

DISSERTATION

ASSESSING MULTIPLE GEOSPATIAL MODELING TECHNIQUES OF
ASSIGNING PESTICIDE EXPOSURE IN THE CALIFORNIA
CENTRAL VALLEY

Submitted by

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In partial fulfillment of the requirements

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Colorado State University

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We hereby recommend that the dissertation prepared under our supervision by Philip D Riggs entitled ASSESSING MULTIPLE GEOSPATIAL MODELING TECHNIQUES OF ASSIGNING PESTICIDE EXPOSURE IN THE CALIFORNIA CENTRAL VALLEY be accepted as fulfilling in part requirements for the degree of Doctor of Philosophy.

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ABSTRACT OF DISSERTATION

ASSESSING MULTIPLE GEOSPATIAL MODELING TECHNIQUES OF ASSIGNING PESTICIDE EXPOSURE IN THE CALIFORNIA CENTRAL VALLEY

Sixty residences in the central valley of California were sampled for pesticide concentrations in carpet dust during years 2001-2004 in order to validate predictive metrics of pesticide exposure. Pesticide use metrics were calculated based on pesticide use proximate to residences as reported in the Pesticide Use Reporting (PUR) database maintained by California Department of Pesticide Regulation for years 1998-2004. PUR reports pesticide application information according to the public land survey system section (each nominally one square mile). Metrics were tested by including pesticide applications within 300, 500, 750, 1000, and 1250 meters of residence locations and during time periods of six months, one year, two years, and three years prior to the residence sampling date. Additional pesticide use metrics were calculated using land use maps created by California Department of Water Resources for the area surrounding each residence at the time the residence was sampled to refine the spatial locations of the pesticide applications. These metrics were not able to adequately identify detections of dicofol, iprodione, phosmet, or trifluralin in homes (ROC C-statistics < 70%) and were significant, but not adequate, predictors of pesticide concentrations of chlorpyrifos, iprodione, phosmet, simazine, and trifluralin in homes where the pesticide was detected (p-values < 0.05 for all but one metric, R^2 ranged between 4.1% and 29.9%). When these metrics were augmented with soil and meteorological data they improved in their prediction

of pesticide detection (ROC C-statistics between 70.3% and 73.8%) and prediction of concentration (R^2 between 18.6% and 58.4%). Wind information was found to be the most important geographical variable for improvement. Soil information and questionnaire answers about agricultural employment and home pesticide use were not significant predictors in pesticide detection and concentration models.

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Dedicated to Nathalie, Lauren, and Christopher Riggs.

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Introduction

The purpose of this study was to develop and evaluate predictive geospatial models for pesticide occurrence and/or concentration in carpet dust samples of homes located near agricultural production areas in the Central Valley of California. The predictive models were based on variables derived from the spatial characteristics of pesticide applications and associated geographic information near sampled houses. Models for each pesticide tested associations at several different drift distances (distances pesticides are transported from the application location to the target location) and final models were the ones that showed the best association with observed pesticide occurrences and/or concentrations. This approach established the "exposure zone," or operational scale, of potential exposure to each pesticide for residents of homes located in proximity to pesticide applications. The operational scale represented the geographic area surrounding a residence over which pesticide transport was realized.

The association between the history of pesticide applications and detection/concentration of pesticides in the sampled houses was also assessed by incorporating into the model descriptions of historic applications near the home at varying time periods prior to sampling.

The overall objective of this study is stated via the following hypothesis statement:

Using geographic information systems and spatial modeling techniques, pesticide presence and concentration in household carpet dust samples can be predicted based upon variables including characteristics of the pesticides and their use, proximity to potential application sites, meteorological information, time be-

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tween pesticide application and sampling, landscape, and soil information.

Literature Review

Previous studies have attempted to assess exposure to agricultural pesticides for individual homes using distance to nearest field expressed as categories as a surrogate for exposure [10, 32, 37]. Distance categories have the benefit of being simple to implement. However, distance categories lack important information about the amount of pesticide applied and the area to which it was applied [40]. Additionally, categories can assume an operational scale¹ that may not capture the pesticide transport process [31]. For example, Curwin et al. [10] used proximity categories of 0-0.4, 0.4-0.8, 0.8-1.2, 1.2-1.6, and ≥ 1.6 km (0-0.25, 0.25-0.50, 0.50-0.75, 0.75-1.00 and ≥ 1.00 miles) to assess pesticide levels in homes near agricultural fields in Iowa. Many of these fields were reported as having pesticides applied by ground spraying. The smallest of these categories was larger than the primary pesticide transport distance suggested by pesticide drift studies for ground spraying [17, 18, 19, 20]. Curwin et al. did not find distance expressed via these categories to be a significant factor in predicting pesticide levels in the residences' carpet dust. By comparison, Quandt et al. [32] expressed distance using a binary system of adjacent (defined as next to, across the road from, or within a short walk of agricultural fields) or not adjacent to agricultural fields and found a highly significant association between distance category and pesticide residues in household dust in North Carolina and Virginia.

Assessment of potential pesticide exposures has been hampered by a lack of accurate and precise spatial and temporal data describing pesticide applications [42]. This has led researchers to make assumptions about pes-

¹Scale at which pesticide transport can be detected [31].

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ticide application rates, such as an assumed constant rate of application for all crops in a region. Ward et al. [40] modeled pesticides in carpet dust of residences in Iowa using maps of agricultural land use. These researchers assumed all agricultural crops received the same pesticides application rate and used acreage within 750 meters as a proxy for pesticide exposures. Acreage was found to be a significant predictor of pesticide detections and concentrations. Nuckols and Riggs [30] refined this approach by using crop specific pesticide use statistics for Iowa reported by the United States Department of Agriculture. This study found predictive results are highly dependent on pesticide use assumptions.

The State of California has partly addressed this issue of crop specific historical pesticide use by creating the California Pesticide Use Reporting (PUR) database [13, 34]. The State requires growers and other applicators to report all applications of commercial agricultural pesticides to the California Department of Pesticide Regulation, which records them in the PUR database and locates them spatially using the Public Land Survey System (PLSS) (Figure 1). PUR records among its many attributes the pesticide applied, the crop to which the pesticide was applied, acres of crop treated, date and time of application, and the Public Land Survey System (PLSS) township, range, and section (abbreviated as TRS) in which the application occurred (Figure 2) [6, 43].

The spatial resolution of this data is better than previously available statewide data, but PLSS sections are nominally 1,609m (1 mi) square. Pesticide drift literature[17, 20] reports that most primary drift, or drift directly attributable to the pesticide application, from both aerial and ground application equipment is deposited no more than 91 m (300 ft) from field edges with greater deposition concentrations nearer to field edges. The pesticide

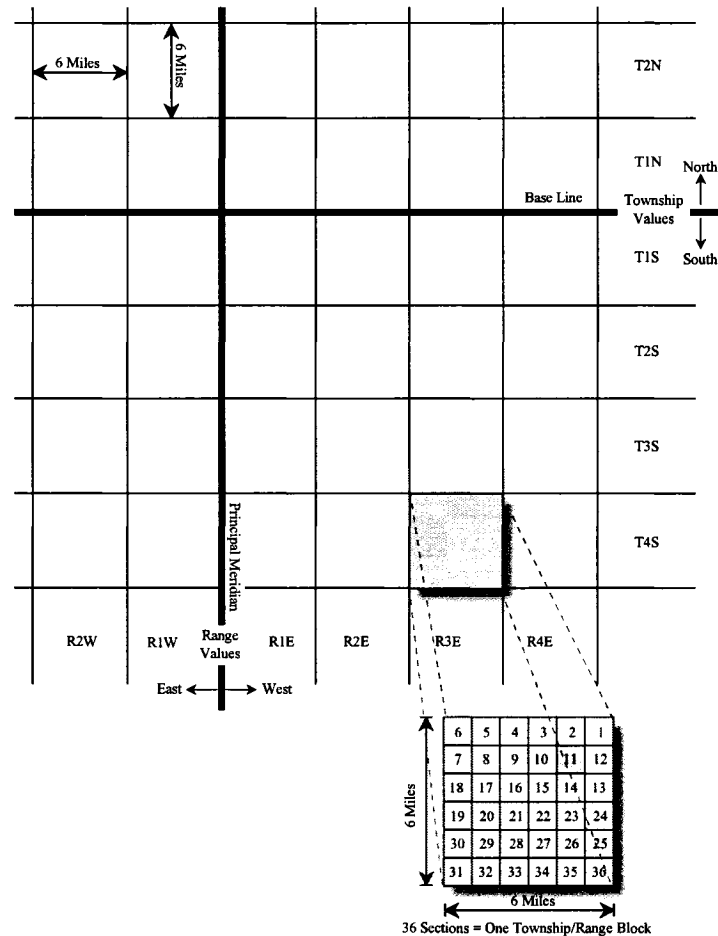


Figure 1: Public Land Survey System (PLSS). PLSS subdivides and describes land in the United States, typically in six-mile-square townships and ranges. Each township/range subdivision is further subdivided into 36 nominally one-mile-square sections. A section can be located by referencing the base line meridian, township and range intersections, and the numeric section of interest. For example, section 11 in the figure (highlighted in light gray) is referenced by location of the Mount Diablo baseline meridian (denoted as M), township 4 south, range 3 east, section 11. The abbreviated form would be M04S03E11.

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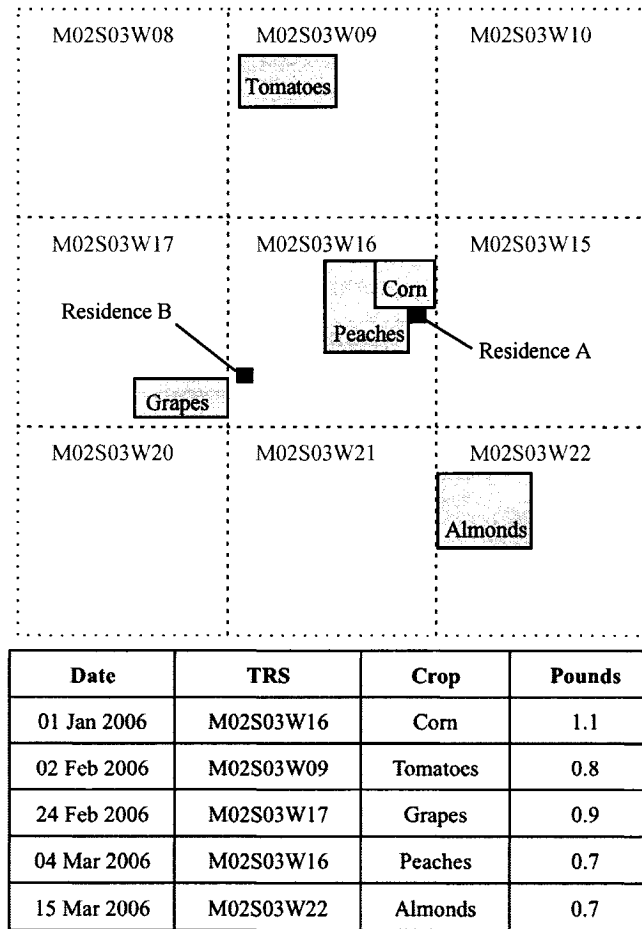


Figure 2: Example of California Pesticide Use Reporting (PUR) database recorded pesticide applications in relation to two imaginary residences. PUR records the date of application, TRS in which the application took place, crop to which the pesticide was applied, and pounds of the pesticide applied. Applications are spatially referenced in the PUR database by TRS, not the actual fields where the applications occurred.

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drift literature does not set a maximum drift distance, but does suggest a primary drift range (the distance at which deposition from the actual application occurs) much less than the coarse resolution inherent in the TRS system. Exposure studies have found strong associations between pesticide drift and pesticide detections in homes at a distance of ≤ 750 m (2,461 ft) [30, 37, 40], which is also less than the TRS spatial resolution.

Despite the coarse spatial resolution of the PUR database, there have been studies that have used it to model health outcomes. For example, Bell et al. [3] investigated fetal death (stillbirth) using the PUR database. Residences were spatially located by linking the address of the participant's home to its TRS. These researchers were then able to derive two measures of exposure. Broad exposure was defined as any pesticide application having occurred in the TRSs of residence or in one of the adjacent eight TRS. Narrow exposure was defined as any pesticide application having occurred in the TRS of residence.

The limitations of this approach are illustrated in Figure 2. The narrow classification would include all applications within TRS M02S03W16, which in this example were to corn and peaches for a total exposure metric of 1.8 pounds. This narrow exposure metric has the flaw of assigning the same exposure to Residence A, which is near to the corn and peach applications, as Residence B, which is further from these applications. Additionally, Residence B is near to the application to grapes in nearby TRS M02S03W17, which was not accounted for due to it being in a separate TRS.

The broad exposure metric includes the application to grapes in TRS M02S03W22 as a potential source of exposure, but to both residences. The broad exposure metric also includes the applications to almonds in TRS M02S03W22 and tomatoes in TRS M02S03W09 when calculating exposure.

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Thus, it includes potential exposures from well outside the primary pesticide drift distance reported in the literature [17, 18, 19, 20].

These spatial resolution effects are summarized in Table 1, which reports larger odds ratios (ORs) [16] for models developed using narrow classification compared to models developed using the broad classification. The more refined spatial resolution of the narrow classification increased the specificity of the exposure metric and revealed a stronger association with stillbirths.

Table 1: Comparison of adjusted odds ratios (OR) and 95% confidence intervals (CI) of defined pesticide exposure compared to fetal death due to congenital anomalies from [3]

Pesticide Class	Broad Classification OR (CI)	Narrow Classification OR (CI)
Phosphates	1.4 (0.8-2.5)	2.9 (1.3-6.4)
Pyrethroids	1.9 (1.0-3.6)	2.2 (0.9-5.3)
Halogenated Hydrocarbons	2.3 (1.2-4.4)	NR*
Carbanates	1.7 (0.9-3.2)	2.3 (0.9-6.4)
Endocrine Disruptors	1.5 (0.9-2.7)	2.3 (0.9-5.3)

NR = Not reported, fewer than 5 exposed cases.

From Bell et al. [3], tables 5 and 6, exposure D (exposure in specified class between 3 and 8 weeks of gestation or not exposed to any of the five classes during the 3rd-8th week period of gestation).

Other studies have attempted to address the scale limitation present in the CPUR database using apportioning methods and additional geographic information. Current literature refers to the exposure classifications generated using these techniques as CPUR and CDWR metrics, but they are actually specialized cases of a buffer operation². These metrics have been

²Buffering is a spatial analysis technique that identifies the area within a specified distance from a mapped location.

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adapted and applied in a similar residential pesticide exposure study in Iowa [30].

The CPUR metric uses an apportioning technique shown in equation (1) [13, 29, 34].

$$EM_{kr} = \sum_{i=1}^{n_r} \left(\frac{A_{ir}}{T_i} * X_{ik} \right) \quad (1)$$

Where EM_{kr} is the exposure metric for pesticide k at residence r in pounds, n_r is the number of TRS within a designated distance of residence r , A_{ir} is the acreage of TRS i within a designated distance of residence r , T_i is the total acreage of TRS i , and X_{ik} is total pounds of pesticide k applied within TRS i .

The CPUR metric is an areal measure of the fraction of a TRS within a designated distance surrounding a residence, typically 500 meters [29, 36]. It assumes that an application applied anywhere within the TRS was applied at the same rate over the entire TRS. Based on pesticide drift literature, this assumption is false for primary drift because pesticides are applied to specific fields, which are sub-areas of the TRS and drift deposition occurs at higher concentrations nearer to the field edges [17, 20]. Secondary drift could increase the portion delivered off-target, but the distribution would be driven by wind direction and speed, which is typically not the same in all directions.

The limitations of this approach are illustrated in Figure 3. The CPUR metric is able to capture the application to grapes missed by Bell's narrow classification metric without the inclusion of applications in other TRS incorporated into Bell's broad classification. However, this metric does assume Residence B is exposed to the applications to corn and peaches at the same

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rate as Residence A because it does not take into account proximity to the actual applications.

A refinement of the CPUR metric has been to link the PUR database reported applications to land use maps. Nuckols [28] Nuckols et al. [29], and Rull and Ritz [36] have attempted to accomplish this using California Department of Water Resources (CDWR) land use data sets available by county. CDWR produces these maps to monitor the nature, location, and rate of change of water use in agricultural regions of California. The program was begun in the early 1950's using field surveys. CDWR now uses aerial imagery to digitize land use boundaries in the county being surveyed as polygons. These polygon maps are then taken into the field and the actual land use of each polygon is identified and recorded, thus making the maps 100% field validated at the time of the field survey. For agricultural fields, the recorded information includes the crop planted among other items. This data is stored in GIS files for each county available to the general public from the CDWR website³. Counties are generally resurveyed every 3-7 years.

For the purpose of pesticide exposure studies, the location of the pesticide application can better be mapped using the CDWR land use maps. The CDWR land use maps are linked to the PUR database by crop type in each TRS [27, 29]. Pesticide application(s) to individual fields can then be estimated via a cross-referenced table that matches the two databases' crop type codes, and uses the PUR databases' information describing crop-specific pesticide application.

The modified CPUR metric (called the CDWR metric [28, 29]) is calculated using equation 2.

³California Department of Water Resources: <http://www.water.ca.gov/>. Last accessed March 19, 2007.

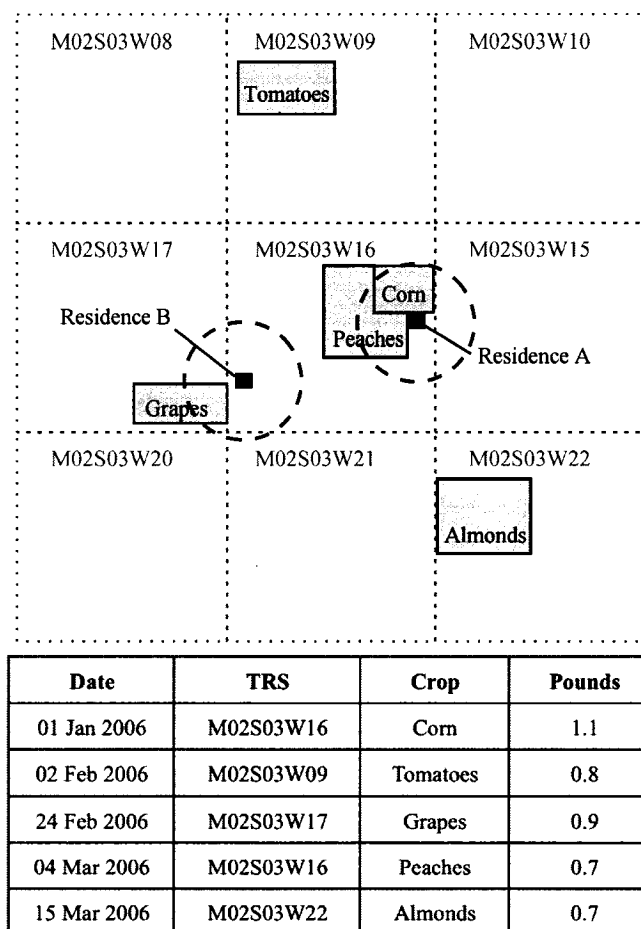


Figure 3: PUR database matched to TRS only with 750m buffers for CPUR metric. It captures exposure similar to the narrow exposure classification of Bell et al. [3]. It also captures applications within TRS proximate to the residence, a refinement over the broad classification of Bell et al. [3].

$$EM_{kr} = \sum_{i=1}^{n_r} \sum_{j=1}^{m_{ij}} \left(\left(\frac{A_{ijr}}{T_{ij}} \right) * X_{ijk} \right) \quad (2)$$

Where EM_{kr} is exposure metric for a user-specified pesticide k at residence r in pounds, i is a TRS within a designated distance of the residence r , n_r is the number of TRS within a designated distance of residence r , j is a crop type having an application of pesticide k , m_{ij} is the number of fields of crop type j in TRS i , A_{ijr} is the acreage of crop type j in TRS i within a designated distance of residence r , T_{ij} is the total acreage of crop type j within TRS i , and X_{ijk} is total pounds of pesticide k applied to crop type j within the TRS i .

This technique addresses the issue of TRS operational scale by assigning the pesticide application to the specific area applied, as closely as possible, and filtering through user defined buffers. However, this method does not take into account spatial proximity within the designated buffer. In other words, all pesticide applications within the buffer are considered equally responsible for any pesticides that have drifted into the residence. This assumption, again, does not take into account higher levels of drift deposition occurring nearer to field edges than further. As an attempt to overcome this issue, Ward et al. [40] defined buffer "donuts" (or rings) of 0-100, 100-250, 250-500, and 500-750 meters around each residence. Crop acreages within each buffer ring was treated as independent variables in the model. This method was found to introduce interdependence in the predictor variables because a residence with crop acreage of a specific type in one buffer ring typically also had crop acreage of that same type in the larger adjacent buffer rings. This interdependence was due to the monoculture landscape of midwest agriculture and may not occur in more diverse agricultural land-

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scapes. Non-independence of predictor variables can result in poor parameter estimations with high variances [22]. To overcome interdependence, a follow-up study developed an alternative approach that included distance in the metric [30]. This new methodology used a primary drift predictive model, AgDRIFTTM [38], which uses information about pesticide application practices to compute the percentage of an application drifting to discrete distances away from the field [38]. AgDRIFTTM calculates different drift rates based on application methods including aerial and ground, which comprise the majority of application methods reported in the PUR database. Pounds of pesticide drifting to location l for application method t are calculated using equation 3:

$$p_{lt} = \sum_{m=1}^n a_{mdt} * r \quad (3)$$

where p_{lt} is the pounds of pesticide drift at location l from application method t , m is a location representing acres on the field as a raster cell where the pesticide was applied, n is the total number of cells in the field, a_d is the AgDRIFTTM percentage drift of the application from field location m which is located at distance d from location l using application method t , and r is the application rate (pounds per acre) of the pesticide onto the field.

The use of available CDWR land use maps for calculating the CDWR metric also makes the assumption that the land use map used in the study is representative of the landscape at the time of pesticide application. Land cover change within the area studied here has been shown to vary unpredictably between time periods [35]. If land use within mapped fields had changed between the time the land use databases were created and the time the pesticide applications recorded in the PUR database occurred, errors

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would result. These errors could have the effect of not reporting applications that have been performed in that field (an error of omission) or falsely reporting applications as having been performed on a field that were actually applied to a different field (an error of commission). Either error would result in a misclassification of exposure reflected in the exposure metric. An example of this problem is illustrated in Figure 4.

Most previous studies have ignored additional factors influencing pesticide exposures. Some of the more important factors [25] include:

- Persistence (i.e. half-life) of the pesticide in the environment. Pesticides break down into other chemicals over time.
- Adherence of the pesticide to soil or the target crop. A pesticide with strong adherence to soil particles or vegetation will remain in the system for transport. Pesticides that do not have strong adherence, or that adhere strongly to water molecules, are moved from the surface into groundwater or interstitial spaces within the soil and become unavailable for surface transport. This affects secondary transport.
- Application method, equipment, and procedure. Application methods include aerial and ground. Because aerial applications take place further above the surface than do ground applications, they have the potential to drift much further from the point of application.
- Wind direction and speed at the time of application. Wind affects both where and how far a pesticide may move in primary drift. This also affects secondary drift by movement of soil particles carrying pesticides.

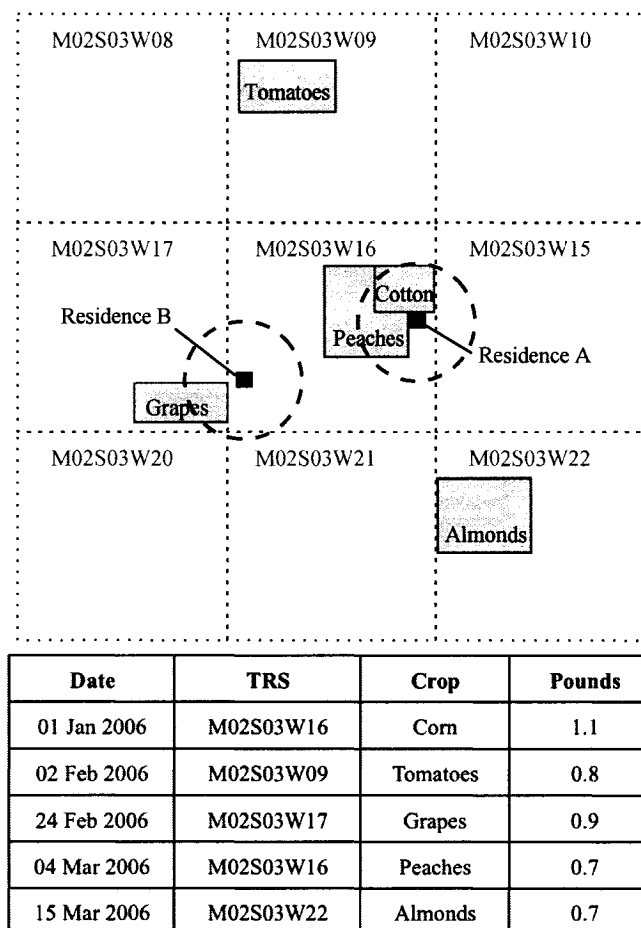


Figure 4: PUR database matched to both TRS and agricultural fields with the same crop type reported in the pesticide application. A 750m buffer captures exposure proximate to each residence. However, if the field planted as corn at the time of pesticide application has been harvested and replanted as cotton at the time the land use map was created, the result would be that the pesticide application to that field when it contained corn would not be included in the exposure metric calculation.

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- Weather conditions such as temperature, precipitation, and sunlight. Weather factors most often affect the chemical’s persistence, an important factor in secondary transport. Many chemicals are broken down by exposure to ultraviolet light, while others are water soluble and are moved down into the soil by water transport.

Nuckols and Riggs [30] found that incorporation of wind speed, as well as direction and soil erosion factors, improved a predictive model in a similar study in Iowa.

Previous research has typically tested the association of pesticide exposure metrics like these described here to disease [3, 13, 32, 34, 37]. By comparing exposure metric values to disease outcomes, these studies have omitted the important step of validating the accuracy of their exposure predictions. Unvalidated metrics often assume parameters based on assumptions rather than empirical evidence. The use of unvalidated metrics as a proxy for exposure to a contaminant introduces unknown errors because the mechanism leading from exposure to disease is complex. Furthermore, this process has not provided validation of the exposure metrics themselves. As an example, Nuckols et al. [29] compared CPUR and CDWR exposure metrics and revealed differences in assigning participants as exposed/not-exposed and the magnitude of potential exposure. The CPUR exposure metric was found, on average, to predict twice as many residences as exposed in comparison to the more spatially refined CDWR metric.

Non-geographic factors can also affect the validity of these metrics. For example, Ward et al. [40] found in a pesticide exposure study in Iowa that increased crop acreage surrounding a residence up to and including 750 meters increased the odds that the residence will have pesticides in carpet dust,

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and suggested testing even larger distances. Ward et al. included residences reporting a family member working in the agricultural industry as an additive factor in their exposure models. However, Nuckols and Riggs [30] found in a follow-up study that this trend could be attributed to an interaction with agricultural employment, because agricultural employees tended to live in proximity to large areas of agriculture. Within the agricultural employee population, no association was found between the amount of agriculture proximate to residence and the occurrence of pesticides inside the residence.

