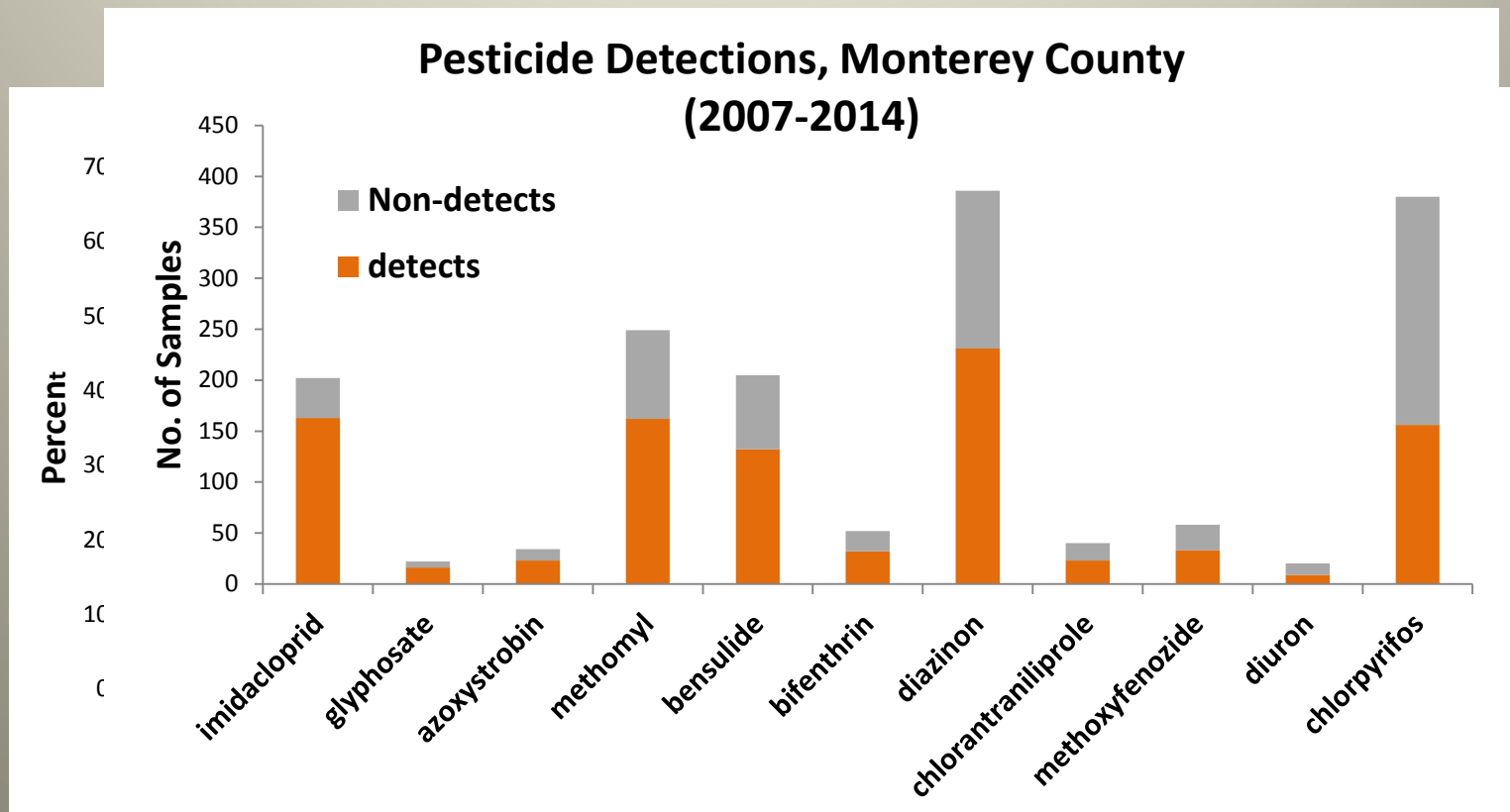
| COUNTY | SITE | CHEMICAL | CONC_PPB | LOQ_PPB | SAMP_DATE | SAMP_TIME | LAT_NAD83 | LONGI_NAD83 | SITE_CODE | STUDY_CD | STUDY_WEBLINK | Lat_Longi for mapping |
|----------|--|--------------|----------|---------|-----------|-----------|-----------|-------------|-----------|----------|---|-----------------------|
| Monterey | Reclamation Ditch at De LaTorne St. nr Airport Blvd. original DPR site | chlorpyrifos | 0.203 | 0.01 | 6/3/2006 | 1410 | 36.659 | -121.61527 | 27_10 | 91 | http://www.cdpr.ca.gov/docs/emon/pubs | 36.659 -121.61527 |
| Monterey | Reclamation Ditch at De LaTorne St. nr Airport Blvd. original DPR site | chlorpyrifos | 0.448 | 0.01 | 7/27/2009 | 1410 | 36.659 | -121.61527 | 27_10 | 92 | http://www.cdpr.ca.gov/docs/emon/pubs | 36.659 -121.61527 |
| Monterey | Reclamation Ditch at De LaTorne St. nr Airport Blvd. original DPR site | chlorpyrifos | 1.988 | 0.01 | 7/8/2010 | 1100 | 36.659 | -121.61527 | 27_10 | 93 | http://www.cdpr.ca.gov/docs/emon/pubs | 36.659 -121.61527 |
| Monterey | Rec Ditch at San Jon Rd | chlorpyrifos | 0.1905 | 0.01 | 4/8/2013 | 1300 | 36.70501 | -121.70408 | 27_12 | 262 | http://www.cdpr.ca.gov/docs/emon/pubs | 36.70501 -121.70408 |
| Monterey | Rec Ditch at San Jon Rd | chlorpyrifos | 0.1122 | 0.001 | 4/30/2014 | 1110 | 36.70501 | -121.70408 | 27_12 | 293 | http://www.ceden.org/ | 36.70501 -121.70408 |
| Monterey | Salinas River at Gonzales River Rd. bridge | chlorpyrifos | 0.12 | 0.05 | 1/10/1995 | | 36.48667 | -121.46861 | 27_3 | 14 | http://www.cdpr.ca.gov/docs/emon/pubs | 35.48667 -121.46861 |
| Monterey | Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.) | chlorpyrifos | 0.156 | 0.04 | 8/4/2003 | 1145 | 36.60923 | -121.56227 | 27_7 | 82 | http://www.cdpr.ca.gov/docs/emon/surfw | 36.60923 -121.56227 |
| Monterey | Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.) | chlorpyrifos | 0.197 | 0.04 | 6/30/2003 | 1440 | 36.60923 | -121.56227 | 27_7 | 82 | http://www.cdpr.ca.gov/docs/emon/surfw | 36.60923 -121.56227 |
| Monterey | Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.) | chlorpyrifos | 0.179 | 0.04 | 7/14/2003 | 1335 | 36.60923 | -121.56227 | 27_7 | 82 | http://www.cdpr.ca.gov/docs/emon/surfw | 36.60923 -121.56227 |