The large amount of agriculture proximate to these residences created a false association between pesticide occurrence and amount of agricultural area proximate to residences. The conclusions of Nuckols and Riggs [30] were that residences having a person within the residence employed in agriculture produces an exposure pathway unrelated to pesticide drift from agricultural use. Possibilities for pesticides found in these homes included pesticide transportation on clothing or shoes, which cannot be modeled by geographic information. Findings by Curwin et al. [10] and Quandt et al. [32] support “take home” exposure in agricultural employee residences as a mode of transportation of pesticides in residences. When residences having a person employed in agriculture were excluded from the study, it was determined that residences were best modeled at a distance less than 500 meters, suggesting pesticide transport in this data set was at a much smaller operational scale than thought in the original study. Thus, the validation by Nuckols and Riggs [30] of the metrics used by Ward et al. [40] revealed a false association of exposure explained by geographic information for residences who were in fact exposed by a non-geographic transport mechanism.

An important source of error in studies of the type described here is the method by which addresses of study participants are mapped, usually

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referred to as georeferencing. Many epidemiological studies have relied on automated georeferencing algorithms included in commercial geographical information system (GIS) software to obtain the location of study residences. Automated georeferencing of addresses is based on matching the address of a home to a road data set. Although there are many methods, the process typically involves finding a line segment matching the street name recorded in the address, then estimating the position of the house by linear interpolation between the first and last addresses along the street. The home location may be offset from the street centerline a specified distance to reflect the actual house location. Unfortunately, georeferencing depends upon many assumptions that, when violated, can lead to location discrepancies between the data and the true location [11]. The assumptions of georeferencing tend to be valid in well-structured urban environments and thus georeferencing results tend to be fairly accurate in these areas [21]. Conversely, rural residences are generally located much further and are more variable in their distance away from road centerlines, and are seldom evenly spaced along the street section, as linear interpolation assumes, than are city addresses [41]. This implies automated geocoding results will be less accurate in rural areas than they are in urban areas.

Using incorrect house locations can cause exposure misclassification if the locational error is great in proportion to the operational scale of the exposure being investigated [41]. A potentially more accurate way to locate rural addresses is to use a global positioning system (GPS) approach to record latitude and longitude directly beside the house. Ward et al. [41] found that by using the GPS, rural residence locations were georeferenced more accurately than they would have been using automated georeferencing techniques.

Methods

Data for this study were obtained from the sources listed in Table 2. All spatial data sets were projected to the universal transverse mercator (UTM) projection, zone 10.5⁴. The UTM coordinate system has the advantages of acceptable linear accuracy of one in 2500 and little distortion of shape and area [5], which helped preserve the spatial relationships between fields in this study.

Residential dust sample data were obtained from both the University of California, Berkeley, Childhood Leukemia Study (UCB-CLS) and the Agricultural Pesticide Study in Fresno (APS-F). Data collection for UCB-CLS was begun in 2001 in a collaborative effort between UCB, National Cancer Institute (NCI), and Colorado State University. To be considered for use in this study, a residence must have had more than 25%, or 40 acres, of agricultural land within a 500-meter radius of the residence as recorded by the most recent land use maps available from California Department of Water Resources (CDWR). The 500-meter buffer was chosen because 500 meters is considered an intermediate distance for drift from ground and aerial pesticide applications [28, 29, 36, 40, 42].

The UCB-CLS and APS-F studies visited participating residences to obtain dust samples, which were collected with an HVS3 vacuum⁵ from

⁴A UTM zone specific to California. California state GIS data sets are typically projected in this format because California straddles UTM zones 10 and 11. Using either of these zones for the entire state would cause projection errors of data lying further away from the zone's central meridian. By using this special UTM zone projection errors are distributed evenly across the state.

⁵A modified commercial vacuum cleaner. Also referred to as a high-volume surface sampler.

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Table 2: Sources of data used in study.

Source	Data product
University of California, Berkely	Residence locations, questionnaire answers, pesticide carpet samples (UCB-CL)
National Cancer Institute	Residence locations, questionnaire answers, pesticide carpet samples (APS-F)
California Department of Pesticide Regulation	Pesticide Use Reporting (PUR) Database
California Department of Water Resources	Land use maps (CDWR)
United States Department of Agriculture, Natural Resources Conservation Service	Soil Survey Geographic (SSURGO) Database
National Oceanographic and Atmospheric Administration and Scripps Institution of Oceanography	Daily climate information

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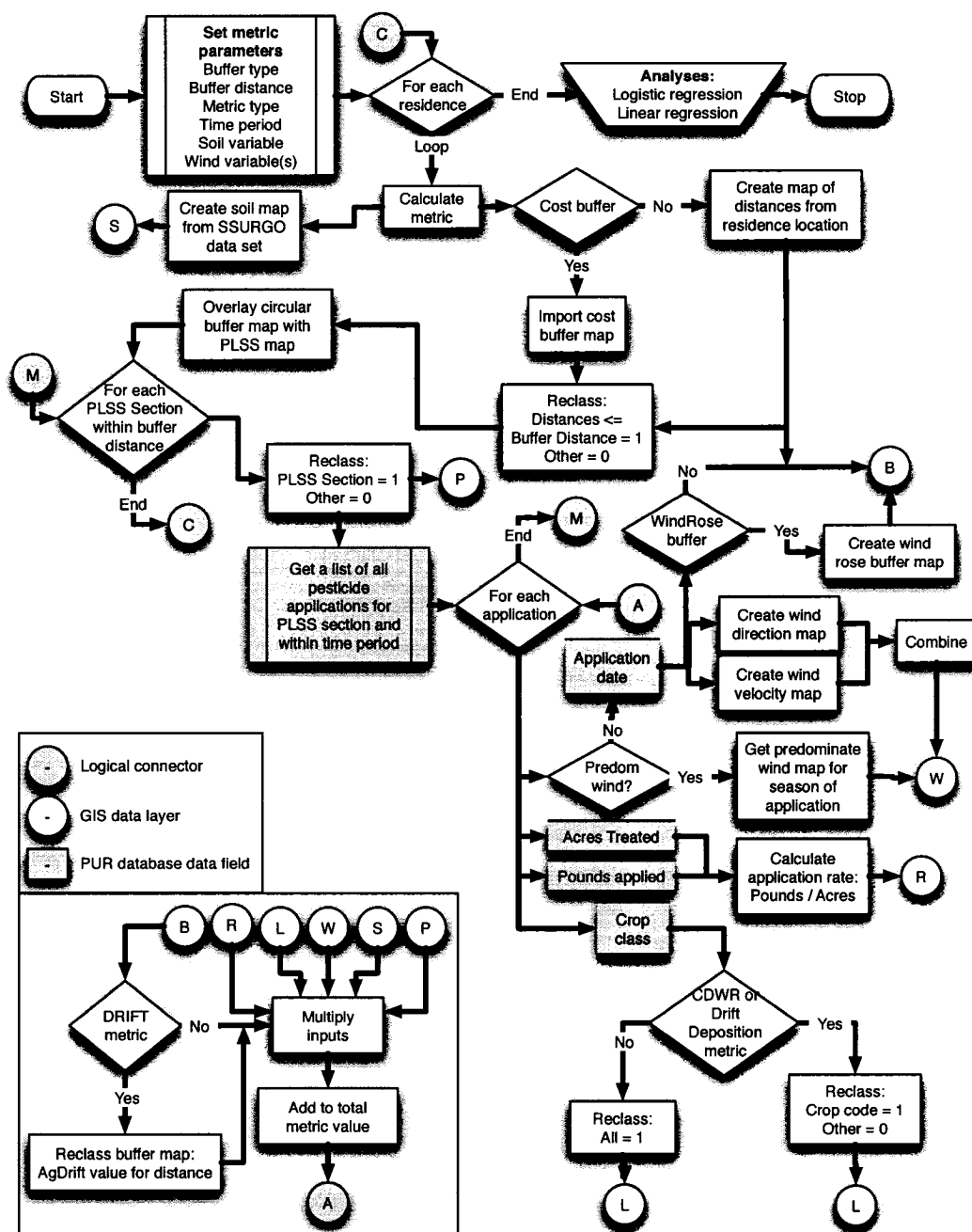
carpeted areas and residential pesticide use questionnaire data (described fully in the Data Sources section). The collected dust was analyzed for concentration of designated pesticides and is used as the outcome variable for this analysis.

Approach

Exposure metrics were calculated for each participating residence on the date of sampling from residence locations. Metrics were calculated using the methodology outlined in Figure 5. Separate exposure metrics were calculated using the following parameters:

1. Metric types
2. Buffer methods and distances
3. Time periods to include pesticide applications on dates prior to home sampling date
4. Soil and wind variables

All spatial data sets were converted to a raster format to allow spatial distance analyses other than Cartesian, or straight line, distance. Raster is a data representation that projects space into a regular series of uniform or nearly uniform square cells [12]. Spatial resolution was set to 15m per cell side (total area = 225m² per cell) to approximate pesticide application equipment boom width. The boom width is the length of the pesticide sprayer and represents each pass of the pesticide application equipment across an agricultural field.



Metric Types

Three exposure metrics were calculated for each participating residence. The first, referred to as the CPUR metric [28, 29], was calculated by apportioning the amount of pesticide applied in a public land survey system section (TRS) by the amount of that section contained in a buffer surrounding a residence (equation 1). This metric was discussed in detail in the Literature Review chapter.

The second, referred to as the LANDUSE metric (or CDWR metric in [28, 29, 36, 42]) was calculated by applying the rate of an application to areas of crop inside both the reported TRS and the buffer matching the crop to which the application was applied. (equation 2). Once again, this metric was discussed in detail in the Literature Review chapter. Compared to the CPUR metric, the LANDUSE metric refines the locations of the pesticide applications by analyzing mapped land uses. Land cover maps were created especially for the UCB-CLS and APS-F studies by CDWR as discussed in the Land Use/ Land Cover Section. Both the CPUR and LANDUSE metrics have been applied for modeling exposure to pesticides in California [29, 36] and in other regions [29, 30, 40, 42].

The third, referred to as the DRIFT metric [30], was calculated in the same manner as the LANDUSE metric, but included the amount of pesticide drift as a percentage of application rate at varying distances from the source of application (equation 3) as calculated by AgDRIFTTM software⁶ (see the Literature Review chapter). The DRIFT metric refines the LANDUSE metric by accounting for drift deposition as a function of distance from the

⁶<http://www.agdrift.com/> Last accessed February 12, 2007.

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source of application. The DRIFT metric has not previously been applied to the California data set, but was included in a previous study in Iowa [30].

Two primary drift deposition curves were developed using AgDRIFTTM software (Figure 6). These curves were based on 15m intervals to correspond with the raster cell sizes used in this study. The ground application drift deposition curve used the AgDRIFTTM software Tier I approach. The Tier I approach bases deposition on the primary controlling variable for off-target drift, which is drop-size classification (atomization spectrum of nozzle emission) [38]. The ground application drift deposition curve was calculated using a very fine to fine drop size distribution and a low boom height (sprayer height above the ground of approximately 0.05 meters) and a boom width of 15m.

The aerial application drift deposition curve used the AgDRIFTTM software Tier III approach. Tier III is a more sophisticated drift prediction for aerial spray deposition based on a Lagrangian model to approximate aircraft wake and background atmospheric behavior [38]. Tier III incorporates the environmental variables of atomization spectra, wind speed, application area, temperature, relative humidity, aircraft class and speed, boom length, nonvolatile fraction, formulation properties, release height above the ground, crop, site, formulation, and equipment specific variables. For the aerial application drift deposition curve, a swath (the width each pass of the airplane) of 15m was used to agree with the spatial scale of ground applications and the software's default values of typical application equipment and conditions for other parameters [38].

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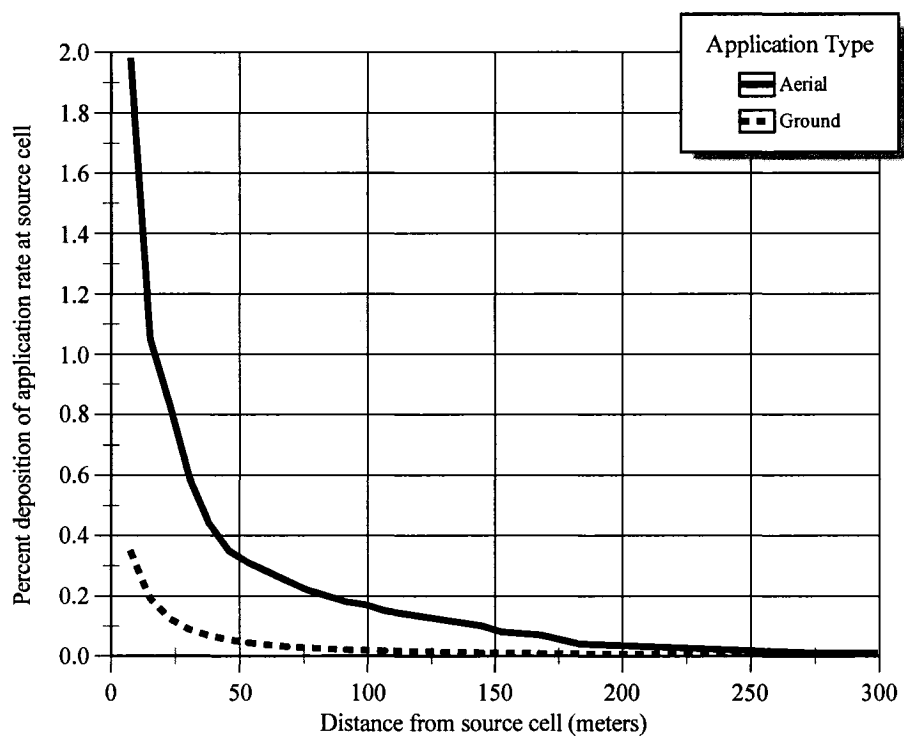


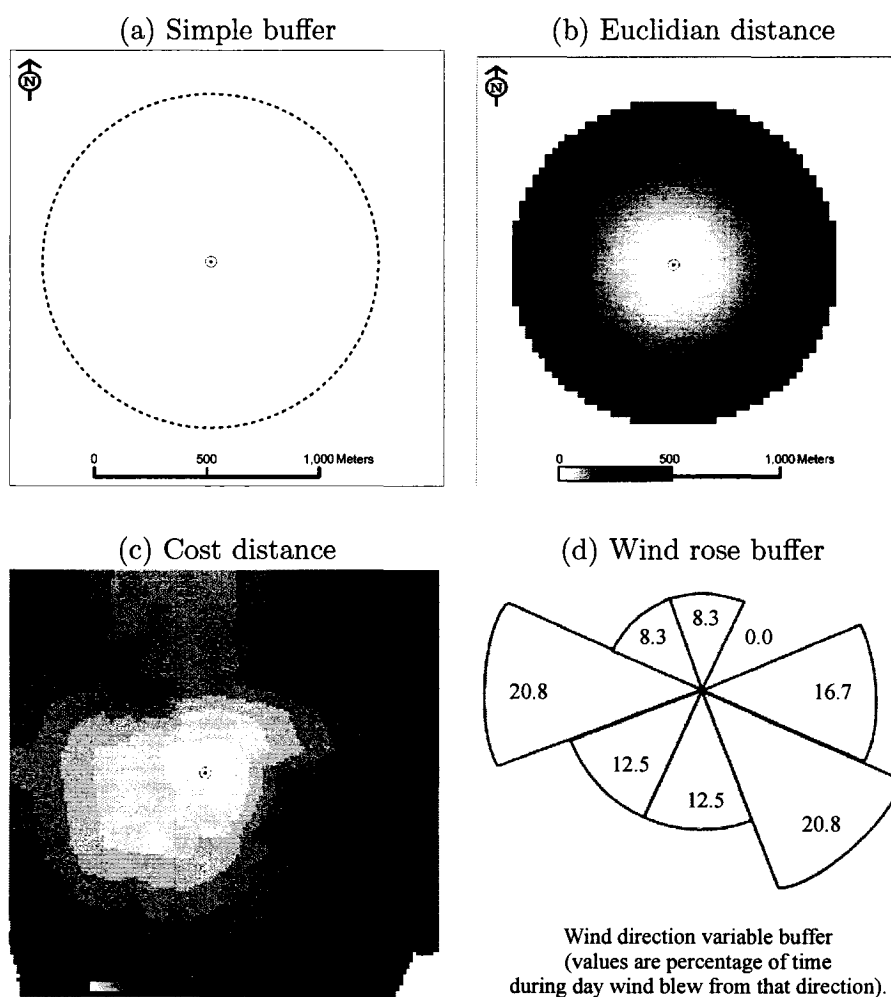
Figure 6: Percentage of deposition at varying distances from application area. Values were calculated by AgDRIFTTM software [38].

Buffers

Three buffer methods were used to define the source area of pesticide drift used for metric calculation at each participant residence location (Figure 7). The first method was the circular Euclidean buffers used by previous studies (Figure 7b). In this method, areas within the buffer radius distance were marked as inside the drift zone, and all other areas were marked as outside. Values are represented as distances in meters from a residence based on straight-line Cartesian distances.

The second buffer method was based on the cost distance analysis operator available in most commercial GIS packages. Cost distance analysis calculates distance across a map taking into account resistance of geographical features to movement [12, 23]. The cost distance calculation has been described and illustrated extensively in the literature [4, 12, 23], and is illustrated here in Figure 7c. The cost distance calculation is illustrated in Figure 8. At the start of the cost distance calculation, each cell contains a value that reflects its relative resistance to pesticide transport based on surface roughness, typically assumed to be $1/30$ of the height land cover per linear meter traveled [15, 38]. These values were rescaled to $\frac{5}{30}$ of the height per linear meter so that the total areas of the final cost distance buffers were roughly equal to the areas of the Cartesian buffers for the same distance (verified by visual analysis). Buffers of equal area made buffer distances comparable across buffer types. The resistance values are shown in Table 3. Accumulated distance was calculated for each cell as the minimum total distance required to move to the cell from the origin, which was the mapped residence location. Cells with a total cost distance less than a designated

Figure 7: Example of buffers using a threshold value of 500 meters. (a) Simple buffer based on Cartesian distance to demarcate areas within a distance of 500 meters. (b) Distances inside the buffer area are assigned the Cartesian distance from the center point. (c) Cost distance buffer representing pesticide transport resistance. Values are the total resistance for moving across the underlying cell as derived from Table 3. (d) Wind rose buffer calculated to have the same total area as Cartesian buffer (a).



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threshold distance value were marked as inside the drift zone, and all other areas on the map were marked as outside the drift zone.

The third buffer method was a novel approach of creating variable shaped buffers based on wind direction at the time of application. A circular buffer at a specified distance was created around the residence. This was divided into a wind rose buffer by equally dividing it into sections centered on the eight primary compass directions of north, north-east, east, south-east, south, south-west, west, and north-west. The summed area of the 8 directional sections equalled the area of the original circular buffer (equation 4). Substituting the equation of a circular area ($a = \pi r^2$) and simplifying the equation isolated the starting radius for each section (equation 5). The radius of each section was adjusted using the percentage of time the wind blew from the designated direction for the day of application using wind data downloaded from the CalClim website⁷

Each section's new buffer radius was calculated by adjusting the total area of the circular buffer to reflect the percent time wind blew from the designated direction. The circular buffer radius (equation 5) was multiplied by the percent time wind blew from the designated direction applied to all eight sections (equation 6). Multiplying by eight ensured the total area of the new wind rose buffer would be the same as the total area of the beginning circular buffer. The simplified wind rose buffer equation is shown in equation 7.

⁷CalClim is a joint venture of the National Oceanographic and Atmospheric Administration's Western Regional Climate Center, California Climate Data Archive located in Reno, Nevada and Scripps Institution of Oceanography's California Climate Change Center, funded by the California Energy Commission. Last accessed January 12, 2007.

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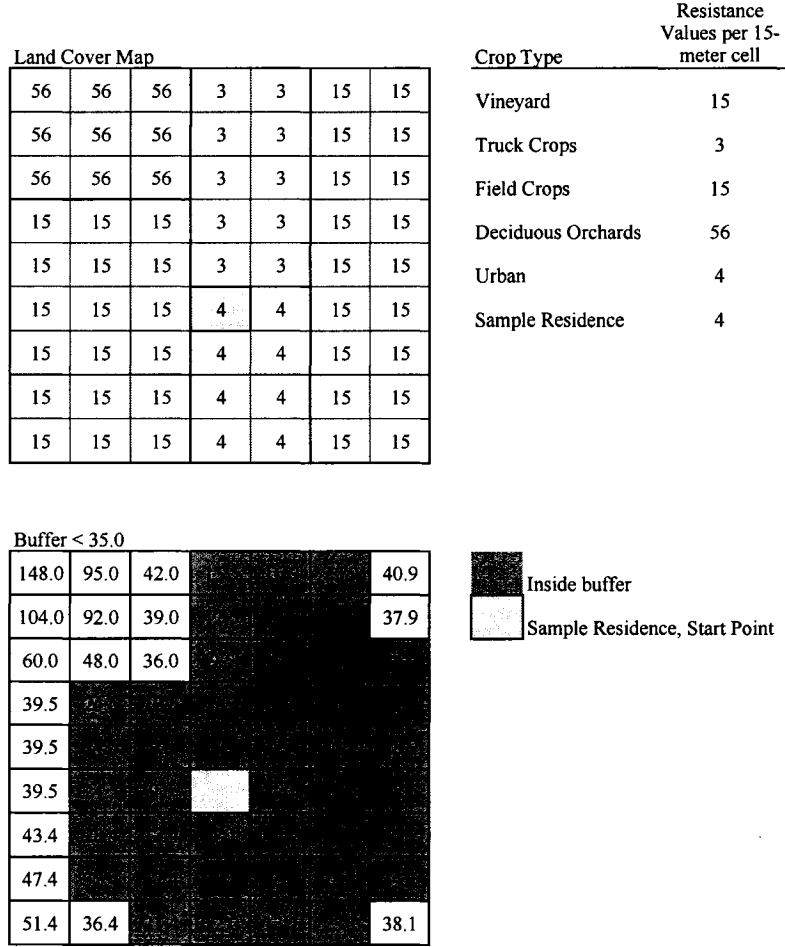


Figure 8: Example of creating a resistance map for use in accumulated distance map. A land cover map is reclassified with resistance values from Table 3. Accumulated distance is calculated from the residence location. Distance to each cell is calculated as the minimum of orthogonal: $c_d = (0.5 * f_d + 0.5 * f_s) + c_s$ and diagonal: $c_d = \sqrt{2} * (0.5 * f_d + 0.5 * f_s) + c_s$ where c_d is the cost for movement into destination cell d , f_d is the friction value for movement through destination cell d , f_s is the friction of the starting cell s , and c_s is the total cost for movement to starting cell s from the residence location origin cell. A buffer map is created by marking cells with accumulated distances less than or equal to the example's 35.0 threshold as being inside buffer, and all other cells as outside the buffer.

Table 3: Range of resistance values (per meter linear distance) to pesticide transport per linear meter used for cost distance maps. These values were based on surface roughness values as presented by Hewitt ([15]) rescaled to $\frac{5}{30}$ per linear meter traveled so that final buffer areas were roughly close to the Cartesian buffers when metrics were calculated for the same distance.

Crop	Resistance per meter	Rational
Grain, Field, Vineyard, Pas- ture	1	Assumed to be the highest values for crops because typically high growing.
Truck	0.2	Assumed to be the lowest values for crops because typically low grow- ing vegetables such as lettuce, melons, and cabbage.
Deciduous, Citrus	3.75	Assumed to be the average for orchards.
Idle	0.05	The highest for bare soil because value is higher for plowed areas. This is the same value as low grass.
Semi-agricultural (farm- steads, dairies, livestock feed lots, poultry farms)	0.5	Assumed to be the highest for typical rural farmland.
Urban	10	Assumed to be the highest for suburban/towns.
Urban Landscape	0.25	Assumed to be a medium value for high grass because this represents cemeteries, parks, etc. and often have bushes and trees.
Urban Vacant	0.05	Assumed to be a low value for suburban/towns because represents paved areas.
Native Classes	5	Assumed to be the lowest values for forests because these areas in California are usually wetlands with bushes and trees along the banks.

$$8a_d = a_t \quad (4)$$

$$r_d = \sqrt{\frac{\pi r_t^2}{8\pi}} \quad (5)$$

$$r_d = \frac{r_t}{\sqrt{8}} * 8 * p_d \quad (6)$$

$$r_d = \frac{4r_t p_d}{\sqrt{2}} \quad (7)$$

Where a_d is the area of the section in direction d , a_t is the total area desired (in this case, a circular buffer of radius r_t), r_d is the radius for pie section direction d , and p_d is the percentage time the wind blew from direction d .

Metrics for pesticide transport were evaluated at distances of 300, 500, 750, 1000, and 1250 meters as suggested by published research findings and recommendations [28, 29, 36, 40, 42].

Time periods

Time periods prior to sampling limited the dates on which pesticide applications were included in the exposure metric calculation. Separate exposure metrics were calculated to include pesticide applications within a time period 90 days, 6 months, 1 year, 2 years, or 3 years prior to sampling. These time periods cover a range suggested by the persistence times of each target pesticide in the environment as discussed in the Study Pesticides section and potentially longer persistence times inside homes suggested by other exposure studies [9, 8].

Soil and Wind

Metrics created with the previous parameters were augmented by overlaying soil and wind data layers. Data layers describing soil wind erosion

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group (WEG) and percent organic matter (OM) were used to augment metric calculations. Soil data were obtained from the Soil Survey Geographic (SSURGO) database ⁸, created and maintained by the United States Department of Agriculture, Natural Resources Conservation Service.

Meteorological data investigated in this study were predominate wind patterns, wind direction, and wind velocity. Wind data layers were developed by assigning the wind speed (in miles per hour) or direction (percent time wind blew from that direction) to each of the eight compass direction sections (Figure 10). Wind information on the application date was used to create date specific wind direction and velocity data layers used as predictors of pesticide transport. Predominate wind patterns were used to create seasonal data layers based on maps from Hayes et al. [14] (Figure 9). These variables were included in the calculated metrics both individually and together.

Metric Calculation

An automated script was developed to perform all metric calculations. The script queried the PUR database for all applications within each PLSS section that intersected the buffer data layer and were within the designated time period. Pesticide application information queried was the date of pesticide application, pounds applied, number of acres treated with the pesticide, and the crop to which the pesticide was applied. The application rate equaled the pounds of pesticide applied divided by the acres treated by the application.

⁸<http://www.ncgc.nrcs.usda.gov/products/datasets/ssurgo/> Last accessed November 13, 2006.



Figure 9: Predominant wind flow patterns of California's Central Valley in spring, summer, and fall based on Hayes et al [14]. Winter predominant wind flow patterns are the inverse of spring, summer, and fall wind flows.

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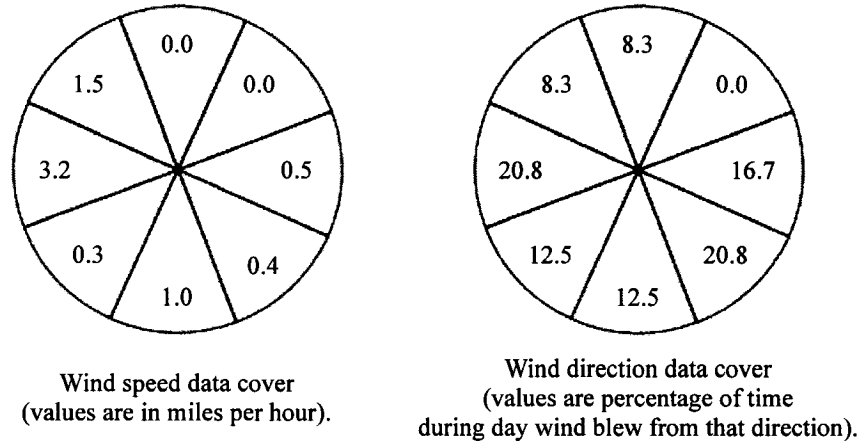


Figure 10: Example wind data layers (speed and percent time) based on day of application.

The script thus calculated a exposure metric for each pesticide application according to equation 8 using a summation of the raster cells from the raster overlay multiplication ⁹. All pesticide application metrics within the designated time period were summed to create the total exposure metric.

$$M = R * B * L * W * S * P \quad (8)$$

where M is the metric value, R is the application rate, B is the buffer mask data layer (which could be Euclidean, cost, or wind), L is the land cover mask data layer, W is the wind map (which could be wind velocity, wind direction, or predominate wind), S is the soil map (which could be any one of the soil variable data layers), and P is the PLSS section mask data layer. This calculation assumed a multiplicative relationship between the data layers for this study. All individual pesticide application metric values

⁹Overlay multiplication is the process of multiplying the value in each cell location on a map with the value at its corresponding location on another map [12].

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were totaled to create a single predicted metric value (in pounds) for each study residence.

Data Analysis

Residence locations, dust sample concentrations, questionnaire answers, and calculated metrics were input into the R statistical software package for statistical analysis [33]. Two analyses were performed to assess prediction of individual residence exposure by metrics for each pesticide: (1) metric values prediction of detection of the pesticide in carpet dust using logistic regression and (2) metric values prediction of concentration of the pesticide in carpet dust using normal linear regression. Detection analyses were limited to pesticides with at least a 20% and not more than 80% detection prevalence, defined as a measurable concentration in house dust above the laboratory detection limit. These limits were imposed by logistic regression, which requires relatively equal proportions of detections and non-detections in the observed data. Concentration analyses were limited to pesticides with at least a 30% detection prevalence. All pesticides that did not meet at least one of these criteria were excluded from further analyses.

The effect of varying minimum detection limits (MDL) on the number of samples reporting a pesticide concentration (detection prevalence) were investigated by describing the detection prevalence of pesticides by MDLs in a linear regression model. Total pounds of pesticide applied and number of applications for each pesticide within 1250m of study residences during the study period were also used to describe the influence of pesticide use patterns on detection prevalence in a separate model. All variables were transformed to the log-log scale to achieve homogeneity of variance and linearity.

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Questionnaire data collected at the time of residence sampling included whether a resident had worked in the agricultural industry during the previous 12 months. Significant differences in pesticide observations due to employment in the agricultural industry were tested using Fisher's exact test for pesticide detection and the Wilcoxon two-sample rank sum test for concentration.

To test how well CPUR and LANDUSE metrics without any additional geographic information predicted pesticide detections, three measures of validity were calculated for each pesticide: sensitivity, specificity, and overall agreement. These measures compared observed detections and predicted detections by metrics calculated with the Euclidean buffer at 500 meters and including pesticide applications occurring within one year previous to home sampling. This 500 meter buffer distance for the metrics is the most commonly used buffer distance used in previous studies and this time period because previous studies have included pesticide applications from one full year of PUR reported use [29, 36]. Based on these validity tests, detection and concentration analyses were further limited to those pesticides with sensitivity greater than 0% because a sensitivity of 0% meant the metrics did not predict any concentration of that pesticide in the residence from agricultural sources and, therefore, any detections of these pesticides in residences were from a source not captured by these metrics.

These same CPUR and LANDUSE metrics used in the validity tests were also used to create predictive logistic regression models of pesticide detection and linear regression models concentration for each pesticide. The results of these predictive models were used as a baseline for quantifying improvements by metrics with additional geographic information and/or different buffer distances and time periods. Concentration models were limited to

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only those residences with measured pesticide concentrations. Although assigning a value to residences with concentrations below detection limits is a common technique for these situations, this has been found to bias parameter estimates and their variance in the model [24]. By limiting models to only observed values, these biases were avoided. Concentration models were based on a log transform of the observed pesticide concentration and metric predictions to achieve homogeneity of variance.

Individual models were created for each pesticide using each metric variation. Variations of metrics included buffer type and distance, time period previous to residence sampling, method of matching PUR crop classes to CDWR land use crop classes, soil wind erosion group and percent organic matter, and wind direction and velocity. Additionally, questionnaire answers about home pesticide use and spatial trend were tested for model improvement. Concentration models were, again, limited to residences with an observed pesticide concentration. The 20 models with highest ROC C-statistic (logistic regression) or R^2 (linear regression) were compared to identify the combination of spatial factors that most improved model prediction. Comparing 20 models for similarities across pesticides reduced the the chance of a random association from multiple comparisons.

Data Sources

Participant enrollment

The first source of study participants was the Agricultural Pesticide Study in Fresno (APS-F) and the second was the University of California-Berkeley Childhood Leukemia Study (UCB-CLS). APS-F was created primarily to (1) address temporal changes by taking multiple samples at the same household,

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and (2) address seasonality in crop rotations and pesticide applications. UCB-CLS started in 2001 and was intended to identify households where a family member was stricken with childhood leukemia (cases) and somewhat similar households where leukemia was not present (controls). UCB-CLS has continued identifying such households through 2006. UCB-CLS obtained cases of childhood leukemia from the cancer registry and pediatric hospitals. Controls were obtained from birth certificates and selected to match cases based on date of birth, gender, and race. In both cases, an initial interview was conducted with families identified as possible participants in order to evaluate eligibility and interest in participating in the study. Cases and controls were enrolled if they met the following criteria:

1. Agree to participate in the study.
2. Child less than 8 years old at diagnosis (cases) or date of referral (controls),
3. Lived in the 35 county study area at diagnosis or reference date,
4. Controls must be born in California to match cases,
5. Have a carpeted area not less than 24 square feet for carpet dust sample collection.

Spatial locations of enrolled participant residences were collected at the time of this initial interview using a global positioning system (GPS) approach.

The residence of each participant in the UCB-CLS study was also tested for eligibility in a more ambitious agricultural pesticide exposure modeling sub-study. The residence was eligible for this sub-study if there were more than 25%, or 40 acres, of agricultural land within a 500-meter radius of the

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residence as recorded by the most recent CDWR land use map. The 500-meter buffer was chosen because 500 meters is considered an intermediate distance for drift from ground and aerial pesticide applications [28, 29, 36, 40, 42].

After households were enrolled, a follow-up interview was scheduled at the participant's convenience. Initially the interview could take place any time during the year and thus was independent of seasonal agricultural pesticide use. Beginning in 2004, the interview schedule was restricted so that all interviews occurred during the growing season. During this follow-up interview, questionnaire data was collected about home pesticide use during pregnancy and during the child's life (Appendix A). Dust samples from the carpet and windowsill were collected at this time for chemical analysis. Locations for dust sampling were chosen based upon the interview and focused on the child's main play area.

APS-F was initiated by CSU in 2002 and participation was not limited by epidemiological information. Households were identified as possible participants using a home ownership database and by word of mouth referrals. Residences identified as possible participants had an initial residence location coordinate recorded along the roadside proximate to the residence using a GPS receiver. This allowed adjacent agriculture land cover to be assessed in a GIS. This initial assessment determined if there were more than 25%, or 40 acres, of agricultural land use within a 500-meter radius circular buffer as recorded by the latest CDWR map. In addition, a visual check of surrounding lands was made at the time of the GPS survey to record any possible recent development that may not have been recorded on the most recent CDWR land use maps.

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Only residences meeting the agricultural land use criteria were considered for further participation in the study. The homeowners whose residence passed this initial screening were asked if they would be interested in participating in the study. If so, the homeowners were asked a series of questions designed to determine if the household met the following criteria:

1. Have a carpet or rug of at least 3 feet by 3 feet inside the residence for at least 1 year,
2. No agricultural workers living in residence.

Households were enrolled if they met these criteria. After enrollment, a home interview was scheduled during a peak pesticide application time period, defined as the months receiving the greatest amount of any pesticide used on the predominant crop surrounding the target residence, according to the PUR database. During the home interview a questionnaire was administered (Appendix B) and dust samples were taken from the carpet and window sills. The actual residence location was recorded using a GPS receiver. Additional home interviews were scheduled at peak pesticide application times later in that year or in a subsequent year.

The number of agricultural surveys as of January 2006 is 69 from UCB-CLS and 21 from APS-F, for a total of 90. One of the study residences did not have a SSURGO soil map available (in Kern County) and was dropped from analysis. Due to the study design for APS-F, most residences were sampled several times, leading to possible non-independence of sample data, so only the first sampling event for each residence was included in each analysis. Pesticide use data were only available through the end of year 2004. Taking into account all these constraints, 60 surveys (40 UCB-CLS, 20 APS-F) were available for this analysis.

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Dust Sample Collection and Analysis

The complete methodology of collecting dust in participant carpet is reported by Colt et al. [7]. Carpet dust was collected using a high-volume surface sampler (HVS3), which is a specially designed vacuum cleaner [2]. The dust sample was collected from rooms where the child spent the most time while awake, as identified by the parents. If that room had at least nine square feet of carpet or rug, a sample was collected. If the room did not meet this criteria another room was selected. The sample room was typically the living room or family room for most households. Once collected, samples were shipped in styrofoam containers with ice packs via overnight mail to Battelle Memorial Institute laboratory¹⁰ for analysis. The complete laboratory methodology is reported by Colt et al. [7].

Study Pesticides

Uses, environmental persistence, and environmental binding affinity of pesticides examined in this study are summarized in Tables 4 and 5. The laboratory reported varying minimum detection limits for each pesticide in the study.

Home Usage and Characteristics of Residences

Questionnaire data collected in the UCB-CLS and APS-F studies were included in analyses. Questionnaire data available at the time of analysis included agricultural occupation and any home applications of pesticides as reported to the interviewer. Questionnaire data were available for all APS-F participants. However, questionnaire data was not available for six

¹⁰Battelle Memorial Institute, 505 King Avenue, Columbus, Ohio 43201

Table 4: Pesticides analyzed for UCB-CLS and APS-F studies having primary agricultural use and detailed uses.

Source: EXTOWNET [1].

Use		Control Uses	Notes
Pesticide	Classification		
Alachlor	Herbicide	Grasses and broadleaf weeds	
Azinphos methyl	Insecticide	Leaf feeding insects	
Chlorpyrifos*	Insecticide	Cutworms, corn rootworms, cockroaches, grubs, flea beetles, flies, termites, fire ants, and lice	
Cyanazine	Herbicide	Annual grasses and broadleaf weeds	
Dacthal	Herbicide	Grasses and broadleaf weeds	Homes and gardens comprise about 20% of use in U.S.
Dicofol	Miticide	Mites	Contains < 0.1% DDT
Dimethoate	Insecticide	Mites and insects	
Endosulfan beta	Insecticide	Insects and mites	
Ethafuralin	Herbicide	<i>Not Reported</i>	
Iprodione	Fungicide	Fungal pests	Also used as a seed treatment and post harvest fungicide
Methidathion	Insecticide	Insects and mites	
Metolachlor	Herbicide	Grasses and broadleaf weeds	highway rights-of-way
Pendimethalin	Herbicide	Annual grasses and certain broadleaf weeds	
Phosmet	Insecticide	Aphids, suckers, mites, and fruit flies	Active ingredient in some dog collars
Simazine	Herbicide	Grasses and broadleaf weeds	
Trifluralin	Herbicide	Grasses and broadleaf weeds	

* Also commonly used in households, but included because of widespread agricultural use.

Table 5: Persistence and soil adsorption affinity of pesticides analyzed for this study having primary agricultural use. Source: EXTOTOXNET [1].

Pesticide	Reported Persistence (Half-life)	Adsorption Affinity
Alachlor	8 days	Weakly adsorbed to soils
Azinphos methyl	5 to 355 days	Strongly adsorbed to soils
Chlorpyrifos*	60 to 120 days, can range from 2 weeks to over 1 year	Strongly adsorbed to soils
Cyanazine	10 to 14 weeks	Not adsorbed to soils
Dacthal	14 to 100 days	Water soluble
Dicofol	60 days	Strongly adsorbed to soils
Dimethoate	20 days, as low as 4 days and as high as 122 days	Weakly adsorbed to soils
Endosulfan beta	150 days	Moderately adsorbed to soils
Ethafuralin	No information	No information
Iprodione	14 days (reported from 7 to greater than 60 days)	Slightly soluble, moderately adsorbed to soils
Methidathion	7 days	Poorly binds to soil particles
Methoprene	10 days	Strongly adsorbs to soil particles
Metolachlor	15 to 70 days	Moderately well sorbed by most soils
Pendimethalin	40 days	Strongly adsorbed to soils
Phosmet	19 days	Moderately adsorbed to soils
Simazine	60 days (28 to 149 days)	Moderately to poorly adsorbed to soils
Trifluralin	45 days to 8 months	Strongly adsorbed to soils

* Also commonly used in households, but included because of widespread agricultural use.

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residences in the UCB-CLS study. Answers (Yes/No) to the following questions were used (all answers were based on having occurred within the past 12 months).

- Employment in an agriculture-related industry.
- Professional pesticide application outside home.
- Professional pesticide application inside home.
- Pesticide application for ant and roaches.
- Pesticide application for fleas and ticks.
- Pesticide application for slugs and snails.
- Pesticide application to weeds.
- Pesticide application to indoor plants.
- Pesticide application to outdoor plants.

Pesticide Use Data

The California Pesticide Use Reporting (PUR) database was obtained from the California Department of Pesticide Regulation (CDPR) and used as the source of pesticide application data, which. The PUR database was described in detail in the literature review. The PUR database was linked to the public land survey system (PLSS) data set obtained from California Department of Public Health (CDPH) via TRS (Figure 1).

Limitations of the PUR database, as discussed in the literature review, include its spatial resolution (currently applications must only be reported to the Public Land Survey System Township-Range-Section (TRS) level (1

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mi²) [29] and data entry/recording errors (0.5 to 1.0% of all reports entered) (Larry Wilhoit, Senior Environmental Research Scientist, California Department of Pesticide Regulation, personal communication, April 7, 2006) [6]. The spatial resolution limitation is inherent in the data and can only be mitigated by linking PUR to other geographic information, such as land use, to estimate the location of fields where reported applications took place.

CDPR has developed methods of testing the database for potential entry and reporting errors. CDPR or county staff manually correct obvious errors when possible. A computer program performs automated checks of values for all fields in new records before they are incorporated into the database. Additionally, after the data are loaded into the database, application rates are checked for any unusually high values relative to other reported applications that year. Application rates in the PUR database are calculated using the equation $\frac{p}{a}$, where p is the pounds of chemical applied and a is the acres treated. Thus, application rates can be inaccurate because of (1) errors when entering the pounds applied by either the applicator or the database entry person, or (2) incorrect estimate or rounding of acres treated (Larry Wilhoit, Senior Environmental Research Scientist, Department of Pesticide Regulation, personal communication, April 7, 2006).

In metric calculations the application rates were multiplied by the land use mask and TRS mask maps and summed across raster cells to ensure that the metric did not record more pounds than were actually applied to the specified crop inside the specified section. This situation could arise if there were more than one field with the applied crop type in the section of application, which would greatly increase the area assumed to have received the pesticide application. In the case of more pounds calculated than reported

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by the application in the PUR database, the pounds reported by PUR was used in place of the calculated metric.

Land Use/Land Cover

The California Department of Water Resources (CDWR) has been given the task of surveying agricultural lands and crops. These surveys are used to create maps for inventory and analysis of water use. CDWR maps all crops in agricultural counties in California about once every 5-7 years. CDWR maps are available in geographic information systems (GIS) format for the agricultural counties of the state. CDWR uses aerial photography to delineate agricultural field boundaries with a minimum area of 0.81 hectares (0.003 mi²). The crops within these fields are then identified via a field survey, usually conducted once, between July and September. Thus, the data are collected using a 100% ground verification procedure by highly trained personnel, which should result in minimal error [29]. These maps were used to determine eligibility for inclusion in the UCB-CLS agricultural pesticide exposure sub-study and the APS-F study.

To minimize crop change and rotation error, NCI contracted with CDWR to create custom land maps within 3 weeks of the house dust sample date for each participant in both the UCB-CLS and APS-F studies. The mapping process involves using the initial road GPS point of the house location as the center of a 1300-meter radius circle that is used to clip out agricultural use polygons around the house from the existing CDWR map. This field boundary map is sent to CDWR along with benchmark locations of four major road intersections as a quality control and a general location map of the region to be surveyed. The CDWR crop surveyor then travels to the

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site and conducts a visual survey to (1) note any field boundaries changes, (2) identify the crop type present in each field, and (3) note other land uses. After the crop survey is finished, the updated field boundary map and associated crop information is returned to NCI for post-processing and incorporation into the GIS.

CDWR's crop type and land use classification system includes a major class and usually a subclass for each land use polygon identified in the database (Table 6). This land use data can be linked to the PUR database by a table that translates the PUR's more specific crop classes into the CDWR's less specific major crop classes and subclasses [26, 29]. Major classes break land use into general types of agricultural, urban, or native land use. Subclasses further break major classes into specific crops or related groups of crops. When field surveyors are unable to determine the subclass of a particular field due to recent harvesting or early stages of plant development, the field is classified only to the major class level and the subclass is set to fallow. If no crop at all is present in the field, the field is categorized as idle.

To test the sensitivity of the calculated metrics to the influence of fallow land and missing subclass codes in CDWR land use maps, metrics were calculated using 1) only applications where an exact match to the subclass level was found, 2) applications where a match to specific subclass or to fallow was found, and 3) applications where a match to at least the major class level was found.

Table 6: CDWR agricultural, urban, and native classes used in this study

Major Class	Sub-Classes
Grain and Hay Crops	Barley; Wheat; Oats; Miscellaneous and mixed
Rice	-None-
Field Crops	Cotton; Safflower; Flax; Hops; Sugar Beets; Corn; Grain Sorghum; Sudan; Castor Beans; Beans; Sunflowers; Miscellaneous
Pasture	Alfalfa; Clover; Mixed; Native; Turf Farms; Miscellaneous
Truck, Nursery, and Berry Crops	Artichokes; Asparagus; Green Beans; Cole Crops; Carrots; Lettuce; Melons, Squash, and Cucumbers; Onions and Garlic; Peas; Potatoes; Sweet Potatoes; Spinach; Tomatoes; Flowers, Nursery, and Christmas Tree Farms; Mixed; Bush Berries; Strawberries; Peppers; Broccoli; Cabbage; Cauliflower; Brussels Sprouts; Miscellaneous
Deciduous Fruits and Nuts	Apples; Apricots; Cherries; Peaches and Nectarines; Pears; Plums; Prunes; Figs; Almonds; Walnuts; Pistachios; Miscellaneous
Citrus and SubTropical	Grapefruit; Lemons; Oranges; Dates; Avocados; Olives; Kiwis; Jojoba; Eucalyptus; Miscellaneous
Vineyards	-None-
Idle	-None-
Urban	Residential, commercial, and industrial
Urban Landscape	Lawn; golf course; ornamental landscape; cemeteries
Vacant	Paved and unpaved areas; railroad right of way; airport runways
Native	Riparian vegetation; brush and timber; barren and wasteland (dry streams, mine tailings, etc.)

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Soil Data Sets

Soil data were obtained from the Soil Survey Geographic (SSURGO) database¹¹ created and maintained by the United States Department of Agriculture, Natural Resources Conservation Service. The SSURGO database continues to be maintained and expanded by the United States Department of Agriculture - Service Center Agencies (Farm Services Agency, Natural Resources Conservation Service, and Rural Development). It is created at a scale of 1:25,000, providing the finest spatial resolution soil data widely available in the United States.

The SSURGO database is composed of a map layer that contains polygons outlining soil map units. Map units may have more than one soil type (referred to as the component); in these cases each component has a reported percentage of the map unit that it covers (percent area). SSURGO data was further processed so that each map unit has only one component. If a polygon from the original SSURGO database had only one associated component, that component was assigned to the polygon in the final database. For map units having more than one component, the dominant component rule to assign the dominant component [39]. This meant that in the final database, the map units were assigned the component composing the largest percent area of the original SSURGO polygon.

For each soil type, the SSURGO database also has soil properties at various soil horizons. Only the top horizon was used in this study because only this layer is affected by pesticide transport processes in the environment being modeled.

¹¹<http://www.ncgc.nrcs.usda.gov/products/datasets/ssurgo/> Last accessed March 22, 2005.

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Soil attributes included in this study were wind erosion group (WEG) and percent organic matter (OM). High wind erodibility was composed of WEG sequences 1 and 2, which had a wind erosion index ≥ 134 tons/acre/year. Moderate wind erodibility was composed of WEG sequences 3 through 5, which had a wind erosion index of 86 tons/acre/year. Low wind erodibility was composed of WEG sequences 6 through 9, which had a wind erosion index ≤ 56 tons/acre/year.

Meteorological Data

Meteorological data were downloaded from the CalClim website¹². Data were recorded hourly and included wind direction, wind speed, wind gust direction, wind gust speed, precipitation, solar radiation, sample time, and temperature. Stations for which data were downloaded are presented in Figure 11. Generalized predominant wind patterns in the study region are shown in Figure 9.

Wind direction, wind velocity, gust direction, and gust velocity were summarized for each station both on the day of application and accumulated for all days between the day of application and the day of sampling. Wind direction data were condensed into a wind rose of the percent time the wind blew from each of the 8 compass directions and wind velocity data into wind roses of maximum and average speed for each of the eight compass directions. This same procedure was used for wind gust information to

¹²CalClim is a joint venture of the National Oceanographic and Atmospheric Administration's Western Regional Climate Center, California Climate Data Archive located in Reno, Nevada and Scripps Institution of Oceanography's California Climate Change Center, funded by the California Energy Commission.

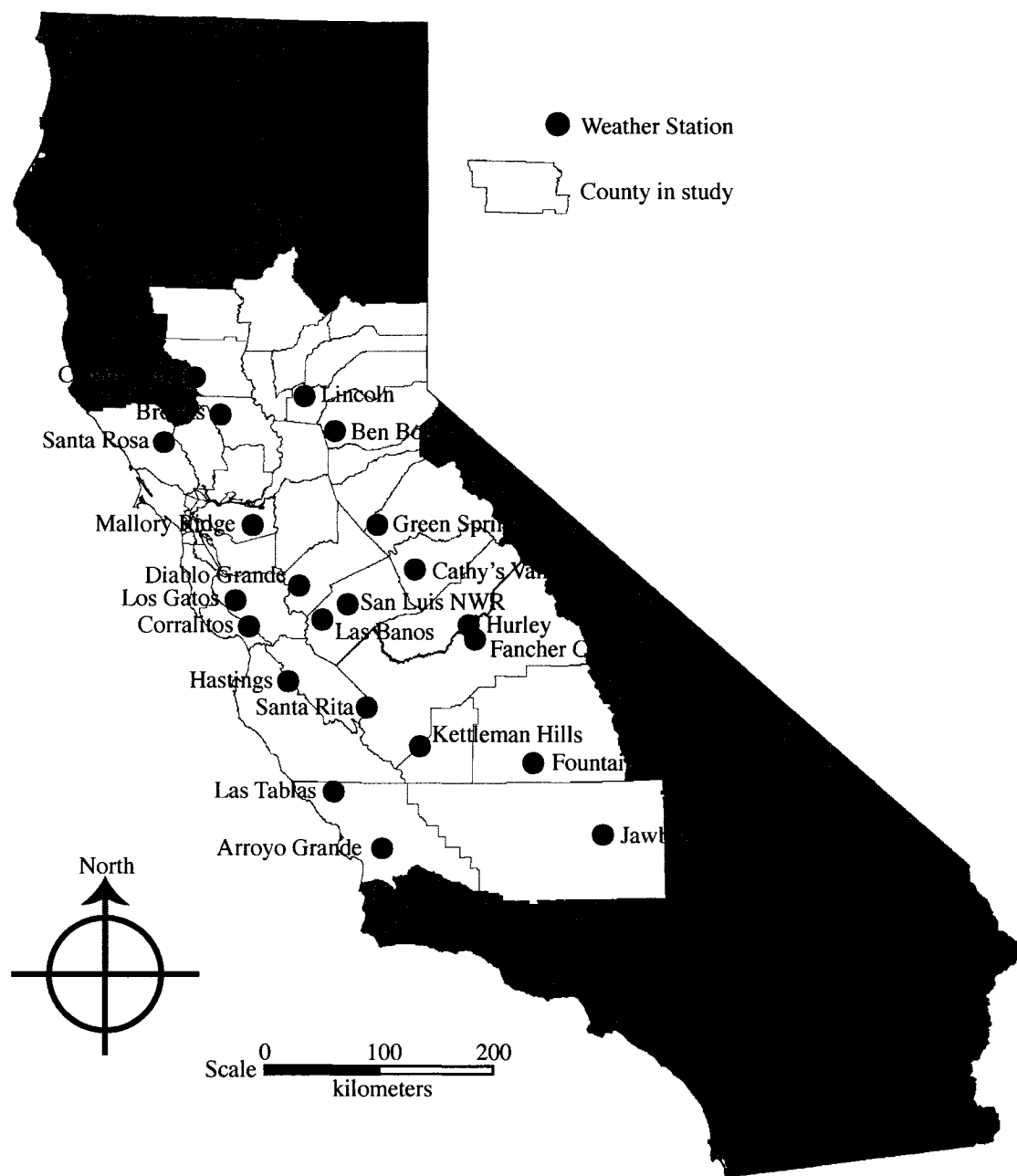


Figure 11: Weather stations for which data was used in analysis.

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produce the maximum gust speed for each of the eight compass directions by day.

Values for each of the meteorological variables of wind direction, velocity, gust direction, and gust velocity at the pesticide application points were estimated using an inverse distance weighting interpolation procedure of all weather stations having data on the date of the pesticide application (equation 9).

$$Y_{rt} = \frac{\sum_{i=1}^n \frac{Y_{it}}{D_{ir}}}{\sum_{i=1}^n \frac{1}{D_{ir}}} \quad (9)$$

Where Y_{rt} is the estimated value of variable Y at residence r at time t , n is the number of stations, Y_{it} is the observed value for the climate variable at station i at time t , and D_{ir} is the Euclidian distance between station i and residence location r . Rather than interpolate to each land use location of pesticide application, interpolation was to the residence residence location r to simplify the interpolation process. The difference between interpolation to the location of the residence or the field did not appear to make a substantive difference between the interpolated values. This is because the distance between the residence and the field were less than 1 km, while the distances between either field or residence to the weather station were 3.2 to 596.8 km (median = 167.5).

Aggregating wind data over the time period between the date of application and the date of sampling was included as an alternative to the wind data on the date of application, but is not presented in the results because it was found not to be significant for any metric tested.

To test predominate wind patterns as a pesticide transport predictor, map overlays of 90° wedge masks were created centered in the direction of

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predominate wind source during the season of pesticide application. These wedges were based on predominate winds as reported by Hayes [14] (Figure 9).