| Monterey | Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.) | chlorpyrifos | 0.132 | 0.04 | 8/25/2003 | 1220 | 36.60923 | -121.56227 | 27_7 | 82 | http://www.cdpr.ca.gov/docs/emon/surfw | 36.60923 -121.56227 |
| Monterey | Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.) | chlorpyrifos | 0.113 | 0.04 | 6/16/2003 | 1305 | 36.60923 | -121.56227 | 27_7 | 82 | http://www.cdpr.ca.gov/docs/emon/surfw | 36.60923 -121.56227 |
| Monterey | Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.) | chlorpyrifos | 0.344 | 0.04 | 7/28/2003 | 1210 | 36.60923 | -121.56227 | 27_7 | 82 | http://www.cdpr.ca.gov/docs/emon/surfw | 36.60923 -121.56227 |
| Monterey | Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.) | chlorpyrifos | 0.106 | 0.04 | 9/8/2003 | 1145 | 36.60923 | -121.56227 | 27_7 | 82 | http://www.cdpr.ca.gov/docs/emon/surfw | 36.60923 -121.56227 |
| Monterey | Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.) | chlorpyrifos | 0.107 | 0.04 | 7/7/2003 | 1235 | 36.60923 | -121.56227 | 27_7 | 82 | http://www.cdpr.ca.gov/docs/emon/surfw | 36.60923 -121.56227 |
| Monterey | Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.) | chlorpyrifos | 0.123 | 0.04 | 8/18/2003 | 145 | 36.60923 | -121.56227 | 27_7 | 82 | http://www.cdpr.ca.gov/docs/emon/surfw | 36.60923 -121.56227 |
| Monterey | Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.) | chlorpyrifos | 0.371 | 0.04 | 8/11/2003 | 1145 | 36.60923 | -121.56227 | 27_7 | 82 | http://www.cdpr.ca.gov/docs/emon/surfw | 36.60923 -121.56227 |
| Monterey | Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.) | chlorpyrifos | 1.297 | 0.04 | 6/23/2003 | 1246 | 36.60923 | -121.56227 | 27_7 | 82 | http://www.cdpr.ca.gov/docs/emon/surfw | 36.60923 -121.56227 |
| Monterey | Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.) | chlorpyrifos | 3.96 | 0.04 | 7/21/2003 | 1147 | 36.60923 | -121.56227 | 27_7 | 82 | http://www.cdpr.ca.gov/docs/emon/surfw | 36.60923 -121.56227 |
| Monterey | Quail Creek at HWY 101, btwn Spence and Potter Roads (trib. to Salinas R.) | chlorpyrifos | 0.471 | 0.01 | 1/3/2005 | 1130 | 36.60923 | -121.56227 | 27_7 | 83 | http://www.cdpr.ca.gov/docs/emon/surfw | 36.60923 -121.56227 |