RESULTS

Results

A preliminary analysis of laboratory detection prevalence of pesticides was conducted to find which pesticides met the criteria of having at least 20% and not more than 80% detection prevalence for logistic regression and at least 30% detection prevalence for linear regression analysis. Pesticides meeting the criteria for detection analysis were alachlor, azinphos methyl, dacthal, dicofol, iprodione, phosmet, and trifluralin. Pesticides meeting the criteria for concentration analysis were chlorpyrifos, dacthal, iprodione, phosmet, simazine, and trifluralin. Cyanazine, dimethoate, endosulfan beta, ethafluralin, methidathion, metolachlor, and pendimethalin were excluded from consideration in all analyses because they did not meet this criteria. Laboratory results, including detected prevalence and minimum detection limits (MDL), are presented in Appendix C for each residence and summarized in Table 7.

Laboratory results reported phosmet at much smaller concentrations than the laboratory reported minimum detection limits. The laboratory explanation for this is included as part of Appendix C. Minimum detection limits were found to be significantly negatively correlated with pesticide occurrence in the population ($R^2 = 46.4\%$, parameter estimate (standard error) = -0.4073 (0.1656), $p = 0.0435$). This relationship¹³ between MDL and pesticide occurrence was strengthened to an R^2 of 86.9% when the maximum reported concentration values were included (Figure 12).

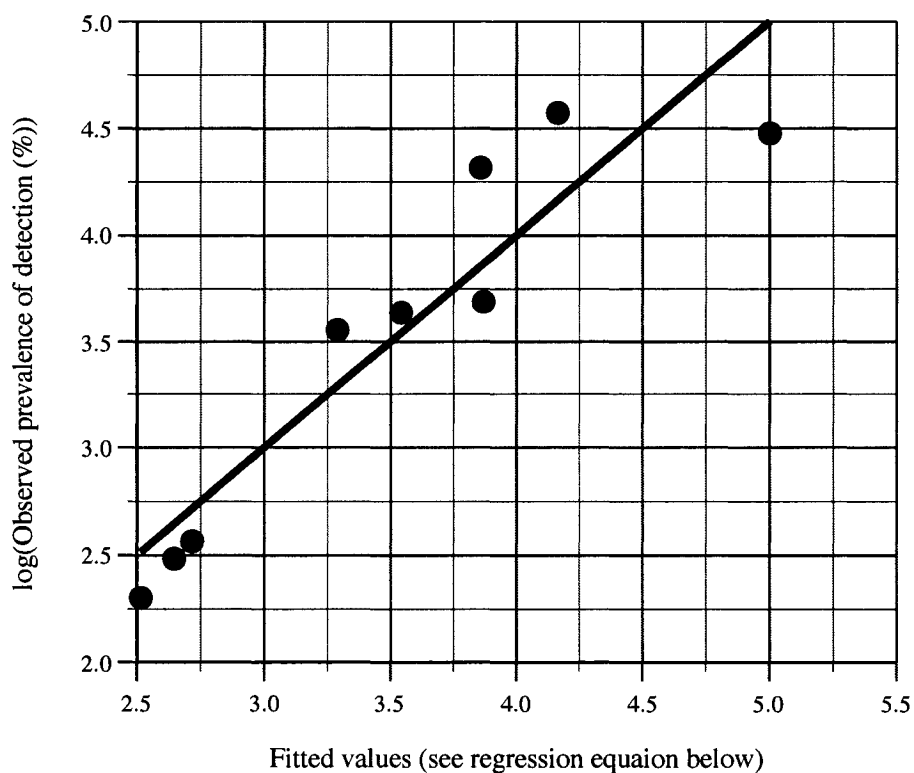
¹³This descriptive model should not be taken as a predictive model of pesticide occurrence in a population for any pesticide, but only as a descriptive model of the influence of laboratory results on pesticide detections. These pesticides do not represent a random sample from a population of pesticides.

Table 7: Summary of laboratory results for pesticides meeting criteria of having at least 10% and not more than 80% detection prevalence for logistic regression and at least 30% detection prevalence for linear regression analysis (marked with *).

Pesticide	MDL (ng/g)	Obs N=60	Prev	Statistics of pesticide detected concentrations (ng/g)					Non-ag N=52	Ag N=8
				Min	Q1	Median	Q3	Max		
Alachlor	10	6	10%	10.26	13.02	14.38	18.29	23.09	8%	25%
Azinphos methyl	50	7	12%	93.7	104.4	112.0	210.3	381.4	10%	25%
Chlorpyrifos*	5	58	97%	5.38	28.44	55.43	123.30	1120.0	96%	100%
Dacthal*	1	24	40%	0.70	1.70	2.45	9.35	41.49	42%	25%
Dicofol	50	8	13%	89.82	107.20	131.40	249.30	469.40	13%	13%
Iprodione*	20	21	35%	19.49	43.78	73.19	110.20	656.20	37%	25%
Phosmet*	25	23	38%	3.78	26.54	96.32	467.40	1948.00	37%	50%
Simazine*	2	53	88%	1.84	16.37	25.46	74.74	3421.00	88%	88%
Trifluralin*	2	45	75%	0.740	1.940	4.420	6.780	113.400	73%	88%

MDL = Minimum detection limit of the pesticide concentration in the laboratory analysis.
Obs = Number of residences with some pesticide concentration detected. Prev = detection prevalence calculated as the number of observations divided by the total population (N=60).
Min = Minimum.
Q1 = First quartile.
Q3 = Third quartile.
Max = Maximum.
Ag = Prevalence in residences reporting a household member employed in the agricultural industry within the 12 months previous to carpet sampling.
Non-ag = Prevalence in residences reporting a household member not employed in the agricultural industry within the 12 months previous to carpet sampling.
Fisher p-value = Fisher's exact test significance level for nonrandom associations between Ag and Non-ag residences.

RESULTS



Regression equation: $\log(\text{prevalence}) = \log(\text{mdl}) + \log(\text{max})$

Parameter	Estimate	Std. Error	p-value*
Intercept	2.620	0.486	0.00169
$\log(\text{mdl})$	-0.503	0.094	0.00175
$\log(\text{max})$	0.335	0.081	0.00609

*Note: This is not a predictive model, only a descriptive model, because pesticides cannot be considered a random population, therefore p-values are not a true test of significance.

Figure 12: Plot of observed detection prevalence against modeled prevalence using the variables maximum detected value (Maximum) and minimum detection limit (MDL). Pesticides plotted are alachlor, azinphos methyl, chlorpyrifos, dacthal, dicofol, iprodione, phosmet, simazine, and trifluralin. $R^2 = 86.1\%$.

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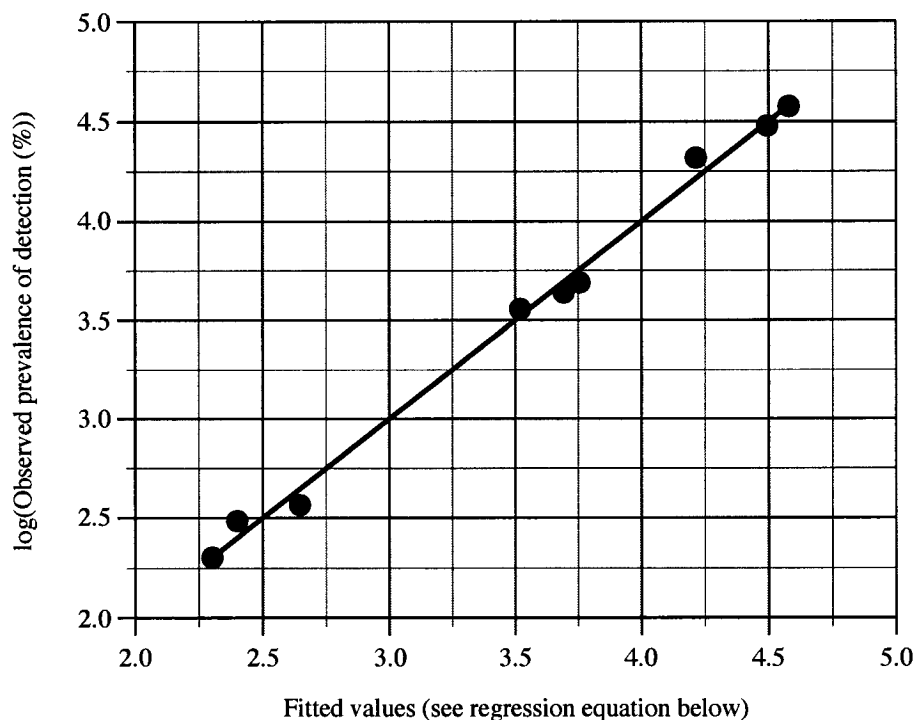
Pesticide use proximate to study residences is summarized in Appendix D. Overall population pesticide occurrence was described as a function of MDL, pounds of pesticide applied within 1250m during the study period, and the number of applications within 1250m during the study period¹⁴ (Figure 13). The descriptive model included an interaction term between pounds applied and number of applications. These variables were able to account for 99.5% of the variability of the occurrence of pesticides investigated in this study.

Questionnaire answers for each residence are presented and summarized in Appendix D. There was no difference found in the prevalence of any pesticides detected in residences reporting a resident employed in the agricultural industry within the 12 months prior to carpet sampling and residences not reporting a resident employed in the agricultural industry within the previous 12 months (Table 8). A Wilcoxon two-sample test of pesticide concentrations and employment in the agricultural industry revealed significant differences for pesticides included in the study (Table 8). Significance was greatest (p-value < 0.0001) for chlorpyrifos, simazine, and trifluralin, which also had the greatest detection prevalences (97%, 88%, and 75% respectively). Based on these results, all residences were treated as a single population in the analyses of pesticide detections, but agricultural industry employment was included as a potential predictor in concentration analyses.

Descriptions of land use and soil types proximate to each residence is presented in Appendix E. Meteorological summaries for each residence are presented in Appendix F.

¹⁴This should not be taken as a predictive model of pesticide occurrence in a population for any pesticide, but only as a descriptive model of the influence of laboratory results on pesticide detections. These pesticides do not represent a random sample from a population of pesticides.

RESULTS



Regression equation: $\log(\text{prevalence}) = \log(\text{mdl}) + \log(\text{lbs}) * \log(\text{apps})$

Parameter	Estimate	Std. Error	p-value*
Intercept	3.263	0.307	0.0004
$\log(\text{MDL})$	-0.323	0.023	0.0001
$\log(\text{Pounds applied})$	-0.059	0.076	0.4832
$\log(\text{Number of applications})$	-0.303	0.088	0.0261
Interaction (Pounds and applications)	0.048	0.005	0.0008

*Note: This is not a predictive model, only a descriptive model, because pesticides cannot be considered a random population, Therefore p-values are not a true test of significance.

Figure 13: Plot of detected pesticide prevalence described by minimum detection limit (MDL) and PUR reported pesticide application (pounds of pesticide applied, number of applications) within 1250 meters of study residences during the study period. Pesticides are alachlor, azinphos methyl, chlorpyrifos, dacthal, dicofol, iprodione, phosmet, simazine, and trifluralin. $R^2 = 99.5\%$.

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Table 8: Fisher's exact test of nonrandom association and Wilcoxon two-sample test of laboratory reported concentrations for each pesticide and employment in the agricultural industry within the 12 months prior to carpet sampling.

Pesticide	Fisher's exact test	Wilcoxon two-sample test
	p-value	p-value
Alachlor	0.2731	0.1101
Azinphos methyl	0.3515	0.2031
Chlorpyrifos	1.000	< 0.0001
Dacthal	0.6656	0.0110
Dicofol	0.2369	0.3365
Iprodione	0.6822	0.0525
Phosmet	0.4752	0.0057
Simazine	0.8060	< 0.0001
Trifluralin	0.2660	< 0.0001

RESULTS

The validity tests (sensitivity, specificity, and overall agreement) of CPUR and LANDUSE metric predictions based on a buffer distance of 500 meters and pesticide applications occurring within one year previous to residence sampling are shown in Table 9. Based on these results, alachlor and dacthal were excluded from further analyses because neither metric predicted any detections of these pesticides within study residences. Azinphos methyl was also excluded from further analyses because the metric predictions of detections did not coincide with any of the seven actual laboratory detections. Dicofol was excluded from the both analyses because only two metric predictions coincided with observed detections, which does not give enough observations for a predictive model. Thus, detection models were limited to iprodione, phosmet, and trifluralin. Concentration models were limited to chlorpyrifos, iprodione, phosmet, simazine, and trifluralin.

Validity results of the remaining pesticides eligible for detection and concentration modeling revealed that the LANDUSE metric increased specificity for iprodione, and phosmet by 4%, 12%, and 62% respectively. Of these three pesticides, only phosmet had a large improvement of overall agreement from 32% to 65%. The LANDUSE metric developed with a 500 meter buffer and limited to applications occurring one year prior to carpet dust sampling increased specificity over the CPUR metric for iprodione, and phosmet. The specificity of simazine was reduced by the LANDUSE metric from 71% to 29%, but overall agreement was reduced by only 3%. The specificity of Trifluralin remained the same at 100%, but the LANDUSE metric reduced overall agreement by 5%.

Predictive models of pesticide detection using these CPUR and LANDUSE metrics (500 meter buffer and limited to applications occurring one year prior to carpet dust sampling) are shown in Table 10. The CPUR met-

Table 9: Validity of CPUR and LANDUSE metric pesticide predictions (Pred) versus observed pesticide at 500m circular buffer and one year previous to sampling. Validity tests are sensitivity (Sens), specificity (Spec), and overall agreement (OA).

Pesticide	CPUR Metric						LANDUSE Metric					
	Pred	Observed		Sens	Spec	OA	Pred	Observed		Sens	Spec	OA
Alachlor	Yes	0	0	0%	100%	90%	Yes	0	0	0%	100%	90%
	No	6	54				No	6	54			
Azinphos methyl	Yes	0	7	0%	87%	77%	Yes	0	7	0%	88%	82%
	No	7	46				No	4	49			
Chlorpyrifos	Yes	40	0	69%	100%	70%	Yes	34	0	59%	100%	% 60
	No	18	2				No	24	2			
Dacthal	Yes	0	0	0%	100%	60%	Yes	0	0	0%	100%	60%
	No	24	36				No	24	36			
Dicofol	Yes	2	5	25%	90%	82%	Yes	2	3	25%	94%	85%
	No	6	47				No	6	49			
Iprodione	Yes	12	15	60%	62%	61%	Yes	9	10	45%	74%	64%
	No	8	24				No	11	29			
Phosmet	Yes	10	28	43%	24%	32%	Yes	7	5	30%	86%	65%
	No	13	9				No	16	32			
Simazine	Yes	28	2	53%	71%	55%	Yes	29	5	55%	29%	52%
	No	25	5				No	24	2			
Trifluralin	Yes	16	0	36%	100%	52%	Yes	13	0	29%	100%	47%
	No	29	15				No	32	15			

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ric was not a significant predictor of any pesticide detection. Neither metric predicted detection of any pesticide with ROC C-Statistics of acceptable discrimination as defined by Hosmer and Lemeshaw [16].

Table 10: CPUR and LANDUSE metric prediction models of pesticide detection.

Prediction of pesticide detection				
Metric	Pesticide	Odds Ratio (95% CI)	p-value	C-Statistic
CPUR	Iprodione	1.12 (0.61-2.06)	0.7115	61.7%
	Phosmet	1.03 (0.99-1.07)	0.1422	66.3%
	Trifluralin	1.97 (*)	0.9937	67.8%
LANDUSE	Iprodione	1.02 (0.77-1.34)	0.8889	61.3%
	Phosmet	1.28 (1.24-1.33)	0.1617	59.7%
	Trifluralin	1.40 (*)	0.9944	64.4%

*Confidence intervals are too large to show.

Prediction of detected pesticide concentrations				
Metric	Pesticide	Estimate (Standard Error)	p-value	R ²
CPUR	Chlorpyrifos	0.1573 (0.1013)	0.126	4.1%
	Iprodione	0.3284 (0.1462)	0.0374	21.9%
	Phosmet	0.5072 (0.1752)	0.0087	28.5%
	Simazine	0.4715 (0.1259)	0.0005	21.6%
	Trifluralin	0.2283 (0.0875)	0.0125	13.7%
LANDUSE	Chlorpyrifos	0.2225 (0.0909)	0.0176	9.7%
	Iprodione	0.3301 (0.1191)	0.0126	29.9%
	Phosmet	0.4616 (0.1624)	0.0097	27.8%
	Simazine	3.165 (0.1225)	0.0006	20.9%
	Trifluralin	0.2239 (0.0816)	0.0088	14.9%

The CPUR metric was a significant predictor of detected pesticide concentrations in residence carpet dust samples for iprodione, phosmet, simazine,

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and trifluralin. The LANDUSE metric was a significant predictor of detected pesticide concentrations in residence carpet dust samples for chlorpyrifos, iprodione, phosmet, simazine, and trifluralin. Comparing R^2 values, the LANDUSE metric improved concentration prediction over the CPUR metric for chlorpyrifos (5.6%), iprodione (8.0%), and trifluralin (1.2%) and the CPUR metric performed better than the LANDUSE metric for phosmet (0.7%) and simazine (0.7%).

Final optimal models of pesticide detection and concentration are shown in Table 11. Optimal models included additional geographic information and predicted pesticide detection better than the CPUR and LANDUSE metrics by themselves (when comparing ROC C-Statistics). Based upon the ROC C-Statistic and model discrimination as defined by Hosmer and Lemeshow [16], optimal models provided acceptable discrimination of iprodione, acceptable discrimination of phosmet when latitude was included as a predictor, and nearly excellent discrimination of trifluralin when latitude was included as a predictor. All predictor variables were significant at the $\alpha = 0.1$ level. Optimal models that included additional geographic information predicted pesticide concentration of residence samples having pesticide detected better than the CPUR or LANDUSE metrics by themselves, as reflected by larger R^2 values. The R^2 value improved greatest for the iprodione optimal model (40.8% and 32.8% greater than the CPUR and LANDUSE metrics' R^2 values respectively), and least for the trifluralin optimal model (7.1% and 5.9% greater than the CPUR and LANDUSE metrics' R^2 values respectively).

Metric parameters for optimal models are shown in Tables 12 and 13. Comparisons of metric variations revealed that the LANDUSE and DRIFT metrics were important factors in 99% of occurrence models and 86% of concentration models. Wind rose buffer was an important factor in 48% of

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Table 11: Model parameters for prediction models of pesticide detection and concentration. Factors used in the calculation of each metric predictor are shown in Tables 12 and 13.

Prediction of pesticide detection

Pesticide	Parameter	Odds Ratio (95% CI)	p-value	C-Statistic
Iprodione	Metric	1.88 (1.16, 3.06)	0.0106	73.8%
Phosmet	Metric	2.08 (1.07, 4.04)	0.0307	70.3%
Trifluralin	Metric	1.07 (0.98, 1.17)	0.1150	70.3%

Prediction of pesticide concentration

Pesticide	Parameter	Estimate (Standard Error)	p-value	R ²
Chlorpyrifos	Metric	0.5767 (0.1615)	0.0007	18.6%
Iprodione	Metric	0.7814 (0.1554)	< 0.0001	58.4%
Phosmet	Metric	0.5319 (0.1199)	0.0002	48.4%
Simazine	Metric	0.7429 (0.1252)	< 0.0001	40.9%
Trifluralin	Metric	0.1510 (0.0359)	0.0001	29.2%

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occurrence models and 47% of concentration models. Buffer distances of 1000 and 1250 meters occurred in 67% of occurrence models and 58% of concentration models. Three years was the better time period for 81% of occurrence models. Concentration models did not show any one time period to be better. However, time periods of one year or less were important factors of 64% of concentration models. Applications matched exactly was the better method of matching for 44% of occurrence models. Applications matched to major class was the better method for 44% of concentration models. Wind in the form of spatial multipliers using wind direction and/or velocity were important factors for 66% of occurrence and concentration models.

Table 12: Parameters used for calculating the metric variables used in the 20 occurrence models with the largest ROC C-statistic values.

		Number of occurrences in the 20 models with highest ROC			$\frac{\sum_{Row}}{\sum_{Group}}$
Group	Variable	Iprodione	Phosmet	Trifluralin	Percent
Metric	CPUR			1	1
	LANDUSE	2	11	7	36
	DRIFT	18	9	12	63
Buffer	Euclidean			14	28
	Cost		20		25
	WindRose	20		6	48
Distance	300				20
	500			1	6
	750		6		8
	1000	13	14		34
	1250	7		19	33
Time	6 months				0
	1 year			6	8
	2 years			9	11
	3 years	20	20	5	81
Match	Exact	9	6		44
	Fallow	8	7	1	20
	Major Class	3	7	18	35
Wind	Direction	9	2	1	20
	Velocity	4	6	6	26
	Direction & Velocity	5		6	20
	Predominate				5

Table 13: Parameters used for calculating the metric variables used in the 20 concentration models with the largest R² values.

		Number of occurrences in 20 models with highest ROC					$\frac{\sum Row}{\sum Group}$
Group	Variable	Chlorpyrifos	Iprodione	Phosmet	Simazine	Trifluralin	Percent*
Metric	CPUR		8				14
	LANDUSE		12	17	20	20	63
	DRIFT	20		3			23
Buffer	Euclidean			3	10	8	21
	Cost		20			12	32
	WindRose	20		17	10		47
Distance	300		2	12	3	2	21
	500		4	3			7
	750	9	1	3			14
	1000	5	1		8		15
	1250	6	13	2	9	18	43
Time	6 months			17	14		31
	1 year	14	16		3		33
	2 years	5	2		3	13	23
	3 years	1	2	3		7	13
Match	Exact	5	4	6	4	3	20
	Fallow	7	4	6	4	3	22
	Major Class	8	4	8	12	14	44
Wind	Direction		6	3	13	3	22
	Velocity	5		7		4	16
	Direction & Velocity	10	3	7	2	9	28
	Predominate	5				2	16

$$*Percent = \frac{\sum Row}{\sum Group}$$

Discussion

This study demonstrates that, compared to metrics used in previous studies, including geographic variables in exposure metrics improved model prediction of pesticides in carpet dust samples of study residences. Nuckols et al. [29] raised the question whether a metric based upon location, acreage, and associated pesticide use of crops in a TRS (the LANDUSE metric in this study) better reflects residential exposure than the total pesticide use in a TRS (the CPUR metric in this study). Results of this study revealed that including land cover maps improved model prediction of pesticide detection and concentration in residential carpet dust. Additionally, the inclusion of additional geographic information also improved these metrics' predictive power.

Dicofol, cyanazine, dimethoate, endosulfan beta, ethafluralin, methidathion, metolachlor, and pendimethalin pesticides were excluded from analyses because they either had no detections in the study residences (for the detection modeling portion of the study), or had fewer than 20% detections (for the concentration modeling portion of the study). This was nearly half of the 16 pesticides primarily used in agriculture analyzed for this study. The pesticide detection prevalences were greater in this study than in a similar study in Iowa. In the Iowa study, Ward et al. [40] found metolachlor to be the pesticide with primary agricultural use the second most often detected in residences and (Table 14). Contrary to Ward's study, metolachlor was not detected in any residence in this study. Detection prevalence of atrazine and pendimethalin were similar to Ward's, but trifluralin occurred much more frequently, with 75% of residences having some trifluralin compared to 15.2% in Ward's study. This difference may indicate some regional dif-

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ference in pesticide use or transport between the central valley of California and midwest areas such as Iowa due to differences in cropping patterns (e.g. California's diverse crops versus the midwest's monoculture) and pesticide use.

Table 14: Iowa detection prevalence from Ward et al. [40] ($n = 112$)

Pesticide	Number of Samples	Detection Prevalence %
Acetoclor	112	8.0
Atrazine	112	8.0
Alachlor	112	6.2
Bentazon	111	8.1
Dicamba	111	28.8
Fluazifop-p-butyl	112	6.2
Metolachlor	112	21.4
Pendimethalin	112	11.6
Trifluralin	112	15.2

Minimum detection limits (MDL) for the pesticides that remained for analysis varied widely and were significant descriptors of pesticide occurrence in the study population. Previous pesticide studies have typically combined different pesticides into a single value of pesticide detection based on some factor common to those pesticides [3, 13, 34, 40]. The influence of MDL described by the model in Figure 12 indicates care should be taken when doing this sort of aggregation.

After adjusting for MDL, prevalence of pesticides for each pesticide could be described using pesticide application information proximate to residences. This descriptive model (Figure 13) reveals a multiplicative interaction with pounds of pesticide applied and number of applications. The amount of pesticide applied is a measure of the total amount available for transport in the environment. The number of applications is a measure of opportunities

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for an application to be transported into a residence. The interaction term indicates that numerous applications of large amounts of pesticide predicts a higher occurrence of pesticide in carpet dust than either numerous applications of small amounts of pesticide or few applications of large amounts of pesticide.

Studies by Curwin et al. [10], Quandt et al. [32], and Simcox et al [37] used distance to nearest field as a proxy for exposure. These previous studies assumed proximity to agricultural fields alone was directly related to residential exposure. Contrary to the data available to these researchers, the land use maps used in this study were not detailed enough to calculate metrics used by these other studies. However, a comparison of pesticide detections in residences and pesticide applications proximate to residences (Appendices C, E, and F) show this assumption to be false and, if adopted, would cause predictive models to misclassify as exposed many residences not exposed to nearby agricultural pesticide applications. PUR data shows that many residences were located near fields that never received an application of pesticide during the study period.

Studies that have used crop acreage as a proxy for pesticide application [40, 30] likely better accounted for the amount of pesticide that might have been used proximate to residences. These studies were conducted in Iowa where the cropping patterns were much more homogeneous than in the central valley of California and pesticide application rates are likely homogeneous across the state, and likely received different patterns of pesticide applications. However, these studies had no way to quantify the number of applications on nearby fields. Based on the interaction term in the descriptive model, this is an important factor that would likely improve metric predictions for individual residences and methods to quantify and include

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this variable in studies where only state-wide data is available should be investigated further.

Pesticide occurrence in residence carpet samples in the central valley of California tended to be more ubiquitous than predicted by the metrics used in the study (Table 9). For example, 24 residences were found to have some concentration of dacthal. However, models based on metrics predicted no residences to have dacthal. Other pesticides followed a similar trend. Possible sources of occurrence not accounted for by the metrics include occupational transport from work into the home, home use by the home owner or professional applicator employed by the home owner, and secondary transport from further distances than used in this study.

Other sources of pesticide occurrence was tested by including questionnaire answers as predictive variables in models, but found questionnaire answers not to be significant predictors of pesticide detections or concentrations. This lack of significance may be due to the small sample size or a need for more specific information regarding home pesticide use. The lack of significance of employment in the agricultural industry was surprising and is contrary to the findings of Nuckols and Riggs [30] and Curwin et al. [10]. One possible explanation of this discrepancy is smaller agricultural worker sample size used in this study compared to the number used in these other studies. Nuckols and Riggs [30] had 111 residences available for analysis with 13 of those residences reporting a resident currently employed in the agricultural industry and Curwin et al. [10] had 25 farm and 25 nonfarm residences for analysis. This study had 60 residences available for analysis with only eight of these reporting employment in the agricultural industry.

A second possible explanation for this discrepancy is the difference of the sampling method used in collecting data for this study compared to

DISCUSSION

the studies by Nuckols and Riggs [30] and Curwin et al.[10] Samples used by Nuckols and Riggs [8] were vacuum cleaner bags used by residents that contained dust collected throughout the home. Because of this sampling regime all carpeted areas in the home were combined into a single residence sample. Curwin et al. collected a dust sample from carpet in each room throughout the home. Curwin et al. reported pesticide concentrations in farm homes had the highest levels in the entranceway, father's change area, and laundry room. The sampling regime used in this study focused on rooms used as play areas of children. The entranceway, father's change area, and laundry room are not likely to be primary play areas by children, thus likely excluding the locations from samples in which Curwin found the highest pesticide levels in farm houses. This take-home pathway of exposure in this study population warrants further investigation with a larger sample size.