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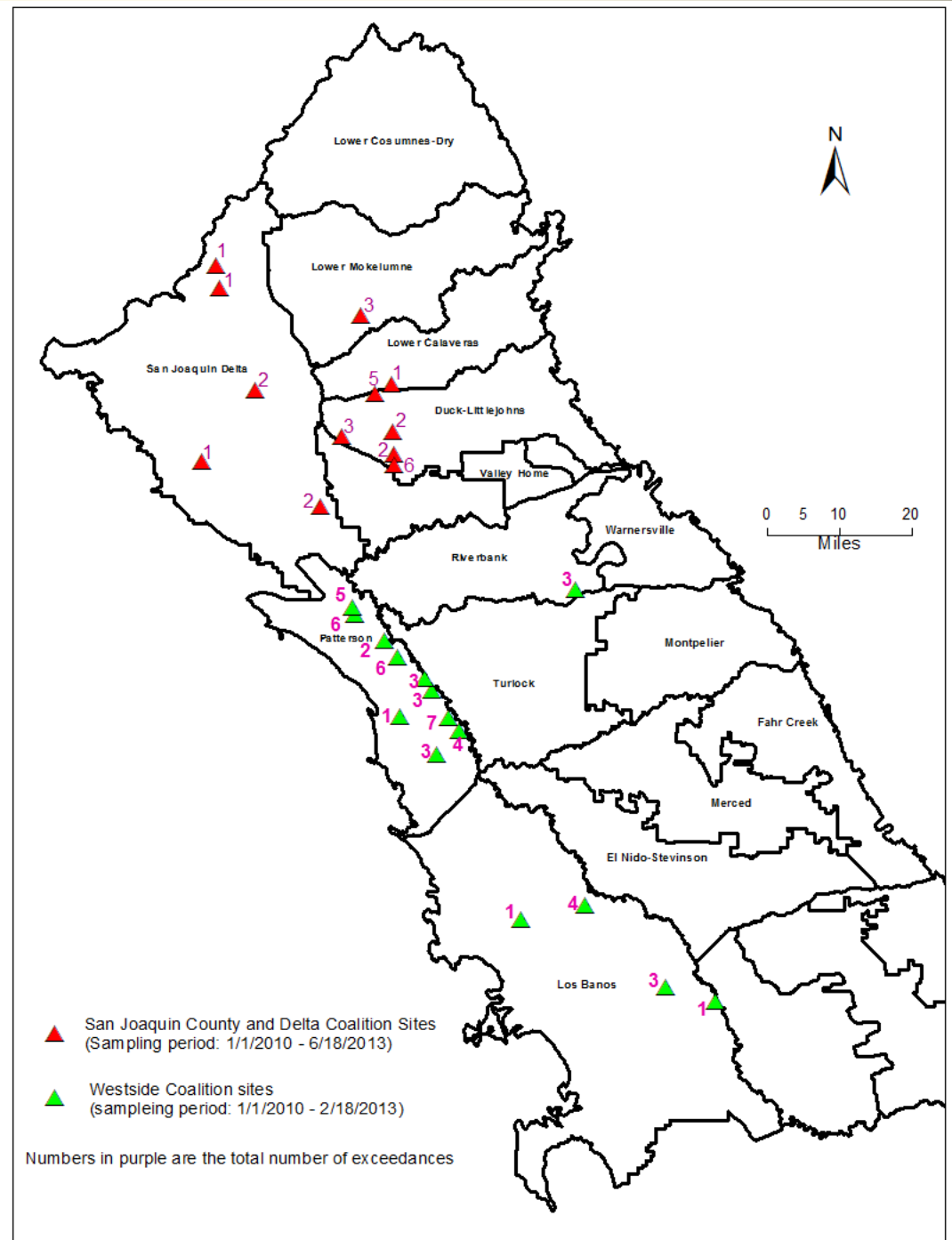
What can be done with the data?