As found in Nuckols et al. [29], the LANDUSE metric developed with the 500 meter buffer limited to pesticide applications occurring one year prior to carpet dust sampling generally increased predictive power by the CPUR metric. However, results from Tables 9 and 10 indicate that models using either of these metrics did not predict pesticide detections very well, but did have limited success in predicting pesticide concentration.

Adding additional geographic information and different parameters of metric type, buffer method and distance, and time period prior to sampling improved prediction. The models created using metrics calculated in this study were able to describe pesticide detections and concentrations with varying success:

- Including land cover maps was an important spatial variable to include in models.

DISCUSSION

- Wind rose tended to be a better buffer method compared to the Euclidian circular buffer typically used in previous pesticide exposure studies.
- Larger buffer distances (1000 and 1250 meters) were important model predictors. Findings by Nuckols and Riggs [30] suggested that the 1250 meter buffer could be due to some other pesticide transport mechanism, such as worker take-home transport, that was not found to be a significant predictor in these models because of the limited number of samples.
- Longer time periods produce better occurrence models, but shorter time periods produce better concentration models. However, all optimal models were based on time periods much longer than the reported half-life persistence time periods of these pesticides in the environment.
- The method of matching applications to crop fields does affect the model.

Wind information in the form of the wind rose buffer, and wind direction and/or velocity as a overlay data layer wind pattern as an overlay data layer were all common improvements in models. These models establish that wind is an important factor in pesticide transport from the environment into residences. The importance of wind to pesticide transport in the environment is well established in the literature [25, 38]. Despite the importance of wind as a pesticide transport factor, previous pesticide exposure studies have not accounted for wind as a factor in pesticide transport to residences in their studies. Also, this study used interpolated wind parameters from established regional weather stations and regional predominate wind

DISCUSSION

maps. An improvement for wind data would be wind readings at the actual residence location during pesticide application time periods. This level of spatial detail would better capture specific wind patterns at residence locations.

Soil wind erosion group or percentage organic matter were not found to be significant predictors of pesticide detection or concentration. This is contrary to Nuckols and Riggs [30] who found that the soil factor of wind erosion significantly improved a predictive model of pesticide exposure in Iowa. This could be a result of the Nuckols and Riggs study having 111 study residences, and therefore more statistical power, than this study. Further investigation of the influence of soil factors' influence on pesticide transport in this region is needed using more study residences.

A limitation of this study was the number of samples available and the number of pesticides for which predictive models could be developed. Sixty residences may have lacked the statistical power to find significant influences of soil and questionnaire information. The number of models developed using this limited data set limited inferences about the predictability of these metrics and the improvement geographic variables were able to contribute to these metrics. For example, in the validity test for simazine (Table 9), specificity was greatly affected by metric changes because specificity was calculated as the number of correctly identified negatives (five residences for the CPUR metric and two residences for the LANDUSE metric) divided by the total number of residences without a detection of simazine (seven in both cases). Thus, there was a large relative percentage change for simazine, but overall agreement differed by only 3% because the number of residences without simazine detected were so few. The widely varying detection preva-

DISCUSSION

lence among pesticides also meant that chlorpyrifos and simazine could only be modeled for concentration.

Another limitation of this study was the precision of which pesticide applications were matched to fields in the land use map data set. A TRS can have more than one field reporting the same crop type planted. This is especially true in areas where only a few crop types dominate the local land use, such as vineyards, deciduous fruits and nuts, and field crops. The lack of spatial precision affects the calculated metrics by assigning pesticide applications to the wrong locations. This shift of location assignment could very well result in a pesticide application on a field outside the buffer being recorded as occurring inside the buffer. This may cause an overestimation of the exposure metric when the assigned field is closer to the residence than the actual field treated. More research is needed to better locate the fields on which the pesticide application took place.

Overall, including more geographic information improved models based on these metrics' predictions. Metric performance in terms of ROC C-statistics for detection models and R^2 values for concentration models varied with pesticide. Inclusion of land cover maps improved predictability. The wind rose buffer method tended to be the most common buffer method among the 20 top occurrence and concentration models, indicating the Euclidean circular buffer typically used in pesticide exposure studies may not be the best choice. Larger buffer distances were better predictors than smaller buffer distances. Longer time periods were better for occurrence models, and shorter time periods were better for concentration models. The method of linking the PUR database to land cover maps was not very important, but including wind improved most models. More investigation is needed using a greater number of residence samples.

CONCLUSIONS

Conclusions

This research met its goal of validating the ability of previously used metrics to predict pesticide occurrence in residential carpet dust. Results from this study indicate that pesticide use information proximate to residences additional, location specific geographic information, especially land cover and wind information, can improve predictions of pesticide occurrence. A caveat of this study is that results could be heavily influenced by the assumptions made to apply spatially coarse data sets to individual residences.

Bibliography

- [1] Exttoxnet, extension toxicology network, pesticide information project of cooperative extension offices of cornell university, oregon state university, the university of idaho, and the university of california at davis and the institute for environmental toxicology, michigan state university, October 2006.
- [2] ASTM. Standard practice for collection of dust from carpeted floors for chemical analysis. Standard practice d 5438-93, American Society of Testing and Materials, Philadelphia, PA, 1993.
- [3] EM Bell, I Hertz-Picciotto, and JJ Beaumont. A case-control study of pesticides and fetal death due to congenital anomalies. *Epidemiology*, 12(2):148–156, March 2001.
- [4] JK Berry. *Beyond Mapping: Concepts, Algorithms, and Issues in GIS*. GIS World Books, Fort Collins, CO, 1993.
- [5] LM Bugayevskiy and JP Snyder. *Map Projections: A Reference Manual*. Taylor & Francis, London, 1995.
- [6] California Department of Pesticide Regulation, Sacramento, California. *Pesticide Use Reporting: An Overview of California's Unique Full Reporting System*, 2000.

-
- [7] JS Colt, RB Gunier, C Metayer, M Nishioka, JR Nuckols, P Reynolds, P Buffler, and MH Ward. Comparison of pesticides and other compounds in carpet dust samples collected from used vacuum cleaner bags and from a high-volume surface sampler. *Under review*, 2007.
- [8] JS Colt, JH Lubin, D Camann, S Davis, JR Cerhan, RK Severson, W Cozen, and P Hartge. Comparison of pesticide levels in carpet dust and self-reported pest treatment practices in four u.s. sites. *Journal of Exposure Analysis and Environmental Epidemiology*, 14:74–83, 2004.
- [9] JS Colt, SH Zahm, DE Camann, and P Hartge. Comparison of pesticides and other compounds in carpet dust samples collected from used vacuum cleaner bags and from a high-volume surface sampler. *Environmental Health Perspectives*, 106:721–724, 1998.
- [10] BD Curwin, MJ Hein, WT Sanderson, MG Nishioka, SJ Reynolds, EM Ward, and MC Alavanja. Pesticide contamination inside farm and nonfarm homes. *Journal of Occupational and Environmental Hygiene*, 2:357–367, July 2005.
- [11] SM Dearwent, RR Jacobs, and JB Halbert. Locational uncertainty in georeferencing public health datasets. *Journal of Exposure Analysis and Environmental Epidemiology*, 11(4):329–334, Jul-Aug 2001.
- [12] MN DeMers. *Fundamentals of Geographic Information Systems*. John Wiley & Sons, Inc., New York, 2nd edition, 2000.
- [13] RB Gunier, ME Harnly, P Reynolds, A Hertz, and J Von Behren. Agricultural pesticide use in california: Pesticide prioritization, use densi-

- ties, and population distributions for a childhood cancer study. *Environmental Health Perspectives*, 109(10):1071–1078, October 2001.
- [14] RG; Myrup LO; Cahill TA Hayes, TP; Kinney. *California Surface Wind Climatology*. State of California Air Resources Board, Aerometric Data Division, Sacramento, California, 1984.
- [15] AJ Hewitt. Drift filtration by natural and artificial collectors: A literature review. October 2001.
- [16] DW Hosmer and S Lemeshow. *Applied Logistic Regression*. Wiley-Interscience, second edition, 2000.
- [17] D Johnson. A summary of aerial application studies. Stewart Agricultural Research Services, P.O. Box 509, Macon, Missouri 63552, 1997.
- [18] D Johnson. A summary of airblast application studies. Stewart Agricultural Research Services, Inc., P.O. Box 509, Macon, Missouri 63552, 1997.
- [19] D Johnson. A summary of chemigation application studies. Stewart Agricultural Research Services, P.O. Box 509, Macon, Missouri 63552, 1997.
- [20] D Johnson. A summary of ground application studies. Stewart Agricultural Research Services, P.O. Box 509, Macon, Missouri 63552, 1997.
- [21] HA Karimi, M Durcik, and W Rasdorf. Evaluation of uncertainties associated with geocoding techniques. *COMPUTER-AIDED CIVIL AND INFRASTRUCTURE ENGINEERING*, 19(3):170–185, 2004.

- [22] DG Kleinbaum, LL Kupper, KE Muller, and A Nizam. *Applied Regression Analysis and Multivariable Methods*. Duxbury Press, Pacific Grove, CA, 3rd edition, 1998.
- [23] PA Longley, MF Goodchild, DJ Maguire, and DW Rhind. *Geographic Information Systems and Science*. John Wiley & Sons, Ltd., West Sussex, England, 2001.
- [24] JH Lubin, JS Colt, D Camann, S Davis, JR Cerhan, RK Severson, L Bernstein, and P Hartge. Epidemiologic evaluation of measurement data in the presence of detection limits. *Environmental Health Perspectives*, 112(17):1691–1696, December 2004.
- [25] CM Menzie. Fate of pesticides in the environment. *Annual Review of Entomology*, 17:199–222, 1972.
- [26] RS Miller, JR Nuckols, RB Gunier, A Hertz, and P Reynolds. Assessing the spatial accuracy of the california pesticide use reporting database for use in exposure assessment studies. In *Linking Exposures and Health: Innovations and Interactions, Proceedings of the 12th Conference of the ISEA and the 14th Conference of the ISEE, 11-15 August 2002, Vancouver, BC.*, number 39.16. Boston:JSI Research and Training Institute, 2002.
- [27] RS Miller, JR Nuckols, RB Gunier, A Hertz, MH Ward, and P Reynolds. Linking the california pesticide use reporting database with spatial land use data for exposure assessment. In *Linking Exposures and Health: Innovations and Interactions. Proceedings of the 12th Conference of the ISEA and the 14th Conference of the ISEE, 11-*

- 15 August 2002, Vancouver, BC., number 39.15. Boston:JSI Research and Training Institute, 2002.
- [28] JR Nuckols. *Final Progress Report, 1 RO3 CA 83071-01, Agricultural Chemical Exposures and Childhood Cancer*. Environmental Health Advanced Systems Laboratory, Colorado State University, Fort Collins, CO 80523, March 8 2002.
- [29] JR Nuckols, RB Gunier, P Riggs, R Miller, P Reynolds, and MH Ward. Linkage of the california pesticide use reporting database with spatial land use data for exposure assessment. *Environmental Health Perspectives*, Online, 2007.
- [30] JR Nuckols and PD Riggs. Iowa paper. *In review*, 2007.
- [31] JR Nuckols, MH Ward, and L Jarup. Using geographic information systems for exposure assessment in environmental epidemiology studies. *Environmental Health Perspectives*, 112(9):1007 – 1015, June 2004.
- [32] SA Quandt, TA Arcury, P Rao, BM Snively, DE Camann, AM Doran, AY Yau, JA Hoppin, and DS Jackson. Agricultural and residential pesticides in wipe samples from farmworker family residents in north carolina and virginia. *Environmental Health Perspectives*, 112(3):382–387, March 2004.
- [33] R. R: *A Language and Environment for Statistical Computing*. R Development Core Team, R Foundation for Statistical Computing, Vienna, Austria, 2006.
- [34] P Reynolds, J Von Behren, RB Gunier, DE Goldberg, A Hertz, and ME Harnly. Childhood cancer and agricultural pesticide use:

- An ecologic study in california. *Environmental Health Perspectives*, 110(3):319–324, March 2002.
- [35] PD Riggs, JR Nuckols, and MH Ward. Temporal changes in agricultural land and pesticide use in california: Implications for exposure assessment in an epidemiological study. In *14th Conference of the International Society of Exposure Analysis, Philadelphia, Pennsylvania*. UMDNJ-School of Public Health & Columbia-Mailman School of Public Health, 2004.
- [36] RP Rull and B Ritz. Historical pesticide exposure in california using pesticide use reports and land-use surveys: An assessment of misclassification error and bias. *Environmental Health Perspectives*, 111(13):1582–1589, October 2003.
- [37] NJ Simcox, RA Fenske, SA Wolz, I-C Lee, and DA Kalman. Pesticides in household dust and soil: Exposure pathways for children of agricultural families. *Environmental Health Perspectives*, 103(12):1126–1134, December 1995.
- [38] ME Teske, SL Bird, DM Esterly, SL Ray, and SG Perry. *A User's Guide for AgDRIFTTM 2.03: A Tiered Approach for the Assessment of Spray Drift of Pesticides*. Spray Drift Task Force c/o Stewart Agricultural Research Services, Inc., Macon, Missouri, August 2001.
- [39] United States Department of Agriculture, Natural Resources Conservation Service, USDA NRCS National Soil Survey Center in Lincoln, Nebraska. *SSURGO Data Packaging and Use*, October 2005.

- [40] MH Ward, JH Lubin, J Giglierano, JS Colt, C Wolter, N Bekiroglu, DE Camann, P Hartge, and JR Nuckols. Proximity to crops and residential exposure to agricultural herbicides in iowa. *Environmental Health Perspectives*, 2006.
- [41] MH Ward, JR Nuckols, J Giglierano, MR Bonner, C Wolter, M Airola, W Mix, JS Colt, and P Hartge. Positional accuracy of two methods of geocoding for rural and community addresses. *Epidemiology*, 16(4):542–547, July 2005.
- [42] MH Ward, JR Nuckols, SJ Weigel, SK Maxwell, KP Cantor, and RS Miller. Identifying populations, potentially exposed to agricultural pesticides using remote sensing and a geographic information system. *Environmental Health Perspectives*, 108(1):5–12, January 2000.
- [43] L Wilhoit, D Supkoff, J Steggall, A Braun, C Goodmand, B Hobza, B Todd, and M Lee. *An Analysis of Pesticide Use in California, 1991 - 1995*. State of California, Environmental Protection Agency, Department of Pesticide Regulation, Environmental Monitoring and Pest Management Branch, Pest Management Analysis and Planning Program, Sacramento, California 95814-5624, December 1998.

Appendix A

UCB-CLS interview questionnaire sample

DUST SAMPLE DATA FORM

ID NUMBER: [][][][][][]

SAMPLE COLLECTION

INTERVIEWER ID: [][][][]

DATE: [][]-[][]-[][]

REFERENCE DATE: _____

ROOM				
1. CURRENT ROOM NAME/FLOOR NUMBER				
2. ROOM USED AS A THROUGHWAY		Y N		
3. Since (REFERENCE DATE) were there changes to this room? (SPECIFY IN COMMENTS)		Y N		
CARPETS AND RUGS IN ROOM				
WALL-TO-WALL CARPET	4. How long has this carpet been in place?	YEARS MOS IF DK: Was it there when you moved in? NO YES → When did you move in? MO YR		
		RUG 1	RUG 2	RUG 3
AREA RUGS	5. How long has this rug been in this home?	YEARS MOS	YEARS MOS	YEARS MOS
	6. How long have you owned this rug?	YEARS MOS	YEARS MOS	YEARS MOS
	7. Did someone else own this rug before you?	Y N	Y N	Y N
	8. ORIENTAL RUG?	Y N	Y N	Y N
CARPET AND RUGS SAMPLED		SAMPLE AREA 1	SAMPLE AREA 2	SAMPLE AREA 3
9. AREA SAMPLED: (CIRCLE W-W OR RUG; IF RUG, RECORD RUG #)		W-W RUG	W-W RUG	W-W RUG
10. TYPE OF CARPET: A=FLAT OR LEVEL LOOP AND MEDIUM B=THICK (PLUSH, MULTILEVEL, SHAG) O=OTHER (SPECIFY) _____				
11. SIZE OF SAMPLED AREA (LENGTH X WIDTH IN INCHES)		X 	X 	X
12. DISTANCE TO NEAREST DOORS TO OUTSIDE (PACES)		 PACES	 PACES	 PACES
COMMENTS: _____ _____				

Last revised: 3/10/04

Date: _____

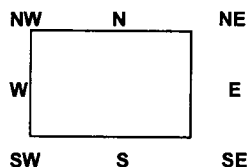
Interviewer ID #: _____

Child ID: _____
Direction: _____
Blank: ☐ Yes ☐ No

WINDOWSILL DUST SAMPLE DATA FORM

WINDOWSILL DUST COLLECTION	WINDOW 1	WINDOW 2	WINDOW 3
1. Name of room window is located			
2. Is room used as a throughway or high activity area?	Y N	Y N	Y N
3. Has anything been applied to the windowsill in the past 12 months to control for insects?	Y N	Y N	Y N
4. How long has it been since you cleaned the windowsill?	Weeks Months	Weeks Months	Weeks Months
5. In the last week, has the window been opened? (IF NO, go to Q7)	Y N	Y N	Y N
6. In the last week, was it open at night or during the day?	DAY NIGHT	DAY NIGHT	DAY NIGHT
7. When was this room last vacuumed or swept?	Last Days: 1, 2, 3, 4, 5, 6 Last Weeks: 1, 2, 3, 4, more	Last Days: 1, 2, 3, 4, 5, 6 Last Weeks: 1, 2, 3, 4, more	Last Days: 1, 2, 3, 4, 5, 6 Last Weeks: 1, 2, 3, 4, more
8. SIZE OF SAMPLED AREA (LENGTH X WIDTH IN INCHES)	X 	X 	X

9. Show approximate location of front door with ☐, and show approx location of window with "x1, x2, x3"



- ☐ No eligible windows
- ☐ Objects on sill(s) (*Describe in comments*)
- ☐ R refused access to some rooms (*Describe in comments*)
- ☐ Starting direction (if different from label)

N S E W

Child ID #: _____
Child DOB: _____
Child Age: _____

____ of ____

CHILDHOOD LEUKEMIA STUDY HOUSEHOLD INVENTORY SHEET

INSTRUCTIONS: COMPLETE ONE FORM FOR EACH PRODUCT WITH AN EPA REGISTRATION NUMBER. EXCLUDE CLEANING PRODUCTS AND AIR FRESHENERS.	
1. Enter the complete name of the pesticide product	2. RECORD EPA REGISTRATION NUMBER: _____
3. Where is the product stored? INTERVIEWER: CHECK ALL THAT APPLY DO NOT READ CATEGORIES	☐ Kitchen ☐ Bathroom ☐ Closets ☐ Utility room (Washer/Dryer Area) ☐ Basement ☐ Detached shed ☐ Garage ☐ Barn ☐ Vehicle ☐ Other (Specify: _____)
4. How is the product applied? INTERVIEWER: CHECK ALL THAT APPLY DO NOT READ CATEGORIES	☐ Ready-to-use spray ☐ Compressed air sprayer ☐ Bomb or room fogger ☐ Hose-end sprayer ☐ Applicator with a handle ☐ Hand-held applicator ☐ Dust, shake, blow ☐ Pour or spread granules ☐ Direct pour ☐ Slow release product ☐ Fly strip ☐ Bait-box ☐ Shampoo, dip or apply ☐ Flea or tick collar ☐ Other (Specify: _____)
5. Why was the product used? USE SHOWCARD B INTERVIEWER: CHECK ALL THAT APPLY	☐ Ants or cockroaches ☐ Flies or mosquitoes ☐ Bees, wasps, or hornets ☐ Termites or carpenter ants ☐ Rats, mice, gophers, or moles ☐ Slugs or snails ☐ Fleas or ticks ☐ Weeds ☐ Indoor plant/tree diseases ☐ Outdoor plant/ tree disease ☐ Other: _____ ☐ Never used GO TO NEXT PRODUCT DO NOT ASK REMAINING QUESTIONS 999 ☐ DK
6. When was the product last used? INTERVIEWER: READ CHOICES & CHECK ONE	☐ Within the last week ☐ Within the last month ☐ Within the last 6 months ☐ Within the last year ☐ More than one year ☐ Never used ☐ DK → GO TO NEXT PRODUCT → SKIP TO 10a → STOP FORM HERE!
7. How often has the product been used in the past 12 months? INTERVIEWER: CHECK ONE	☐ 5 or more times ☐ Less than 5 times ☐ Never used ☐ DK → SKIP TO 10a
8. Where was the product used in the past 12 months? INTERVIEWER: USE CARD C AND CHECK ALL THAT APPLY	☐ Kitchen ☐ Bathroom ☐ Family room, living room, or den ☐ Dining room ☐ Bedroom or nursery ☐ Other inside areas ☐ Detached structures ☐ Lawn And Garden Areas ☐ Other outside areas (not enclosed) ☐ Foundation/ soil underlying home 999 ☐ DK
9. Who administered/used the product in the past 12 months? INTERVIEWER: CHECK ALL THAT APPLY	☐ Biological mother ☐ Biological father ☐ [CHILD] ☐ DK

Household Inventory Sheet continued: _____

	⁷ ☐ Other: _____
--	--

10a. During the period between 1 year before [CHILD'S] birth and his/her 3rd birthday, was this product used in or around your home?

- ¹ ☐ Yes
² ☐ No → STOP FORM HERE
⁹⁹⁹ ☐ DK → STOP FORM HERE

10b. Who in the house used this product? How about you?	10c. When was the product used? Was it used in, USE CALENDAR AND CODE ALL THAT APPLY																																																								
	☐ 3 months before pregnancy ☐ 1st trimester ☐ 2nd trimester ☐ 3rd trimester ☐ from birth to age 1 ☐ from age 1 to age 2 ☐ from age 2 to age 3 ☐ DK																																																								
	<table border="1"><thead><tr><th></th><th colspan="4">Trimesters</th><th colspan="3">Ages</th></tr><tr><th></th><th>3 mo.</th><th>1st trm</th><th>2nd trm</th><th>3rd trm</th><th>0-1</th><th>1-2</th><th>2-3</th></tr></thead><tbody><tr><td>¹ ☐ Biological mother</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>7</td><td>8</td></tr><tr><td>² ☐ Biological father</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>7</td><td>8</td></tr><tr><td>³ ☐ [CHILD]</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>7</td><td>8</td></tr><tr><td>⁷ ☐ Other: _____</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>7</td><td>8</td></tr><tr><td>⁹⁹⁹ ☐ DK</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>7</td><td>8</td></tr></tbody></table>		Trimesters				Ages				3 mo.	1 st trm	2 nd trm	3 rd trm	0-1	1-2	2-3	¹ ☐ Biological mother	1	2	3	4	5	7	8	² ☐ Biological father	1	2	3	4	5	7	8	³ ☐ [CHILD]	1	2	3	4	5	7	8	⁷ ☐ Other: _____	1	2	3	4	5	7	8	⁹⁹⁹ ☐ DK	1	2	3	4	5	7	8
	Trimesters				Ages																																																				
	3 mo.	1 st trm	2 nd trm	3 rd trm	0-1	1-2	2-3																																																		
¹ ☐ Biological mother	1	2	3	4	5	7	8																																																		
² ☐ Biological father	1	2	3	4	5	7	8																																																		
³ ☐ [CHILD]	1	2	3	4	5	7	8																																																		
⁷ ☐ Other: _____	1	2	3	4	5	7	8																																																		
⁹⁹⁹ ☐ DK	1	2	3	4	5	7	8																																																		

- ☐ 1 = Kitchen
☐ 2 = Bathroom
☐ 3 = Family Room, Living Room Or Den
☐ 4 = Dining Room
☐ 5 = Bedroom Or Nursery
☐ 6 = Other Inside Areas
 (Specify _____)
- ☐ 7 = Detached Structures
☐ 8 = Lawn And Garden Areas
☐ 9 = Other Outside Areas (Not Enclosed)
 (Specify _____)
☐ 10 = Foundation/Soil Underlying Home
☐ 999 = DK

5. Other than the products we already found, have you or anyone else in your home used indoor foggers or

13. Not including home gardens, how far do you live from a field where crops are grown?

☐ 1 = Less than 1/4 mile
☐ 2 = 1/4 to 1 mile
☐ 3 = More than 1 mile
☐ 999 = DK

14. In what year was this dwelling constructed?

☐ 1 = 1990 to present	☐ 6 = 1950 to 1959
☐ 2 = 1985 to 1989	☐ 7 = 1940 to 1949
☐ 3 = 1980 to 1984	☐ 8 = 1939 or earlier
☐ 4 = 1970 to 1979	☐ 999 = DK
☐ 5 = 1960 to 1969	

15. Which of the following best describes this residence?

☐ 1 = Single family residence
☐ 2 = Duplex / Townhouse
☐ 3 = Apartment / Condominium
☐ 4 = Mobile Home
☐ 5 = Other (specify _____)
☐ 999 = DK

16. Does this home have an attached garage? (An attached garage has a door connecting directly to the house.)

☐ 1 = Yes → GO TO Q 16a
☐ 2 = No → GO TO Q 17

- 16.a. Has there been a car, boat, or motorcycle parked in the attached garage during the past month?

☐ 1 = Yes → GO TO Q 16b
☐ 2 = No → GO TO Q 17

- 16.b. How often was the car, boat, or motorcycle parked in the attached garage during the past month?

☐ 1 = Every day.
☐ 2 = More than 2 weeks of the month
☐ 3 = Less than 2 weeks of the month
☐ 999 = DK

I just have one more question.

17. What was the total number of cigarettes, cigars, and pipes smoked in this house on a typical day during the past month?

(RECORD ONE NUMBER ONLY)

☐ 999 = DK

18. Do you have any comments or additional information you would like to tell me?

GO TO THE DUST COLLECTION EXPLANATION

Appendix B

APS-F interview questionnaire sample

EXPOSURE PILOT STUDY QUESTIONNAIRE

I would like to ask you about pesticides that you or someone in your home may have used in the past 12 months. Please give as much information as you can about each question.

PART 1
PRODUCT USE QUESTIONNAIRE

1. In the past 12 months, did you have a pet that was treated for fleas or ticks using shampoos, dips, soaps, collars, sprays, dusts, powders, or skin applications?

q 1= Y → GO TO TABLE BELOW
q 2= N → GO TO Q2
q 8= DK → GO TO Q2

PRODUCT a). What were the product names and types of products?		FREQUENCY b). In the past 12 months, how often was the product used?	
Product Name	Product Type	>=5	<5

2. In the past 12 months, have you or anyone else in your home used ant, fly, or cockroach control products in or around the house?

q 1= Y → GO TO TABLE BELOW
q 2= N → GO TO Q 3
q 8= DK → GO TO Q 3

PRODUCT a). What were the product names and types of products?		INSECT b). Insect treated	FREQUENCY C). In the past 12 months, how often was the product used?	
Product Name	Product Type		>5	<5

2d. Where did you use these products in the last 12 months?

- ☐ 1 = Kitchen
☐ 2 = Bathroom
☐ 3 = Family room, living room or den
☐ 4 = Dining room
☐ 5 = Bedroom or nursery
- ☐ 7 = Detached structures
☐ 8 = Lawn and garden areas
☐ 9 = Other outside areas (not enclosed)
(specify _____)
☐ 10 = Foundation/soil underlying home

- ☐ 6 = Other inside areas
(specify _____)
- ☐ 99 = DK

3. In the past 12 months, have you or anyone else in your home used bee, wasp, or hornet control products in or around the house?

q 1= Y → GO TO TABLE BELOW
q 2= N → GO TO Q 4
q 8= DK → GO TO Q 4

PRODUCT a). What were the product names and types of products?		INSECT b). Insect treated	FREQUENCY C). In the past 12 months, how often was the product used?	
Product Name	Product Type		>=5	<5

3d. Where did you use these products in the last 12 months?

- ☐ 1 = Kitchen
☐ 2 = Bathroom
☐ 3 = Family room, living room or den
☐ 4 = Dining room
☐ 5 = Bedroom or nursery
☐ 6 = Other inside areas
(specify _____)
- ☐ 7 = Detached structures
☐ 8 = Lawn and garden areas
☐ 9 = Other outside areas (not enclosed)
(specify _____)
☐ 10 = Foundation/soil underlying home
☐ 99 = DK

4. Did you or anyone in your home treat any other indoor insects or other types of pests? Do not include products applied outside on your lawn, garden, or trees.

q 1= Y →GO TO TABLE BELOW
q 2= N → GO TO Q5
q 8= DK → GO TO Q5

PRODUCT		INSECT	FREQUENCY	
a). What were the product names and types of products?		b). Insect/Pest treated	c). How often in the last 12 months?	
Product Name	Product Type		≥5	<5

4d. Where did you use these products in the last 12 months?

- ☐ 1 = Kitchen
☐ 2 = Bathroom
☐ 3 = Family room, living room or den
☐ 4 = Dining room
☐ 5 = Bedroom or nursery
☐ 6 = Other inside areas
(specify _____)
- ☐ 7 = Detached structures
☐ 8 = Lawn and garden areas
☐ 9 = Other outside areas (not enclosed)
(specify _____)
☐ 10 = Foundation/soil underlying home
☐ 99 = DK

5. In the past 12 months, has a professional pest control person or exterminator applied products inside this dwelling?

q 1= Y→GO TO TABLE BELOW
q 2= N → GO TO Q6
q 8= DK → GO TO Q6

INSECT	FREQUENCY	
a. Insect/Pest treated	b). How often in the last 12 months?	
	≥5	<5

5c. Where were the pesticides applied in the last 12 months?

- ☐ 1 = Kitchen
☐ 2 = Bathroom
☐ 3 = Family room, living room or den
☐ 4 = Dining room
☐ 5 = Bedroom or nursery
☐ 6 = Other inside areas
(specify _____)
☐ 99 = DK

6. In the past 12 months, has a professional pest control person or exterminator applied products on the exterior or foundation of this dwelling? Please do not include pesticides applied to your yard.

q 1= Y→ GO TO TABLE BELOW
q 2= N → GO TO Q7
q 8= DK → GO TO Q7

INSECT	FREQUENCY	
a). Insect/Pest treated	b). How often in the last 12 months?	
	≥5	<5

7. In the past 12 months, has a professional lawn or landscape service treated the lawn or yard outside this dwelling with products to control weeds, insects or plant diseases?

q 1= Y→ GO TO TABLE BELOW
q 2= N → GO TO Q8
q 8= DK → GO TO Q8

PRODUCT		FREQUENCY	
a). Where was the product used (lawn, garden trees or other outdoor plants) and what was treated (weeds, insects, plant diseases)?		b). How often during this time period?	
Location	What treated	≥5	<5

8. In the past 12 months, have you or anyone else in your home treated the lawn, garden, trees or other outdoor plants with products to control weeds, insects, grubs, rats or plant diseases?

q 1= Y → GO TO TABLE BELOW
q 2= N → TO Q9
q 8= DK → GO TO Q9

PRODUCT		FREQUENCY	
a). Where was the product used (lawn, garden trees or other outdoor plants) and what was treated (weeds, insects, plant diseases)?		b). How often during this time period?	
Location	What treated	≥5	<5

PART II
Occupational/Incidental Exposures

9. In the past 12 months, has anyone living in this home, including yourself, worked and has been paid in one of the following jobs?

- ☐ D-1 = FARMER/ FARM OR RANCH WORKER
☐ D-2 = GARDENER/ GROUNDSKEEPER /LANDSCAPER/ NURSERY WORKER
☐ D-3 = PACKER – AGRICULTURAL
☐ D-4 = PESTICIDE HANDLING, PRODUCTION, FORMULATION, OR MIXING
☐ D-5 = NO

10. How many children under the age of 18 currently live in this home?

q 0= none → TO Q11
q 1= 1-2
q 2= 3-5
q 3= 6 or more

10a. Do/does the [CHILDREN, CHILD] currently living at home play or work in the agricultural fields near your home?

q 1= Yes
q 2= No
q 8= DK

11. Not including home gardens, how far do you live from a field where commercial crops are grown?

q 1= Less than _ mile
q 2= _ to 1 mile
q 3= More than 1 mile
q 3= Best Estimate: _____
q 8= DK

12. Do you have cats or dogs?

q 1= Yes, cats only
q 2= Yes, dogs only
q 3= Yes, both
q 4= No → TO Q13

12a. How many [CATS AND DOGS] do you have [TOTAL NUMBER OF CATS AND DOGS]?

q 1= 1
q 2= 2 - 3
q 3= more than 4

12b. Do any of your/does your [CAT(S) OR DOG(S)] spend more than 1 hour a day outside?

q 1= Yes
q 2= No
q 9 = DK

12c. Do any of your/does your [CATS OR DOGS] go outside without a leash?

q 1= Yes
q 2= No
q 9 = DK

13. In what year was this dwelling constructed?

q 1= 1990 to present
q 2= 1985 to 1989
q 3= 1980 to 1984
q 4= 1970 to 1979
q 5= 1960 to 1969
q 6= 1950 to 1959
q 7= 1940 to 1949
q 8= 1939 to earlier
q 8= DK

14. How do you usually cool your home (CHECK ALL THAT APPLY)?

- q 1= Open windows → GO TO Q15
q 2= Central Air Conditioner
q 3= Window Air Conditioner(s), How Many? _____
q 4= Window Fan (s), How Many? _____
q 5= Floor Fan (s), How Many? _____
q 6= Swamp Cooler
q 7= Ceiling Fans, How Many? _____
q 9= DK → GO TO Q16

14b. When you use your air conditioner(s), fan(s) or swamp cooler, do you also keep some windows in your house open?

- q 1= Yes
q 2= No

15. What was the total number of cigarettes, cigars and pipes smoked in this house on a typical day during the past month?

DK

(RECORD NUMBER)

16. In the last twelve months, did all family members routinely take off their shoes when entering the home?

- q 1= Yes
q 2= No
q 9= DK

CARPET DUST SAMPLE DATA FORM

For Continuation Forms only:

ID NUMBER: _____

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ROOM No. _____			
1. ROOM NAME			
2. ROOM USED AS A THROUGHWAY		Y N	
CARPETS AND RUGS IN ROOM			
WALL-TO-WALL CARPET	3. How long has this carpet been in place?	☐ YEARS ☐ MOS IF DK: Was it there when you moved in? ☐ NO ☐ YES → When did you move in? ☐ MOS ☐ YR	
	4. How long has it been since this carpet was steam cleaned or shampooed?	☐ MOS ☐ WEEKS ☐ DAYS IF DK: Has the carpet been cleaned since you moved in? ☐ NO ☐ YES	
AREA CARPET OR RUGS		RUG 1	RUG 2
	5. How long has this carpet/rug been in this home?	☐ YEARS ☐ MOS	☐ YEARS ☐ MOS
	6. How long have you owned this/these carpet/rug(s)?	☐ YEARS ☐ MOS	☐ YEARS ☐ MOS
	7. Did someone else own this carpets/rug before you?	Y N	Y N
	8. How long has it been since this rug was steam cleaned or shampooed?	☐ MOS ☐ WEEKS ☐ DAYS	☐ MOS ☐ WEEKS ☐ DAYS
9. ORIENTAL RUG?	Y N	Y N	Y N
CARPET AND RUGS SAMPLED			
10. AREA SAMPLED: (CIRCLE W-W OR RUG; IF RUG, RECORD RUG #)	W-W RUG ☐	W-W RUG ☐	W-W RUG ☐
11. TYPE OF CARPET: A=FLAT OR LEVEL LOOP AND MEDIUM B=THICK (PLUSH, MULTILEVEL, SHAG) O=OTHER (SPECIFY) _____	☐	☐	☐
12. SIZE OF SAMPLED AREA (LENGTH X WIDTH IN INCHES)	☐ X ☐	☐ X ☐	☐ X ☐
13. APPROX DISTANCE TO NEAREST DOORS TO OUTSIDE (PACES)	☐ FEET	☐ FEET	☐ FEET

Appendix C

Listing of laboratory findings by participant

Summary of number of detections (DET), detection prevalence (PREV), and minimum detection limits (MDL) for all pesticides considered for this study. The total number of residences was sixty. Detection prevalence was calculated as the number of detections divided by the total number of residences.

Pesticide	DET (PREV)	MDL (ng/g)
Alachlor	6 (10%)	10
Azinphos methyl	7 (12%)	50
Chlorpyrifos	58 (97%)	5
Cyanazine	1 (2%)	50
Dacthal	24 (40%)	1
Dicofol	8 (13%)	50
Dimethoate	3 (5%)	25
Endosulfan beta	0 (0%)	50
Ethafuralin	0 (0%)	5
Iprodione	21 (35%)	20
Methidathion	0 (0%)	10
Metolachlor	0 (0%)	5
Pendimethalin	4 (7%)	10
Phosmet	23 (38%)	25
Simazine	53 (88%)	2
Trifluralin	45 (75%)	2

Participant 1 sampled 6, 2004.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	18.29
Cyanazine	ND
Dacthal	1.70
Dicofol	111.79
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	ND
Simazine	20.40
Trifluralin	1.22

Participant 4 sampled 1, 2002.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	99.58
Chlorpyrifos	20.19
Cyanazine	ND
Dacthal	ND
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	10.00
Simazine	30.54
Trifluralin	1.86

Participant 2 sampled 1, 2002.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	40.78
Cyanazine	ND
Dacthal	ND
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	ND
Simazine	13.49
Trifluralin	1.51

Participant 5 sampled 12, 2001.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	20.66
Cyanazine	ND
Dacthal	0.70
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	21.91
Phosmet	ND
Simazine	25.01
Trifluralin	1.61

Participant 3 sampled 1, 2002.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	36.51
Cyanazine	ND
Dacthal	17.14
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	ND
Simazine	14.13
Trifluralin	ND

Participant 6 sampled 4, 2003.

Pesticide	Concentration
Alachlor	1.00
Azinphos methyl	ND
Chlorpyrifos	105.72
Cyanazine	ND
Dacthal	ND
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	ND
Simazine	27.01
Trifluralin	6.78

Participant 7 sampled 2, 2002.

Pesticide	Concentration
Alachlor	1.00
Azinphos methyl	93.70
Chlorpyrifos	32.93
Cyanazine	ND
Dacthal	ND
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	ND
Simazine	2146.15
Trifluralin	3.24

Participant 10 sampled 10, 2004.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	547.54
Cyanazine	ND
Dacthal	2.09
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	19.49
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	ND
Simazine	16.37
Trifluralin	0.74

Participant 8 sampled 6, 2004.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	19.81
Cyanazine	ND
Dacthal	ND
Dicofol	112.99
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	ND
Simazine	25.46
Trifluralin	4.05

Participant 11 sampled 4, 2003.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	34.75
Cyanazine	ND
Dacthal	ND
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	45.34
Simazine	15.07
Trifluralin	36.43

Participant 9 sampled 12, 2001.

Pesticide	Concentration
Alachlor	1.00
Azinphos methyl	ND
Chlorpyrifos	21.23
Cyanazine	ND
Dacthal	ND
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	15.75
Simazine	33.94
Trifluralin	ND

Participant 12 sampled 4, 2003.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	46.19
Cyanazine	ND
Dacthal	ND
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	68.94
Simazine	21.89
Trifluralin	9.36

Participant 13 sampled 4, 2003.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	79.56
Cyanazine	ND
Dacthal	ND
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	3.78
Simazine	23.14
Trifluralin	5.36

Participant 16 sampled 4, 2002.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	68.72
Cyanazine	ND
Dacthal	ND
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	20.94
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	323.04
Simazine	77.27
Trifluralin	1.20

Participant 14 sampled 12, 2001.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	15.88
Cyanazine	ND
Dacthal	4.40
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	56.68
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	ND
Simazine	10.49
Trifluralin	ND

Participant 17 sampled 3, 2003.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	232.74
Chlorpyrifos	19.92
Cyanazine	ND
Dacthal	ND
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	73.62
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	ND
Simazine	44.04
Trifluralin	5.28

Participant 15 sampled 10, 2004.

Pesticide	Concentration
Alachlor	1.00
Azinphos methyl	ND
Chlorpyrifos	211.32
Cyanazine	ND
Dacthal	ND
Dicofol	149.78
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	ND
Simazine	11.24
Trifluralin	2.72

Participant 18 sampled 7, 2003.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	65.38
Cyanazine	ND
Dacthal	1.68
Dicofol	237.46
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	ND
Simazine	19.99
Trifluralin	1.08

Participant 19 sampled 5, 2004.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	33.60
Cyanazine	ND
Dacthal	ND
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	ND
Simazine	18.50
Trifluralin	5.71

Participant 22 sampled 7, 2003.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	98.25
Cyanazine	ND
Dacthal	9.95
Dicofol	284.72
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	118.19
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	23.45
Simazine	41.33
Trifluralin	5.31

Participant 20 sampled 10, 2004.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	116.02
Cyanazine	ND
Dacthal	5.13
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	ND
Simazine	10.35
Trifluralin	16.38

Participant 23 sampled 7, 2003.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	30.67
Cyanazine	ND
Dacthal	41.49
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	72.76
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	96.32
Simazine	40.75
Trifluralin	ND

Participant 21 sampled 5, 2003.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	381.35
Chlorpyrifos	33.01
Cyanazine	ND
Dacthal	1.89
Dicofol	ND
Dimethoate	67.66
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	50.77
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	255.99
Simazine	114.14
Trifluralin	ND

Participant 24 sampled 1, 2002.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	187.80
Chlorpyrifos	326.54
Cyanazine	634.32
Dacthal	ND
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	ND
Simazine	11.71
Trifluralin	ND

Participant 25 sampled 11, 2004.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	37.22
Cyanazine	ND
Dacthal	1.08
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	656.16
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	ND
Simazine	3420.96
Trifluralin	2.76

Participant 28 sampled 7, 2003.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	16.18
Cyanazine	ND
Dacthal	ND
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	ND
Simazine	73.82
Trifluralin	ND

Participant 26 sampled 7, 2003.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	125.79
Cyanazine	ND
Dacthal	ND
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	74.09
Simazine	46.00
Trifluralin	ND

Participant 29 sampled 6, 2004.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	110.28
Cyanazine	ND
Dacthal	ND
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	ND
Simazine	14.73
Trifluralin	4.85

Participant 27 sampled 1, 2002.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	179.88
Cyanazine	ND
Dacthal	ND
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	387.28
Phosmet	ND
Simazine	ND
Trifluralin	4.34

Participant 30 sampled 7, 2003.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	27.70
Cyanazine	ND
Dacthal	9.18
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	86.01
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	582.54
Simazine	74.74
Trifluralin	ND

Participant 31 sampled 7, 2003.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	15.62
Cyanazine	ND
Dacthal	ND
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	148.31
Simazine	1.84
Trifluralin	7.22

Participant 34 sampled 11, 2004.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	13.97
Cyanazine	ND
Dacthal	ND
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	ND
Simazine	36.55
Trifluralin	1.54

Participant 32 sampled 7, 2003.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	109.32
Chlorpyrifos	51.53
Cyanazine	ND
Dacthal	1.58
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	107.57
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	906.44
Simazine	92.63
Trifluralin	1.94

Participant 35 sampled 8, 2004.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	226.69
Cyanazine	ND
Dacthal	20.45
Dicofol	93.39
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	737.15
Phosmet	497.23
Simazine	36.03
Trifluralin	8.75

Participant 33 sampled 1, 2002.

Pesticide	Concentration
Alachlor	1.00
Azinphos methyl	ND
Chlorpyrifos	146.99
Cyanazine	ND
Dacthal	ND
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	32.56
Simazine	900.47
Trifluralin	4.75

Participant 36 sampled 11, 2004.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	5.98
Cyanazine	ND
Dacthal	1.75
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	ND
Simazine	40.25
Trifluralin	4.42

Participant 37 sampled 7, 2004.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	ND
Cyanazine	ND
Dacthal	ND
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	ND
Simazine	ND
Trifluralin	1.89

Participant 40 sampled 7, 2003.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	72.73
Cyanazine	ND
Dacthal	ND
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	Interference
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	ND
Simazine	9.87
Trifluralin	ND

Participant 38 sampled 7, 2003.

Pesticide	Concentration
Alachlor	1.00
Azinphos methyl	ND
Chlorpyrifos	223.97
Cyanazine	ND
Dacthal	17.01
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	40.85
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	27.33
Simazine	ND
Trifluralin	25.18

Participant 41 sampled 4, 2003.

Pesticide	Concentration
Alachlor	1.00
Azinphos methyl	111.96
Chlorpyrifos	102.14
Cyanazine	ND
Dacthal	ND
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	44.69
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	22.68
Simazine	24.26
Trifluralin	3.22

Participant 39 sampled 1, 2002.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	33.91
Cyanazine	ND
Dacthal	2.54
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	ND
Simazine	ND
Trifluralin	ND

Participant 42 sampled 2, 2002.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	70.53
Cyanazine	ND
Dacthal	ND
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	167.85
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	ND
Simazine	139.42
Trifluralin	5.93

Participant 43 sampled 8, 2003.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	32.96
Cyanazine	ND
Dacthal	ND
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	ND
Simazine	ND
Trifluralin	ND

Participant 46 sampled 7, 2003.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	438.80
Cyanazine	ND
Dacthal	9.86
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	90.14
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	1948.31
Simazine	137.36
Trifluralin	113.44

Participant 44 sampled 6, 2003.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	11.42
Cyanazine	ND
Dacthal	ND
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	ND
Simazine	ND
Trifluralin	5.23

Participant 47 sampled 7, 2003.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	33.76
Cyanazine	ND
Dacthal	ND
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	244.28
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	597.06
Simazine	277.69
Trifluralin	ND

Participant 45 sampled 4, 2002.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	889.13
Cyanazine	ND
Dacthal	ND
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	36.15
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	ND
Simazine	286.90
Trifluralin	7.40

Participant 48 sampled 7, 2004.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	1119.67
Cyanazine	ND
Dacthal	1.18
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	3405.19
Phosmet	437.47
Simazine	20.35
Trifluralin	2.38

Participant 49 sampled 12, 2004.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	5.71
Cyanazine	ND
Dacthal	1.49
Dicofol	ND
Dimethoate	33.65
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	ND
Simazine	15.36
Trifluralin	2.65

Participant 52 sampled 8, 2003.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	59.33
Cyanazine	ND
Dacthal	ND
Dicofol	89.82
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	ND
Simazine	ND
Trifluralin	3.60

Participant 50 sampled 12, 2001.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	5.38
Cyanazine	ND
Dacthal	ND
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	ND
Simazine	8.93
Trifluralin	ND

Participant 53 sampled 7, 2003.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	62.47
Cyanazine	ND
Dacthal	ND
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	1628.30
Simazine	208.29
Trifluralin	4.11

Participant 51 sampled 12, 2004.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	ND
Cyanazine	ND
Dacthal	4.73
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	ND
Simazine	58.97
Trifluralin	1.63

Participant 54 sampled 4, 2002.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	553.20
Cyanazine	ND
Dacthal	ND
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	353.68
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	25.76
Simazine	133.22
Trifluralin	6.71

Participant 55 sampled 8, 2003.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	163.23
Cyanazine	ND
Dacthal	ND
Dicofol	469.39
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	41.03
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	ND
Simazine	11.10
Trifluralin	1.48

Participant 58 sampled 7, 2004.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	71.28
Cyanazine	ND
Dacthal	1.80
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	ND
Simazine	23.89
Trifluralin	6.84

Participant 56 sampled 4, 2004.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	37.88
Cyanazine	ND
Dacthal	2.35
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	70.72
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	126.41
Simazine	141.56
Trifluralin	6.73

Participant 59 sampled 12, 2004.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	306.86
Cyanazine	ND
Dacthal	ND
Dicofol	ND
Dimethoate	29.86
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	ND
Simazine	25.10
Trifluralin	ND

Participant 57 sampled 8, 2004.

Pesticide	Concentration
Alachlor	1.00
Azinphos methyl	ND
Chlorpyrifos	275.98
Cyanazine	ND
Dacthal	3.86
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	ND
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	ND
Simazine	25.44
Trifluralin	10.99

Participant 60 sampled 1, 2002.

Pesticide	Concentration
Alachlor	ND
Azinphos methyl	ND
Chlorpyrifos	88.33
Cyanazine	ND
Dacthal	ND
Dicofol	ND
Dimethoate	ND
Endosulfan beta	ND
Ethafuralin	ND
Iprodione	91.25
Methidathion	ND
Metolachlor	ND
Pendimethalin	ND
Phosmet	ND
Simazine	17.98
Trifluralin	7.27

Appendix D

Listing of participant questionnaire answers

Participant 1 sampled 6, 2004.

Question	Response
Flea/Tick	Incomplete
Pro treatment - exterior	Incomplete
Pro treatment - interior	Incomplete
Bee/Wasp	Incomplete
Indoor Insects	Incomplete
Indoor Plants	Incomplete
Outdoor Insects	Incomplete
Outdoor Plants	Incomplete
Ant/Roach	Incomplete
Weeds	Incomplete
Fly/Mosquito	Incomplete
Works in ag industry	No

Participant 4 sampled 1, 2002.

Question	Response
Flea/Tick	No
Pro treatment - exterior	No
Pro treatment - interior	No
Bee/Wasp	Yes
Indoor Insects	Yes
Indoor Plants	No
Outdoor Insects	No
Outdoor Plants	No
Ant/Roach	Yes
Weeds	Yes
Fly/Mosquito	No
Works in ag industry	No

Participant 2 sampled 1, 2002.

Question	Response
Flea/Tick	Yes
Pro treatment - exterior	No
Pro treatment - interior	No
Bee/Wasp	Yes
Indoor Insects	Yes
Indoor Plants	No
Outdoor Insects	No
Outdoor Plants	No
Ant/Roach	Yes
Weeds	No
Fly/Mosquito	No
Works in ag industry	No

Participant 5 sampled 12, 2001.

Question	Response
Flea/Tick	No
Pro treatment - exterior	Yes
Pro treatment - interior	Yes
Bee/Wasp	Yes
Indoor Insects	Yes
Indoor Plants	No
Outdoor Insects	No
Outdoor Plants	No
Ant/Roach	Yes
Weeds	No
Fly/Mosquito	No
Works in ag industry	No

Participant 3 sampled 1, 2002.

Question	Response
Flea/Tick	No
Pro treatment - exterior	No
Pro treatment - interior	No
Bee/Wasp	Yes
Indoor Insects	Yes
Indoor Plants	No
Outdoor Insects	Yes
Outdoor Plants	Yes
Ant/Roach	Yes
Weeds	Yes
Fly/Mosquito	No
Works in ag industry	No

Participant 6 sampled 4, 2003.

Question	Response
Flea/Tick	Incomplete
Pro treatment - exterior	Incomplete
Pro treatment - interior	Incomplete
Bee/Wasp	Incomplete
Indoor Insects	Incomplete
Indoor Plants	Incomplete
Outdoor Insects	Incomplete
Outdoor Plants	Incomplete
Ant/Roach	Incomplete
Weeds	Incomplete
Fly/Mosquito	Incomplete
Works in ag industry	No

Participant 7 sampled 2, 2002.

Question	Response
Flea/Tick	Yes
Pro treatment - exterior	No
Pro treatment - interior	No
Bee/Wasp	Yes
Indoor Insects	Yes
Indoor Plants	No
Outdoor Insects	No
Outdoor Plants	No
Ant/Roach	Yes
Weeds	No
Fly/Mosquito	Yes
Works in ag industry	No

Participant 10 sampled 10, 2004.

Question	Response
Flea/Tick	Yes
Pro treatment - exterior	Yes
Pro treatment - interior	No
Bee/Wasp	No
Indoor Insects	No
Indoor Plants	No
Outdoor Insects	No
Outdoor Plants	Yes
Ant/Roach	Yes
Weeds	Yes
Fly/Mosquito	Yes
Works in ag industry	No

Participant 8 sampled 6, 2004.

Question	Response
Flea/Tick	Yes
Pro treatment - exterior	Yes
Pro treatment - interior	Yes
Bee/Wasp	No
Indoor Insects	No
Indoor Plants	No
Outdoor Insects	No
Outdoor Plants	No
Ant/Roach	Yes
Weeds	Yes
Fly/Mosquito	Yes
Works in ag industry	No

Participant 11 sampled 4, 2003.

Question	Response
Flea/Tick	No
Pro treatment - exterior	No
Pro treatment - interior	No
Bee/Wasp	No
Indoor Insects	No
Indoor Plants	Not asked
Outdoor Insects	No
Outdoor Plants	No
Ant/Roach	No
Weeds	No
Fly/Mosquito	Yes
Works in ag industry	No

Participant 9 sampled 12, 2001.

Question	Response
Flea/Tick	Yes
Pro treatment - exterior	No
Pro treatment - interior	No
Bee/Wasp	Yes
Indoor Insects	Yes
Indoor Plants	Yes
Outdoor Insects	No
Outdoor Plants	No
Ant/Roach	Yes
Weeds	No
Fly/Mosquito	No
Works in ag industry	Yes

Participant 12 sampled 4, 2003.

Question	Response
Flea/Tick	Yes
Pro treatment - exterior	Yes
Pro treatment - interior	No
Bee/Wasp	Yes
Indoor Insects	No
Indoor Plants	Not asked
Outdoor Insects	No
Outdoor Plants	No
Ant/Roach	No
Weeds	Yes
Fly/Mosquito	No
Works in ag industry	No

Participant 13 sampled 4, 2003.

Question	Response	Question	Response
Flea/Tick	Yes	Flea/Tick	Yes
Pro treatment - exterior	No	Pro treatment - exterior	No
Pro treatment - interior	No	Pro treatment - interior	No
Bee/Wasp	No	Bee/Wasp	No
Indoor Insects	No	Indoor Insects	No
Indoor Plants	No	Indoor Plants	No
Outdoor Insects	No	Outdoor Insects	No
Outdoor Plants	No	Outdoor Plants	Yes
Ant/Roach	Yes	Ant/Roach	Yes
Weeds	No	Weeds	Yes
Fly/Mosquito	Yes	Fly/Mosquito	No
Works in ag industry	No	Works in ag industry	No

Participant 16 sampled 4, 2002.

Participant 14 sampled 12, 2001.