A few examples...

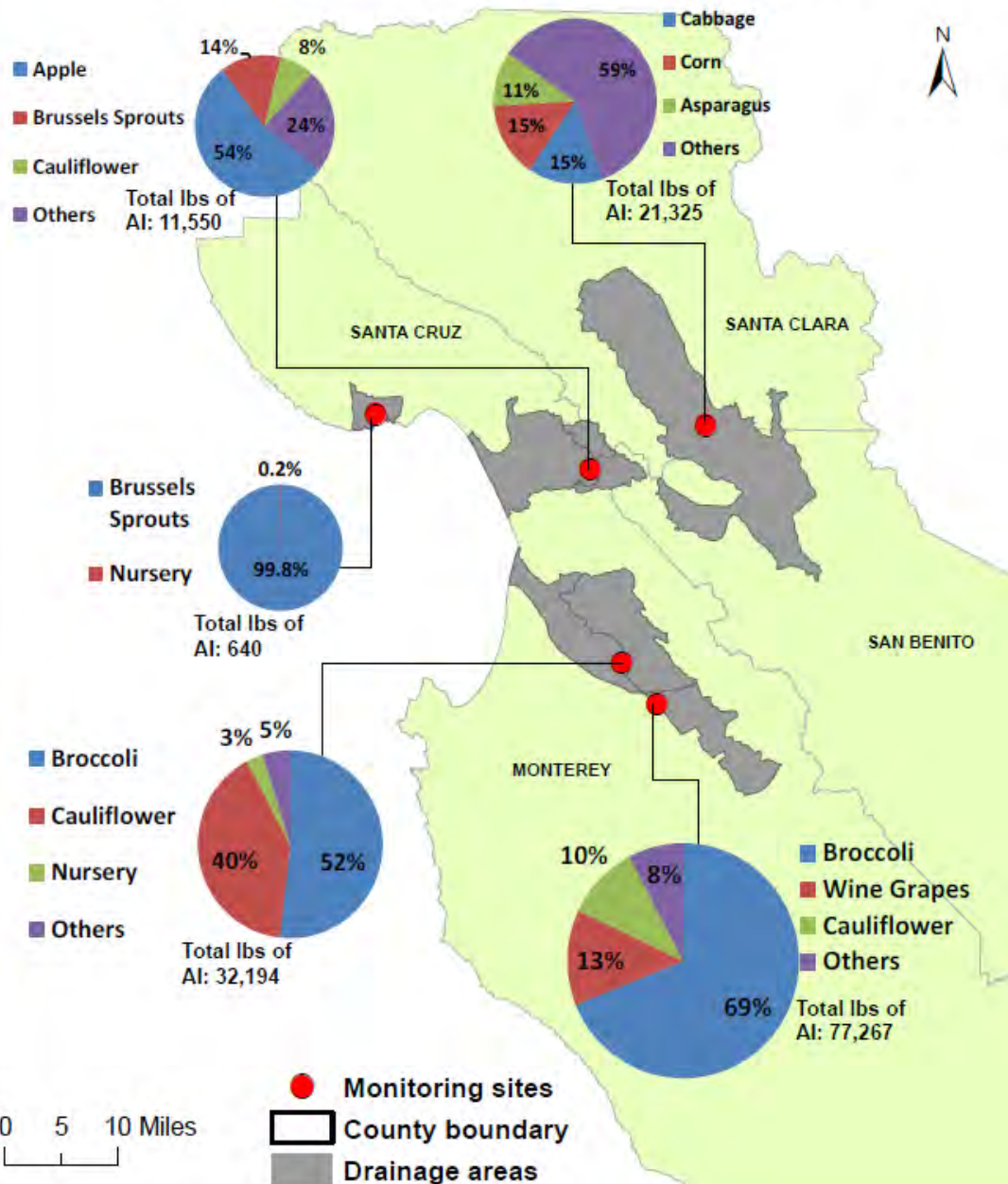
What's in the water?