Question	Response	Question	Response
Flea/Tick	Yes	Flea/Tick	No
Pro treatment - exterior	Yes	Pro treatment - exterior	Yes
Pro treatment - interior	No	Pro treatment - interior	No
Bee/Wasp	Yes	Bee/Wasp	No
Indoor Insects	Yes	Indoor Insects	No
Indoor Plants	No	Indoor Plants	No
Outdoor Insects	Yes	Outdoor Insects	Yes
Outdoor Plants	Yes	Outdoor Plants	No
Ant/Roach	Yes	Ant/Roach	Yes
Weeds	Yes	Weeds	Yes
Fly/Mosquito	Yes	Fly/Mosquito	No
Works in ag industry	No	Works in ag industry	No

Participant 17 sampled 3, 2003.

Participant 15 sampled 10, 2004.

Question	Response	Question	Response
Flea/Tick	No	Flea/Tick	Incomplete
Pro treatment - exterior	No	Pro treatment - exterior	Incomplete
Pro treatment - interior	No	Pro treatment - interior	Incomplete
Bee/Wasp	Yes	Bee/Wasp	Incomplete
Indoor Insects	No	Indoor Insects	Incomplete
Indoor Plants	No	Indoor Plants	Incomplete
Outdoor Insects	No	Outdoor Insects	Incomplete
Outdoor Plants	No	Outdoor Plants	Incomplete
Ant/Roach	Yes	Ant/Roach	Incomplete
Weeds	No	Weeds	Incomplete
Fly/Mosquito	No	Fly/Mosquito	Incomplete
Works in ag industry	Yes	Works in ag industry	No

Participant 18 sampled 7, 2003.

Participant 19 sampled 5, 2004.

Question	Response
Flea/Tick	Yes
Pro treatment - exterior	Yes
Pro treatment - interior	Yes
Bee/Wasp	No
Indoor Insects	No
Indoor Plants	No
Outdoor Insects	No
Outdoor Plants	No
Ant/Roach	No
Weeds	Yes
Fly/Mosquito	Yes
Works in ag industry	No

Participant 22 sampled 7, 2003.

Question	Response
Flea/Tick	No
Pro treatment - exterior	Yes
Pro treatment - interior	No
Bee/Wasp	No
Indoor Insects	No
Indoor Plants	Not asked
Outdoor Insects	Don't know
Outdoor Plants	Don't know
Ant/Roach	Yes
Weeds	Yes
Fly/Mosquito	No
Works in ag industry	No

Participant 20 sampled 10, 2004.

Question	Response
Flea/Tick	No
Pro treatment - exterior	No
Pro treatment - interior	No
Bee/Wasp	No
Indoor Insects	No
Indoor Plants	No
Outdoor Insects	No
Outdoor Plants	No
Ant/Roach	Yes
Weeds	No
Fly/Mosquito	No
Works in ag industry	No

Participant 23 sampled 7, 2003.

Question	Response
Flea/Tick	No
Pro treatment - exterior	Yes
Pro treatment - interior	Yes
Bee/Wasp	No
Indoor Insects	No
Indoor Plants	Not asked
Outdoor Insects	No
Outdoor Plants	No
Ant/Roach	No
Weeds	Yes
Fly/Mosquito	No
Works in ag industry	No

Participant 21 sampled 5, 2003.

Question	Response
Flea/Tick	Yes
Pro treatment - exterior	No
Pro treatment - interior	No
Bee/Wasp	No
Indoor Insects	No
Indoor Plants	Not asked
Outdoor Insects	Don't know
Outdoor Plants	Don't know
Ant/Roach	No
Weeds	Don't know
Fly/Mosquito	No
Works in ag industry	No

Participant 24 sampled 1, 2002.

Question	Response
Flea/Tick	No
Pro treatment - exterior	No
Pro treatment - interior	No
Bee/Wasp	Yes
Indoor Insects	Yes
Indoor Plants	No
Outdoor Insects	Yes
Outdoor Plants	Yes
Ant/Roach	Yes
Weeds	Yes
Fly/Mosquito	No
Works in ag industry	No

Participant 25 sampled 11, 2004.

Question	Response
Flea/Tick	Yes
Pro treatment - exterior	No
Pro treatment - interior	No
Bee/Wasp	Yes
Indoor Insects	No
Indoor Plants	No
Outdoor Insects	No
Outdoor Plants	No
Ant/Roach	No
Weeds	No
Fly/Mosquito	No
Works in ag industry	Yes

Participant 28 sampled 7, 2003.

Question	Response
Flea/Tick	No
Pro treatment - exterior	No
Pro treatment - interior	No
Bee/Wasp	No
Indoor Insects	No
Indoor Plants	Not asked
Outdoor Insects	No
Outdoor Plants	No
Ant/Roach	No
Weeds	Yes
Fly/Mosquito	No
Works in ag industry	No

Participant 26 sampled 7, 2003.

Question	Response
Flea/Tick	Yes
Pro treatment - exterior	Yes
Pro treatment - interior	No
Bee/Wasp	No
Indoor Insects	Yes
Indoor Plants	Not asked
Outdoor Insects	No
Outdoor Plants	No
Ant/Roach	No
Weeds	Yes
Fly/Mosquito	No
Works in ag industry	No

Participant 29 sampled 6, 2004.

Question	Response
Flea/Tick	Incomplete
Pro treatment - exterior	Incomplete
Pro treatment - interior	Incomplete
Bee/Wasp	Incomplete
Indoor Insects	Incomplete
Indoor Plants	Incomplete
Outdoor Insects	Incomplete
Outdoor Plants	Incomplete
Ant/Roach	Incomplete
Weeds	Incomplete
Fly/Mosquito	Incomplete
Works in ag industry	No

Participant 27 sampled 1, 2002.

Question	Response
Flea/Tick	No
Pro treatment - exterior	Yes
Pro treatment - interior	Yes
Bee/Wasp	Yes
Indoor Insects	Yes
Indoor Plants	No
Outdoor Insects	No
Outdoor Plants	No
Ant/Roach	Yes
Weeds	No
Fly/Mosquito	No
Works in ag industry	No

Participant 30 sampled 7, 2003.

Question	Response
Flea/Tick	No
Pro treatment - exterior	No
Pro treatment - interior	No
Bee/Wasp	Yes
Indoor Insects	Yes
Indoor Plants	Not asked
Outdoor Insects	No
Outdoor Plants	No
Ant/Roach	No
Weeds	Yes
Fly/Mosquito	No
Works in ag industry	No

Participant 31 sampled 7, 2003.

Participant 34 sampled 11, 2004.

Question	Response	Question	Response
Flea/Tick	Yes	Flea/Tick	No
Pro treatment - exterior	No	Pro treatment - exterior	Yes
Pro treatment - interior	No	Pro treatment - interior	No
Bee/Wasp	No	Bee/Wasp	No
Indoor Insects	No	Indoor Insects	No
Indoor Plants	Not asked	Indoor Plants	No
Outdoor Insects	No	Outdoor Insects	No
Outdoor Plants	No	Outdoor Plants	No
Ant/Roach	Yes	Ant/Roach	Yes
Weeds	Yes	Weeds	No
Fly/Mosquito	No	Fly/Mosquito	No
Works in ag industry	No	Works in ag industry	No

Participant 32 sampled 7, 2003.

Participant 35 sampled 8, 2004.

Question	Response	Question	Response
Flea/Tick	No	Flea/Tick	No
Pro treatment - exterior	Don't know	Pro treatment - exterior	Yes
Pro treatment - interior	No	Pro treatment - interior	No
Bee/Wasp	Don't know	Bee/Wasp	No
Indoor Insects	No	Indoor Insects	No
Indoor Plants	Not asked	Indoor Plants	Not asked
Outdoor Insects	Don't know	Outdoor Insects	No
Outdoor Plants	Don't know	Outdoor Plants	No
Ant/Roach	Yes	Ant/Roach	Yes
Weeds	Don't know	Weeds	Yes
Fly/Mosquito	No	Fly/Mosquito	No
Works in ag industry	Yes	Works in ag industry	Yes

Participant 33 sampled 1, 2002.

Participant 36 sampled 11, 2004.

Question	Response	Question	Response
Flea/Tick	No	Flea/Tick	No
Pro treatment - exterior	Yes	Pro treatment - exterior	Yes
Pro treatment - interior	No	Pro treatment - interior	Yes
Bee/Wasp	Yes	Bee/Wasp	No
Indoor Insects	Yes	Indoor Insects	No
Indoor Plants	Yes	Indoor Plants	No
Outdoor Insects	Yes	Outdoor Insects	No
Outdoor Plants	Yes	Outdoor Plants	No
Ant/Roach	Yes	Ant/Roach	Yes
Weeds	Yes	Weeds	Yes
Fly/Mosquito	No	Fly/Mosquito	No
Works in ag industry	No	Works in ag industry	No

Participant 37 sampled 7, 2004.

Participant 40 sampled 7, 2003.

Question	Response	Question	Response
Flea/Tick	No	Flea/Tick	Yes
Pro treatment - exterior	No	Pro treatment - exterior	No
Pro treatment - interior	No	Pro treatment - interior	No
Bee/Wasp	No	Bee/Wasp	Yes
Indoor Insects	No	Indoor Insects	No
Indoor Plants	No	Indoor Plants	Not asked
Outdoor Insects	No	Outdoor Insects	No
Outdoor Plants	No	Outdoor Plants	No
Ant/Roach	No	Ant/Roach	No
Weeds	No	Weeds	Yes
Fly/Mosquito	No	Fly/Mosquito	Yes
Works in ag industry	No	Works in ag industry	No

Participant 38 sampled 7, 2003.

Participant 41 sampled 4, 2003.

Question	Response	Question	Response
Flea/Tick	Yes	Flea/Tick	No
Pro treatment - exterior	Yes	Pro treatment - exterior	Yes
Pro treatment - interior	No	Pro treatment - interior	Yes
Bee/Wasp	Don't know	Bee/Wasp	No
Indoor Insects	No	Indoor Insects	No
Indoor Plants	Not asked	Indoor Plants	No
Outdoor Insects	No	Outdoor Insects	No
Outdoor Plants	No	Outdoor Plants	No
Ant/Roach	No	Ant/Roach	Yes
Weeds	No	Weeds	No
Fly/Mosquito	Yes	Fly/Mosquito	No
Works in ag industry	No	Works in ag industry	No

Participant 39 sampled 1, 2002.

Participant 42 sampled 2, 2002.

Question	Response	Question	Response
Flea/Tick	No	Flea/Tick	Yes
Pro treatment - exterior	No	Pro treatment - exterior	No
Pro treatment - interior	No	Pro treatment - interior	No
Bee/Wasp	Yes	Bee/Wasp	Yes
Indoor Insects	Yes	Indoor Insects	Yes
Indoor Plants	Yes	Indoor Plants	No
Outdoor Insects	No	Outdoor Insects	No
Outdoor Plants	No	Outdoor Plants	No
Ant/Roach	Yes	Ant/Roach	Yes
Weeds	No	Weeds	Yes
Fly/Mosquito	No	Fly/Mosquito	No
Works in ag industry	No	Works in ag industry	No

Participant 43 sampled 8, 2003.

Question	Response
Flea/Tick	No
Pro treatment - exterior	No
Pro treatment - interior	No
Bee/Wasp	No
Indoor Insects	No
Indoor Plants	No
Outdoor Insects	Yes
Outdoor Plants	No
Ant/Roach	Yes
Weeds	No
Fly/Mosquito	Yes
Works in ag industry	No

Participant 46 sampled 7, 2003.

Question	Response
Flea/Tick	No
Pro treatment - exterior	Yes
Pro treatment - interior	No
Bee/Wasp	No
Indoor Insects	No
Indoor Plants	Not asked
Outdoor Insects	No
Outdoor Plants	No
Ant/Roach	No
Weeds	Yes
Fly/Mosquito	No
Works in ag industry	No

Participant 44 sampled 6, 2003.

Question	Response
Flea/Tick	Incomplete
Pro treatment - exterior	Incomplete
Pro treatment - interior	Incomplete
Bee/Wasp	Incomplete
Indoor Insects	Incomplete
Indoor Plants	Incomplete
Outdoor Insects	Incomplete
Outdoor Plants	Incomplete
Ant/Roach	Incomplete
Weeds	Incomplete
Fly/Mosquito	Incomplete
Works in ag industry	No

Participant 47 sampled 7, 2003.

Question	Response
Flea/Tick	Yes
Pro treatment - exterior	No
Pro treatment - interior	No
Bee/Wasp	No
Indoor Insects	No
Indoor Plants	Not asked
Outdoor Insects	No
Outdoor Plants	No
Ant/Roach	Yes
Weeds	No
Fly/Mosquito	No
Works in ag industry	No

Participant 45 sampled 4, 2002.

Question	Response
Flea/Tick	Yes
Pro treatment - exterior	No
Pro treatment - interior	No
Bee/Wasp	No
Indoor Insects	No
Indoor Plants	No
Outdoor Insects	No
Outdoor Plants	No
Ant/Roach	No
Weeds	No
Fly/Mosquito	No
Works in ag industry	No

Participant 48 sampled 7, 2004.

Question	Response
Flea/Tick	Yes
Pro treatment - exterior	No
Pro treatment - interior	No
Bee/Wasp	Yes
Indoor Insects	No
Indoor Plants	No
Outdoor Insects	No
Outdoor Plants	No
Ant/Roach	No
Weeds	Yes
Fly/Mosquito	No
Works in ag industry	No

Participant 49 sampled 12, 2004.

Question	Response
Flea/Tick	Yes
Pro treatment - exterior	No
Pro treatment - interior	No
Bee/Wasp	No
Indoor Insects	No
Indoor Plants	No
Outdoor Insects	No
Outdoor Plants	Yes
Ant/Roach	No
Weeds	No
Fly/Mosquito	No
Works in ag industry	No

Participant 52 sampled 8, 2003.

Question	Response
Flea/Tick	Yes
Pro treatment - exterior	No
Pro treatment - interior	No
Bee/Wasp	No
Indoor Insects	No
Indoor Plants	Not asked
Outdoor Insects	No
Outdoor Plants	No
Ant/Roach	Yes
Weeds	No
Fly/Mosquito	No
Works in ag industry	No

Participant 50 sampled 12, 2001.

Question	Response
Flea/Tick	No
Pro treatment - exterior	No
Pro treatment - interior	No
Bee/Wasp	Yes
Indoor Insects	Yes
Indoor Plants	No
Outdoor Insects	No
Outdoor Plants	No
Ant/Roach	Yes
Weeds	Yes
Fly/Mosquito	No
Works in ag industry	No

Participant 53 sampled 7, 2003.

Question	Response
Flea/Tick	Yes
Pro treatment - exterior	No
Pro treatment - interior	No
Bee/Wasp	Yes
Indoor Insects	No
Indoor Plants	Not asked
Outdoor Insects	No
Outdoor Plants	Yes
Ant/Roach	Yes
Weeds	Yes
Fly/Mosquito	No
Works in ag industry	No

Participant 51 sampled 12, 2004.

Question	Response
Flea/Tick	No
Pro treatment - exterior	No
Pro treatment - interior	No
Bee/Wasp	No
Indoor Insects	No
Indoor Plants	No
Outdoor Insects	No
Outdoor Plants	No
Ant/Roach	No
Weeds	Yes
Fly/Mosquito	No
Works in ag industry	No

Participant 54 sampled 4, 2002.

Question	Response
Flea/Tick	Incomplete
Pro treatment - exterior	Incomplete
Pro treatment - interior	Incomplete
Bee/Wasp	Incomplete
Indoor Insects	Incomplete
Indoor Plants	Incomplete
Outdoor Insects	Incomplete
Outdoor Plants	Incomplete
Ant/Roach	Incomplete
Weeds	Incomplete
Fly/Mosquito	Incomplete
Works in ag industry	No

Participant 55 sampled 8, 2003.

Participant 58 sampled 7, 2004.

Question	Response	Question	Response
Flea/Tick	Yes	Flea/Tick	No
Pro treatment - exterior	Don't know	Pro treatment - exterior	Yes
Pro treatment - interior	Yes	Pro treatment - interior	Yes
Bee/Wasp	No	Bee/Wasp	No
Indoor Insects	No	Indoor Insects	No
Indoor Plants	Not asked	Indoor Plants	Not asked
Outdoor Insects	Don't know	Outdoor Insects	Yes
Outdoor Plants	Don't know	Outdoor Plants	No
Ant/Roach	Yes	Ant/Roach	No
Weeds	Yes	Weeds	No
Fly/Mosquito	No	Fly/Mosquito	No
Works in ag industry	No	Works in ag industry	Yes

Participant 56 sampled 4, 2004.

Participant 59 sampled 12, 2004.

Question	Response	Question	Response
Flea/Tick	No	Flea/Tick	Yes
Pro treatment - exterior	No	Pro treatment - exterior	Yes
Pro treatment - interior	No	Pro treatment - interior	Yes
Bee/Wasp	No	Bee/Wasp	No
Indoor Insects	No	Indoor Insects	No
Indoor Plants	Not asked	Indoor Plants	No
Outdoor Insects	No	Outdoor Insects	No
Outdoor Plants	No	Outdoor Plants	No
Ant/Roach	No	Ant/Roach	No
Weeds	Yes	Weeds	No
Fly/Mosquito	No	Fly/Mosquito	Yes
Works in ag industry	No	Works in ag industry	No

Participant 57 sampled 8, 2004.

Participant 60 sampled 1, 2002.

Question	Response	Question	Response
Flea/Tick	Yes	Flea/Tick	Yes
Pro treatment - exterior	No	Pro treatment - exterior	Yes
Pro treatment - interior	No	Pro treatment - interior	Yes
Bee/Wasp	No	Bee/Wasp	Yes
Indoor Insects	No	Indoor Insects	Yes
Indoor Plants	No	Indoor Plants	No
Outdoor Insects	No	Outdoor Insects	No
Outdoor Plants	No	Outdoor Plants	No
Ant/Roach	Yes	Ant/Roach	No
Weeds	No	Weeds	Yes
Fly/Mosquito	Yes	Fly/Mosquito	No
Works in ag industry	No	Works in ag industry	No

Appendix E

Pesticide use by participant

Pesticide Use Proximate to Participant 1

Chlorpyrifos pesticide use by PUR database crops for 1 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
cotton (general)	Apps	2	0	0	0	0	0	0
	Pounds	100	0	0	0	0	0	0

Dicofol pesticide use by PUR database crops for 1 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
cotton (general)	Apps	2	0	0	0	0	0	0
	Pounds	24	0	0	0	0	0	0

Iprodione pesticide use by PUR database crops for 1 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
peach	Apps	12	10	0	6	0	0	0
	Pounds	184	119	0	64	0	0	0
grapes (wine)	Apps	0	4	0	0	0	0	0
	Pounds	0	54	0	0	0	0	0

Phosmet pesticide use by PUR database crops for 1 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apricot	Apps	0	0	0	0	0	0	1
	Pounds	0	0	0	0	0	0	2
nectarine	Apps	0	0	0	0	0	0	1
	Pounds	0	0	0	0	0	0	2
peach	Apps	4	3	2	3	2	5	7
	Pounds	162	145	75	135	143	188	202
plum	Apps	0	0	0	0	0	0	1
	Pounds	0	0	0	0	0	0	2
grapes (wine)	Apps	0	0	0	0	0	0	1
	Pounds	0	0	0	0	0	0	11

Simazine pesticide use by PUR database crops for 1 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apricot	Apps	0	0	0	0	1	1	1
	Pounds	0	0	0	0	9	9	5
peach	Apps	0	0	6	5	5	5	2
	Pounds	0	0	77	71	79	56	27
plum	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
olive	Apps	0	0	0	1	1	1	0
	Pounds	0	0	0	27	27	22	0
grapes (table/raisin)	Apps	2	3	4	3	7	7	4
	Pounds	70	55	138	133	219	167	89
grapes (wine)	Apps	6	8	15	3	9	6	14
	Pounds	143	101	360	71	230	128	267

Pesticide Use Proximate to Participant 2

Azinphos methyl pesticide use by PUR database crops for 2 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	0	0	1	0	0	0	0
	Pounds	0	0	81	0	0	0	0
apple	Apps	0	7	10	11	2	2	0
	Pounds	0	391	485	597	70	105	0
grapes (wine)	Apps	0	0	1	0	0	0	0
	Pounds	0	0	12	0	0	0	0

Chlorpyrifos pesticide use by PUR database crops for 2 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
alfalfa	Apps	0	0	0	2	0	0	0
	Pounds	0	0	0	25	0	0	0
corn (human consumption)	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	63	0

Dicofol pesticide use by PUR database crops for 2 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	0	5	2	4	0	0	0
	Pounds	0	423	195	400	0	0	0

Iprodione pesticide use by PUR database crops for 2 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apricot	Apps	5	2	2	1	0	0	0
	Pounds	28	15	8	4	0	0	0
cherry	Apps	0	0	1	0	1	1	0
	Pounds	0	0	9	0	9	9	0
peach	Apps	2	0	1	0	1	0	0
	Pounds	9	0	1	0	1	0	0

Phosmet pesticide use by PUR database crops for 2 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	2	2	3	6	1	1	0
	Pounds	272	256	378	862	123	90	0
cherry	Apps	0	0	1	0	0	0	0
	Pounds	0	0	16	0	0	0	0
alfalfa	Apps	0	0	5	0	0	0	0
	Pounds	0	0	70	0	0	0	0
grapes (wine)	Apps	4	2	1	1	0	0	0
	Pounds	22	28	13	11	0	0	0

Trifluralin pesticide use by PUR database crops for 2 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
alfalfa	Apps	0	0	1	0	0	0	0
	Pounds	0	0	60	0	0	0	0

Pesticide Use Proximate to Participant 3

Azinphos methyl pesticide use by PUR database crops for 3 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
cauliflower	Apps	9	0	0	2	0	0	0
	Pounds	75	0	0	18	0	0	0
broccoli	Apps	3	0	0	0	0	0	0
	Pounds	29	0	0	0	0	0	0

Chlorpyrifos pesticide use by PUR database crops for 3 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
broccoli	Apps	25	19	33	35	20	13	9
	Pounds	481	475	718	714	467	342	230
cabbage	Apps	0	0	14	38	11	20	13
	Pounds	0	0	166	337	118	181	135
cauliflower	Apps	48	53	53	47	49	44	39
	Pounds	679	14836	585	648	587	680	600
chinese cabbage	Apps	0	0	34	40	6	0	0
	Pounds	0	0	55	79	15	0	0
kale	Apps	0	0	3	4	7	13	17
	Pounds	0	0	19	10	18	32	45
outdoor grown transplant	Apps	0	0	0	0	0	0	1
	Pounds	0	0	0	0	0	0	15
bok choy	Apps	0	0	39	54	4	0	4
	Pounds	0	0	57	99	9	0	5

Dacthal pesticide use by PUR database crops for 3 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
onions (green)	Apps	0	0	3	0	6	0	0
	Pounds	0	0	57	0	56	0	0
broccoli	Apps	6	3	17	22	17	23	15
	Pounds	175	56	528	729	379	1155	1795
cabbage	Apps	0	0	0	4	3	6	5
	Pounds	0	0	0	50	47	98	59
cauliflower	Apps	20	29	18	10	19	10	10
	Pounds	600	899	555	310	540	447	318
kale	Apps	0	0	1	2	4	9	10
	Pounds	0	0	26	18	39	85	125
broccoli raab	Apps	0	0	0	22	1	1	2
	Pounds	0	0	0	395	31	30	23
bok choy	Apps	0	0	0	0	0	0	2
	Pounds	0	0	0	0	0	0	8

Iprodione pesticide use by PUR database crops for 3 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
strawberry	Apps	1	2	2	1	0	0	0
	Pounds	25	47	43	42	0	0	0
cauliflower	Apps	0	1	0	0	0	0	0
	Pounds	0	1	0	0	0	0	0
greenhouse grown cut flowers or greens	Apps	5	0	2	0	1	0	0
	Pounds	12	0	4	0	0	0	0
lettuce (head)	Apps	36	23	19	23	76	77	69
	Pounds	441	276	285	249	972	989	818
lettuce (leaf)	Apps	54	53	43	21	22	8	17
	Pounds	569	576	356	151	191	91	167

Simazine pesticide use by PUR database crops for 3 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
lettuce (head)	Apps	0	0	0	2	0	0	0
	Pounds	0	0	0	62	0	0	0

Trifluralin pesticide use by PUR database crops for 3 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
broccoli raab	Apps	0	0	0	1	1	1	2
	Pounds	0	0	0	0	5	5	6
broccoli	Apps	0	0	1	9	11	16	8
	Pounds	0	0	6	50	144	86	35
peas (general)	Apps	0	0	0	0	0	0	1
	Pounds	0	0	0	0	0	0	6

Pesticide Use Proximate to Participant 4

Chlorpyrifos pesticide use by PUR database crops for 4 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	2	2	6	2	0	0	0
	Pounds	16	22	82	52	0	0	0
orange	Apps	1	0	1	0	0	0	0
	Pounds	16	0	11	0	0	0	0

Phosmet pesticide use by PUR database crops for 4 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	1	5	3	0	0	0	0
	Pounds	34	213	112	0	0	0	0

Pesticide Use Proximate to Participant 5

Chlorpyrifos pesticide use by PUR database crops for 5 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	2	5	1	2	2	4	7
	Pounds	89	201	36	142	72	190	284
alfalfa	Apps	0	4	3	2	2	11	3
	Pounds	0	27	47	39	22	150	50
corn (forage - fodder)	Apps	1	0	0	0	0	0	0
	Pounds	34	0	0	0	0	0	0
cotton (general)	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0

Dicofol pesticide use by PUR database crops for 5 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
beans (dried)	Apps	1	0	0	0	0	0	0
	Pounds	10	0	0	0	0	0	0
walnut	Apps	2	0	1	0	0	1	0
	Pounds	177	0	54	0	0	10	0
cotton (general)	Apps	12	15	17	14	20	10	5
	Pounds	668	667	598	630	463	395	145

Phosmet pesticide use by PUR database crops for 5 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	3	0	0	0	2	1	1
	Pounds	320	0	0	0	71	42	34

Simazine pesticide use by PUR database crops for 5 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
uncultivated agricultural areas	Apps	0	1	0	0	0	0	0
	Pounds	0	90	0	0	0	0	0
walnut	Apps	3	1	2	2	2	2	1
	Pounds	62	16	72	72	72	54	36

Trifluralin pesticide use by PUR database crops for 5 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
uncultivated agricultural areas	Apps	2	0	0	0	0	0	0
	Pounds	60	0	0	0	0	0	0
beans (dried)	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	30	0
alfalfa	Apps	0	1	4	2	3	5	2
	Pounds	0	70	256	160	312	224	182
corn (forage - fodder)	Apps	0	1	0	0	0	0	0
	Pounds	0	63	0	0	0	0	0
cotton (general)	Apps	4	3	19	0	12	6	5
	Pounds	169	125	549	0	303	210	86

Pesticide Use Proximate to Participant 6

Azinphos methyl pesticide use by PUR database crops for 6 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	1	1	1	1	0	0	0
	Pounds	200	200	200	200	0	0	0
apple	Apps	2	0	3	3	1	0	0
	Pounds	75	0	158	158	53	0	0

Chlorpyrifos pesticide use by PUR database crops for 6 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	2	1	1	1	1	0	2
	Pounds	152	139	139	150	150	0	92
cotton (general)	Apps	0	0	0	3	0	4	4
	Pounds	0	0	0	73	0	202	172
apple	Apps	0	0	0	0	1	0	0
	Pounds	0	0	0	0	70	0	0
alfalfa	Apps	2	1	0	0	0	0	0
	Pounds	150	88	0	0	0	0	0

Dicofol pesticide use by PUR database crops for 6 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
cotton (general)	Apps	0	3	6	1	1	9	4
	Pounds	0	74	358	175	46	969	135