Where are they detected?

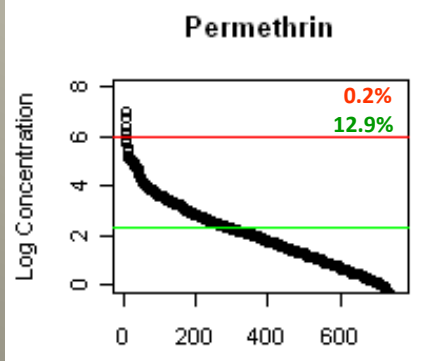
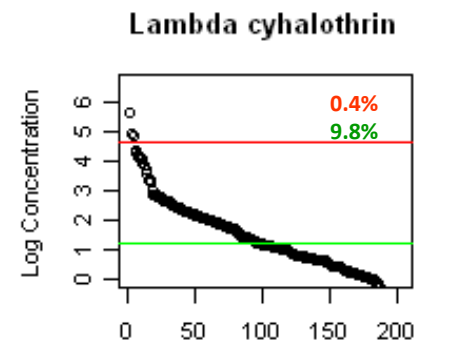
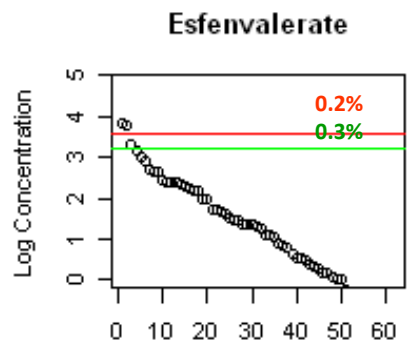
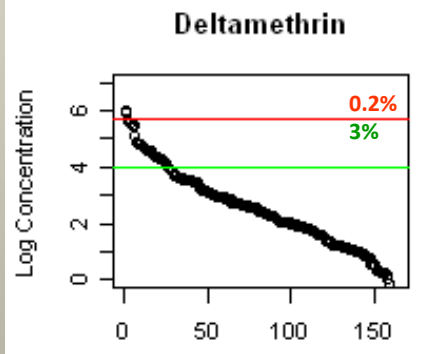
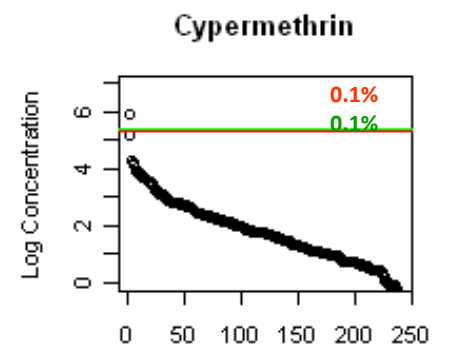
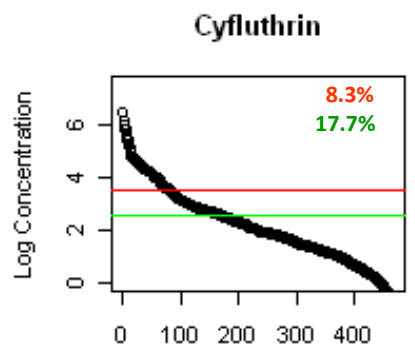
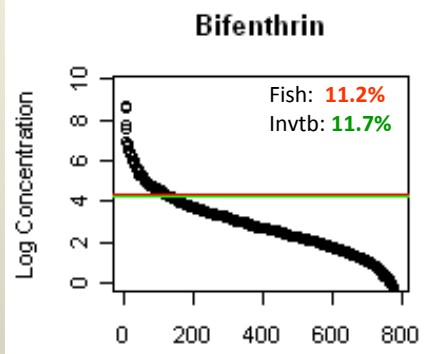


Chlorpyrifos use within the drainage areas of selected monitoring sites: 2006-2010



Why are they detected?

Finding Exceedance



Pyrethroid urban monitoring data 1993-2010

What's new?

- Toxicity and water quality tables
- Online map query tool

Questions? Contact:

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