Iprodione pesticide use by PUR database crops for 6 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	3	2	2	2	2	1	1
	Pounds	97	88	87	87	56	18	18
grapes (table/raisin)	Apps	0	0	1	1	0	0	0
	Pounds	0	0	8	8	0	0	0

Phosmet pesticide use by PUR database crops for 6 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	1	0	0	0	0	0	0
	Pounds	34	0	0	0	0	0	0

Simazine pesticide use by PUR database crops for 6 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	2	1	0	0	0	0	0
	Pounds	61	64	0	0	0	0	0
grapes (table/raisin)	Apps	1	1	0	0	0	0	3
	Pounds	12	12	0	0	0	0	40

Trifluralin pesticide use by PUR database crops for 6 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
beans (dried)	Apps	0	0	0	0	0	2	0
	Pounds	0	0	0	0	0	34	0
almond	Apps	0	1	0	0	0	0	0
	Pounds	0	86	0	0	0	0	0
cotton (general)	Apps	1	3	2	0	2	2	1
	Pounds	32	122	63	0	120	54	47

Pesticide Use Proximate to Participant 7

Azinphos methyl pesticide use by PUR database crops for 7 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	3	3	1	2	0	1	0
	Pounds	141	180	15	105	0	20	0

Chlorpyrifos pesticide use by PUR database crops for 7 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	17	26	18	0	0	0	0
	Pounds	390	597	434	0	0	0	0
walnut	Apps	5	15	10	11	8	17	14
	Pounds	229	803	282	506	344	701	672
peach	Apps	0	0	0	0	0	2	1
	Pounds	0	0	0	0	0	56	30
cabbage	Apps	0	0	0	0	0	0	2
	Pounds	0	0	0	0	0	0	4
corn (forage - fodder)	Apps	0	1	0	0	0	0	0
	Pounds	0	17	0	0	0	0	0
almond	Apps	11	13	10	6	11	17	13
	Pounds	652	556	354	244	320	530	440
alfalfa	Apps	0	2	9	2	1	4	1
	Pounds	0	25	160	58	4	76	40
outdoor grown transplant	Apps	0	0	0	0	0	1	1
	Pounds	0	0	0	0	0	11	18

Dacthal pesticide use by PUR database crops for 7 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
mustard (general)	Apps	0	0	0	8	11	13	13
	Pounds	0	0	0	46	51	95	93
onions (green)	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
turnip (general)	Apps	0	0	0	5	0	0	0
	Pounds	0	0	0	19	0	0	0
chinese radish/daikon	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
cabbage	Apps	0	0	0	4	20	0	7
	Pounds	0	0	0	35	142	0	49
collards	Apps	0	0	0	3	8	7	8
	Pounds	0	0	0	20	75	54	80
kale	Apps	0	0	0	6	6	5	8
	Pounds	0	0	0	16	28	30	58
kohlrabi	Apps	0	0	0	0	4	1	8
	Pounds	0	0	0	0	14	5	73
leek	Apps	0	0	0	0	2	3	0
	Pounds	0	0	0	0	16	13	0
bok choy	Apps	0	0	0	7	11	4	7
	Pounds	0	0	0	34	57	31	42

Dicofol pesticide use by PUR database crops for 7 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
outdoor grown cut flowers or greens	Apps	4	0	0	2	0	0	0
	Pounds	1	0	0	0	0	0	0
pumpkin	Apps	0	0	0	1	0	0	0
	Pounds	0	0	0	6	0	0	0
peach	Apps	2	0	0	0	0	0	0
	Pounds	4	0	0	0	0	0	0

Iprodione pesticide use by PUR database crops for 7 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	1	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
lettuce (leaf)	Apps	24	10	8	10	13	48	8
	Pounds	21	10	8	6	16	52	11
apricot	Apps	0	0	2	0	0	0	0
	Pounds	0	0	0	0	0	0	0
cherry	Apps	0	0	0	0	0	0	1
	Pounds	0	0	0	0	0	0	1
peach	Apps	3	4	6	4	4	5	4
	Pounds	67	44	44	31	58	63	37
grapes (wine)	Apps	3	1	0	1	1	1	0
	Pounds	71	30	0	25	30	30	0
almond	Apps	31	34	25	14	10	17	20
	Pounds	354	327	284	107	71	164	195
outdoor grown transplant	Apps	0	0	0	0	0	0	1
	Pounds	0	0	0	0	0	0	3

Phosmet pesticide use by PUR database crops for 7 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	7	2	5	1	0	0	0
	Pounds	606	182	253	58	0	0	0
walnut	Apps	1	1	0	0	1	1	1
	Pounds	63	14	0	0	84	84	84
peach	Apps	0	1	3	3	2	0	0
	Pounds	0	42	84	65	49	0	0
apple	Apps	22	8	5	20	18	24	0
	Pounds	956	336	280	786	815	1059	0
alfalfa	Apps	0	1	3	0	1	0	0
	Pounds	0	14	98	0	56	0	0

Simazine pesticide use by PUR database crops for 7 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	9	0	10	5	5	5	10
	Pounds	80	0	60	31	40	25	39
walnut	Apps	0	6	5	4	5	8	12
	Pounds	0	90	43	33	58	58	90
cherry	Apps	0	0	0	0	2	1	0
	Pounds	0	0	0	0	0	1	0
nectarine	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	0	0
peach	Apps	1	3	3	3	5	5	3
	Pounds	5	27	21	11	30	62	20
uncultivated agricultural areas	Apps	0	0	0	0	1	0	0
	Pounds	0	0	0	0	8	0	0
grapes (wine)	Apps	10	20	7	3	7	5	17
	Pounds	227	284	77	16	132	86	183
almond	Apps	14	17	17	17	17	31	29
	Pounds	151	193	215	135	141	310	225
outdoor grown plants	Apps	0	0	0	0	0	0	1
	Pounds	0	0	0	0	0	0	9

Trifluralin pesticide use by PUR database crops for 7 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
mustard (general)	Apps	0	44	50	27	18	0	0
	Pounds	0	4	15	3	2	0	0
collards	Apps	0	22	23	19	12	0	0
	Pounds	0	3	6	4	2	0	0
fennel	Apps	0	1	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
cabbage	Apps	0	34	26	18	19	0	0
	Pounds	0	12	5	3	4	0	0
turnip (general)	Apps	0	22	19	13	1	0	0
	Pounds	0	1	1	1	0	0	0
kale	Apps	0	25	21	24	10	0	0
	Pounds	0	3	3	2	1	0	0
kohlrabi	Apps	0	3	4	3	3	0	0
	Pounds	0	0	0	0	0	0	0
almond	Apps	1	0	0	0	0	0	0
	Pounds	5	0	0	0	0	0	0
alfalfa	Apps	0	0	2	2	2	0	1
	Pounds	0	0	120	120	120	0	160
bok choy	Apps	0	33	36	25	15	0	0
	Pounds	0	3	8	3	1	0	0

Pesticide Use Proximate to Participant 8

Chlorpyrifos pesticide use by PUR database crops for 8 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
soil preplant application	Apps	1	0	0	0	0	0	0
	Pounds	37	0	0	0	0	0	0
alfalfa	Apps	6	3	3	2	9	7	7
	Pounds	217	158	112	57	269	254	177
corn (forage - fodder)	Apps	0	0	0	0	0	0	2
	Pounds	0	0	0	0	0	0	132

Dicofol pesticide use by PUR database crops for 8 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
soil preplant application	Apps	0	1	0	0	0	0	0
	Pounds	0	70	0	0	0	0	0
beans (dried)	Apps	9	5	4	0	1	2	8
	Pounds	625	520	378	0	105	207	437
pumpkin	Apps	1	0	0	0	0	0	0
	Pounds	25	0	0	0	0	0	0
beans succulent (other than lima)	Apps	1	2	3	0	0	0	0
	Pounds	113	155	150	0	0	0	0

Phosmet pesticide use by PUR database crops for 8 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
alfalfa	Apps	0	0	0	2	0	0	0
	Pounds	0	0	0	53	0	0	0

Trifluralin pesticide use by PUR database crops for 8 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
soil preplant application	Apps	2	1	1	0	0	0	0
	Pounds	81	75	25	0	0	0	0
safflower (general)	Apps	0	0	0	0	0	5	0
	Pounds	0	0	0	0	0	166	0
tomatoes (processing/canning)	Apps	7	2	2	9	7	7	4
	Pounds	224	125	67	294	250	245	193
wheat (general)	Apps	0	0	0	0	0	0	1
	Pounds	0	0	0	0	0	0	46
corn (forage - fodder)	Apps	0	0	2	0	0	0	0
	Pounds	0	0	55	0	0	0	0
beans (dried)	Apps	4	3	4	0	2	9	5
	Pounds	170	138	93	0	44	211	175
alfalfa	Apps	0	4	1	2	5	4	4
	Pounds	0	422	106	250	638	562	658
beans succulent (other than lima)	Apps	0	1	1	0	1	0	0
	Pounds	0	73	39	0	54	0	0
tomatoes (fresh market)	Apps	0	1	0	0	0	0	0
	Pounds	0	49	0	0	0	0	0

Pesticide Use Proximate to Participant 9

Azinphos methyl pesticide use by PUR database crops for 9 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	9	3	3	2	1	1	0
	Pounds	140	120	86	43	15	15	0
pear	Apps	0	1	3	2	6	2	2
	Pounds	0	69	143	71	233	81	81
apple	Apps	2	5	8	12	7	10	5
	Pounds	20	175	211	1039	616	812	777

Chlorpyrifos pesticide use by PUR database crops for 9 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	3	2	4	2	1	1	2
	Pounds	44	39	63	40	10	20	56
apple	Apps	0	0	0	0	2	1	1
	Pounds	0	0	0	0	468	390	390
cherry	Apps	0	0	0	0	0	0	2
	Pounds	0	0	0	0	0	0	44
plum	Apps	0	0	0	0	0	0	1
	Pounds	0	0	0	0	0	0	2
citrus fruits	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
corn (human consumption)	Apps	0	0	0	0	0	2	0
	Pounds	0	0	0	0	0	63	0

Dicofol pesticide use by PUR database crops for 9 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	0	2	1	0	0	2	0
	Pounds	0	25	30	0	0	165	0
apricot	Apps	0	0	0	0	0	2	0
	Pounds	0	0	0	0	0	27	0
cherry	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	38	0
peach	Apps	0	1	0	0	0	0	0
	Pounds	0	13	0	0	0	0	0
grapes (wine)	Apps	0	2	2	2	1	0	0
	Pounds	0	18	59	38	29	0	0
strawberry	Apps	0	0	1	1	1	0	0
	Pounds	0	0	4	2	3	0	0

Iprodione pesticide use by PUR database crops for 9 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	0	0	1	0	0	0	0
	Pounds	0	0	4	0	0	0	0
apricot	Apps	20	20	9	11	10	8	0
	Pounds	376	158	31	61	41	28	0
cherry	Apps	1	1	0	0	0	0	0
	Pounds	7	1	0	0	0	0	0
nectarine	Apps	8	1	1	1	2	3	3
	Pounds	11	1	1	3	3	3	5
peach	Apps	14	10	6	2	5	5	4
	Pounds	40	29	27	5	19	20	19
plum	Apps	4	0	0	0	2	3	1
	Pounds	1	0	0	0	2	3	0
uncultivated agricultural areas	Apps	0	0	2	0	0	0	0
	Pounds	0	0	10	0	0	0	0
onion (dry, spanish, white)	Apps	1	0	0	0	0	1	0
	Pounds	1	0	0	0	0	1	0
tomatoes (fresh market)	Apps	1	0	0	0	0	0	0
	Pounds	1	0	0	0	0	0	0

Phosmet pesticide use by PUR database crops for 9 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	2	1	0	0	0	1	0
	Pounds	53	70	0	0	0	21	0
pear	Apps	4	0	0	0	0	1	1
	Pounds	701	0	0	0	0	35	76
apple	Apps	6	2	6	10	4	7	6
	Pounds	381	53	304	2209	574	891	866
apricot	Apps	0	1	0	1	0	0	2
	Pounds	0	7	0	86	0	0	67
nectarine	Apps	0	1	0	0	0	0	0
	Pounds	0	2	0	0	0	0	0
peach	Apps	1	3	0	0	0	0	0
	Pounds	24	34	0	0	0	0	0
alfalfa	Apps	2	0	0	0	0	0	0
	Pounds	16	0	0	0	0	0	0

Simazine pesticide use by PUR database crops for 9 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	0	1	2	0	0	1	1
	Pounds	0	18	21	0	0	41	46
pear	Apps	0	0	2	3	1	0	2
	Pounds	0	0	56	60	24	0	58
apple	Apps	0	0	2	1	3	0	1
	Pounds	0	0	24	24	152	0	92

Trifluralin pesticide use by PUR database crops for 9 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
tomatoes (processing/canning)	Apps	1	0	0	0	0	0	0
	Pounds	24	0	0	0	0	0	0
walnut	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
grapes (wine)	Apps	0	0	0	1	0	0	0
	Pounds	0	0	0	4	0	0	0

Pesticide Use Proximate to Participant 10

Azinphos methyl pesticide use by PUR database crops for 10 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
pear	Apps	9	6	9	8	5	2	0
	Pounds	63	40	46	51	29	20	0
plum	Apps	0	0	1	0	0	0	0
	Pounds	0	0	5	0	0	0	0

Chlorpyrifos pesticide use by PUR database crops for 10 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
pecan	Apps	0	1	0	0	0	0	0
	Pounds	0	6	0	0	0	0	0
apple	Apps	3	0	0	0	0	0	0
	Pounds	63	0	0	0	0	0	0
pear	Apps	1	3	5	5	3	1	0
	Pounds	14	37	56	53	32	20	0
walnut	Apps	1	1	1	0	0	1	1
	Pounds	34	30	36	0	0	299	34
cherry	Apps	0	1	0	0	0	1	1
	Pounds	0	1	0	0	0	1	1
nectarine	Apps	5	3	12	0	3	5	1
	Pounds	152	71	286	0	24	175	8
peach	Apps	15	7	14	4	4	4	2
	Pounds	208	83	209	99	57	124	36
plum	Apps	22	20	21	18	18	16	12
	Pounds	577	469	433	381	317	473	273
prune	Apps	2	2	2	2	0	0	0
	Pounds	48	89	92	48	0	0	0
grapefruit	Apps	1	0	1	1	1	0	1
	Pounds	48	0	45	48	48	0	40
grapes (table/raisin)	Apps	0	0	0	0	0	0	6
	Pounds	0	0	0	0	0	0	211
orange	Apps	2	2	2	1	2	3	5
	Pounds	53	9	50	48	79	23	401
grapes (wine)	Apps	0	1	0	0	0	0	1
	Pounds	0	19	0	0	0	0	8
almond	Apps	6	4	7	8	5	2	2
	Pounds	144	193	243	395	130	48	162

Dicofol pesticide use by PUR database crops for 10 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
nectarine	Apps	2	0	0	0	0	0	0
	Pounds	52	0	0	0	0	0	0
peach	Apps	0	0	0	1	0	0	0
	Pounds	0	0	0	8	0	0	0

Iprodione pesticide use by PUR database crops for 10 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
cherry	Apps	0	1	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
nectarine	Apps	3	5	8	5	2	5	0
	Pounds	38	68	80	40	13	59	0
peach	Apps	10	11	6	3	1	4	0
	Pounds	21	51	29	10	4	31	0
plum	Apps	5	17	9	1	8	3	0
	Pounds	70	129	94	4	103	47	0
prune	Apps	2	2	2	2	0	0	0
	Pounds	18	36	40	18	0	0	0
grapes (table/raisin)	Apps	1	0	0	0	0	0	0
	Pounds	30	0	0	0	0	0	0
grapes (wine)	Apps	0	0	0	2	0	0	0
	Pounds	0	0	0	3	0	0	0
almond	Apps	5	4	4	2	4	4	2
	Pounds	33	42	46	32	28	28	17

Phosmet pesticide use by PUR database crops for 10 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	2	0	0	0	0	0	0
	Pounds	90	0	0	0	0	0	0
pear	Apps	0	5	0	2	0	0	0
	Pounds	0	73	0	38	0	0	0
nectarine	Apps	6	7	5	11	9	12	1
	Pounds	322	289	256	506	398	359	17
peach	Apps	10	1	6	10	4	19	4
	Pounds	155	15	195	284	159	542	127
plum	Apps	29	23	4	5	11	1	6
	Pounds	1046	868	118	169	440	35	335
pistachio	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	34	0
grapes (table/raisin)	Apps	0	1	0	0	0	0	1
	Pounds	0	14	0	0	0	0	14
grapes (wine)	Apps	0	0	1	2	0	0	0
	Pounds	0	0	25	9	0	0	0

Simazine pesticide use by PUR database crops for 10 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	1	0	0	0	0	0	0
	Pounds	10	0	0	0	0	0	0
pear	Apps	0	4	2	0	0	1	0
	Pounds	0	8	6	0	0	2	0
walnut	Apps	1	6	3	5	2	3	5
	Pounds	12	108	21	77	11	15	54
nectarine	Apps	5	2	8	2	4	4	1
	Pounds	37	33	106	34	67	37	1
peach	Apps	5	8	8	0	5	5	1
	Pounds	19	50	64	0	91	40	4
plum	Apps	0	0	1	0	1	0	0
	Pounds	0	0	2	0	14	0	0
grapefruit	Apps	2	0	0	0	0	0	0
	Pounds	29	0	0	0	0	0	0
grapes (table/raisin)	Apps	18	21	7	5	5	5	6
	Pounds	175	219	56	78	91	93	83
orange	Apps	5	3	1	1	2	1	0
	Pounds	437	343	54	50	86	63	0
grapes (wine)	Apps	5	10	1	1	3	0	1
	Pounds	32	122	4	42	41	0	4
almond	Apps	0	0	1	1	0	1	0
	Pounds	0	0	8	31	0	31	0

Trifluralin pesticide use by PUR database crops for 10 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
kiwi fruit	Apps	0	1	0	0	0	0	0
	Pounds	0	10	0	0	0	0	0

Pesticide Use Proximate to Participant 11

Chlorpyrifos pesticide use by PUR database crops for 11 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	0	0	1	0	0	0	0
	Pounds	0	0	21	0	0	0	0
alfalfa	Apps	4	4	4	10	7	15	6
	Pounds	106	65	62	253	100	266	87
corn (forage - fodder)	Apps	1	0	0	1	0	0	0
	Pounds	30	0	0	7	0	0	0
cotton (general)	Apps	2	0	0	0	0	1	0
	Pounds	73	0	0	0	0	63	0

Dicofol pesticide use by PUR database crops for 11 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
beans (dried)	Apps	0	2	0	1	0	3	0
	Pounds	0	73	0	36	0	96	0
cotton (general)	Apps	18	16	30	16	26	12	9
	Pounds	649	550	1143	974	823	541	474

Simazine pesticide use by PUR database crops for 11 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	1	0	2	1	1	0	0
	Pounds	14	0	10	5	5	0	0

Trifluralin pesticide use by PUR database crops for 11 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
cotton (general)	Apps	4	12	23	7	12	13	4
	Pounds	120	214	714	346	360	547	137
uncultivated agricultural areas	Apps	2	2	0	0	0	0	0
	Pounds	70	76	0	0	0	0	0
wheat (general)	Apps	0	5	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
corn (forage - fodder)	Apps	12	6	10	6	0	9	0
	Pounds	443	0	407	303	0	447	0
alfalfa	Apps	1	2	3	2	5	3	5
	Pounds	54	208	336	264	402	218	348
beans (dried)	Apps	0	8	1	1	0	2	0
	Pounds	0	144	32	12	0	36	0
tomatoes (fresh market)	Apps	1	0	0	0	0	0	0
	Pounds	26	0	0	0	0	0	0

Pesticide Use Proximate to Participant 12

Chlorpyrifos pesticide use by PUR database crops for 12 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
nectarine	Apps	0	1	0	0	0	0	0
	Pounds	0	17	0	0	0	0	0
peach	Apps	1	1	0	0	0	0	0
	Pounds	10	15	0	0	0	0	0
grapes (table/raisin)	Apps	5	5	4	7	7	9	5
	Pounds	476	279	282	372	373	356	225
orange	Apps	0	0	1	1	1	1	1
	Pounds	0	0	7	6	16	2	8

Dicofol pesticide use by PUR database crops for 12 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
grapes (table/raisin)	Apps	4	2	2	0	0	0	0
	Pounds	173	21	38	0	0	0	0

Iprodione pesticide use by PUR database crops for 12 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
cherry	Apps	0	0	0	0	0	0	1
	Pounds	0	0	0	0	0	0	10
nectarine	Apps	0	1	0	0	0	0	1
	Pounds	0	5	0	0	0	0	6
peach	Apps	0	1	0	0	0	0	1
	Pounds	0	4	0	0	0	0	8
grapes (table/raisin)	Apps	19	9	12	11	8	14	10
	Pounds	170	75	206	70	60	86	68
grapes (wine)	Apps	1	0	0	0	0	0	1
	Pounds	2	0	0	0	0	0	6

Phosmet pesticide use by PUR database crops for 12 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
nectarine	Apps	0	0	0	1	1	2	0
	Pounds	0	0	0	8	30	47	0
peach	Apps	1	0	0	0	0	1	0
	Pounds	10	0	0	0	0	17	0
grapes (table/raisin)	Apps	0	2	1	0	0	0	0
	Pounds	0	28	7	0	0	0	0
grapes (wine)	Apps	1	0	0	0	0	0	0
	Pounds	2	0	0	0	0	0	0

Simazine pesticide use by PUR database crops for 12 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apricot	Apps	0	0	0	1	0	0	0
	Pounds	0	0	0	1	0	0	0
peach	Apps	0	0	0	1	0	0	0
	Pounds	0	0	0	2	0	0	0
grapes (table/raisin)	Apps	46	39	11	11	4	6	5
	Pounds	888	765	169	158	60	58	82
grapes (wine)	Apps	2	2	0	0	0	1	0
	Pounds	6	4	0	0	0	1	0

Trifluralin pesticide use by PUR database crops for 12 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
soil preplant application	Apps	0	0	0	1	0	0	0
	Pounds	0	0	0	30	0	0	0
grapes (table/raisin)	Apps	2	0	0	0	0	0	0
	Pounds	27	0	0	0	0	0	0

Pesticide Use Proximate to Participant 13

Azinphos methyl pesticide use by PUR database crops for 13 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	0	1	0	0	0	1	0
	Pounds	0	25	0	0	0	13	0

Chlorpyrifos pesticide use by PUR database crops for 13 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	1	1	0	0	2	0	1
	Pounds	28	14	0	0	56	0	26
alfalfa	Apps	0	0	0	3	2	2	1
	Pounds	0	0	0	119	55	274	167
corn (forage - fodder)	Apps	0	0	1	0	0	0	0
	Pounds	0	0	20	0	0	0	0
sugarbeet (general)	Apps	0	3	0	0	0	0	0
	Pounds	0	204	0	0	0	0	0

Dicofol pesticide use by PUR database crops for 13 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
tomatoes (fresh market)	Apps	1	0	0	1	0	0	0
	Pounds	30	0	0	14	0	0	0

Simazine pesticide use by PUR database crops for 13 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	0	0	0	0	0	0	1
	Pounds	0	0	0	0	0	0	9

Trifluralin pesticide use by PUR database crops for 13 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	0	0	0	0	0	0	2
	Pounds	0	0	0	0	0	0	9
beans (fresh market)	Apps	0	0	1	0	0	0	0
	Pounds	0	0	56	0	0	0	0
safflower (general)	Apps	0	1	0	0	0	0	0
	Pounds	0	110	0	0	0	0	0
sugarbeet (general)	Apps	0	2	0	0	0	0	0
	Pounds	0	166	0	0	0	0	0
alfalfa	Apps	1	1	0	3	1	1	1
	Pounds	180	180	0	466	294	774	750
peppers	Apps	2	0	0	0	1	0	0
	Pounds	50	0	0	0	40	0	0
tomatoes (fresh market)	Apps	4	7	4	0	0	4	1
	Pounds	269	286	117	0	0	93	83

Pesticide Use Proximate to Participant 14

Chlorpyrifos pesticide use by PUR database crops for 14 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	1	2	0	0	0	0	0
	Pounds	20	28	0	0	0	0	0
onion (dry, spanish, white)	Apps	0	3	0	2	18	1	0
	Pounds	0	224	0	34	320	45	0
broccoli	Apps	0	0	0	1	1	8	0
	Pounds	0	0	0	6	5	90	0
cabbage	Apps	0	0	1	0	0	0	0
	Pounds	0	0	20	0	0	0	0

Iprodione pesticide use by PUR database crops for 14 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
cauliflower	Apps	0	0	1	2	4	0	0
	Pounds	0	0	20	12	49	0	0

Pesticide Use Proximate to Participant 15

Chlorpyrifos pesticide use by PUR database crops for 15 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
alfalfa	Apps	8	2	0	1	1	6	8
	Pounds	124	38	0	7	7	161	174
cotton (general)	Apps	0	0	3	0	0	0	0
	Pounds	0	0	37	0	0	0	0

Dicofol pesticide use by PUR database crops for 15 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
cotton (general)	Apps	14	0	0	6	2	8	5
	Pounds	430	0	0	438	69	391	292
cantaloupe	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0

Iprodione pesticide use by PUR database crops for 15 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	1	1	1	1	0	0	0
	Pounds	11	10	11	10	0	0	0

Phosmet pesticide use by PUR database crops for 15 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	1	0	0	0	0	0	0
	Pounds	70	0	0	0	0	0	0
alfalfa	Apps	17	5	3	0	1	2	0
	Pounds	472	131	74	0	42	106	0

Simazine pesticide use by PUR database crops for 15 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	2	0	1	0	0	0	0
	Pounds	18	0	9	0	0	0	0

Trifluralin pesticide use by PUR database crops for 15 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
alfalfa	Apps	14	17	23	15	17	21	22
	Pounds	1171	1270	1668	1158	1300	1770	1500
cantaloupe	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
cotton (general)	Apps	26	19	18	7	10	15	1
	Pounds	657	624	460	229	249	452	13

Pesticide Use Proximate to Participant 16

Azinphos methyl pesticide use by PUR database crops for 16 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	0	2	0	1	1	1	0
	Pounds	0	117	0	40	40	36	0
pistachio	Apps	0	0	0	1	0	0	0
	Pounds	0	0	0	3	0	0	0
plum	Apps	0	0	0	1	0	0	0
	Pounds	0	0	0	45	0	0	0

Chlorpyrifos pesticide use by PUR database crops for 16 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	4	2	2	1	1	2	4
	Pounds	146	97	33	36	20	64	157
peach	Apps	0	1	1	1	1	1	1
	Pounds	0	20	20	10	10	20	20
plum	Apps	1	1	1	5	2	2	1
	Pounds	24	24	20	440	76	114	60
citrus fruits	Apps	0	0	0	0	0	1	2
	Pounds	0	0	0	0	0	24	55
grapefruit	Apps	1	0	0	1	0	0	0
	Pounds	18	0	0	2	0	0	0
orange	Apps	15	12	10	14	13	5	29
	Pounds	1466	800	564	780	657	212	2609
tangelo	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	2	0
tangerine (mandarin satsuma murcott)	Apps	1	1	3	0	1	3	4
	Pounds	60	37	109	0	10	35	98
almond	Apps	0	1	0	0	0	0	0
	Pounds	0	6	0	0	0	0	0

Dicofol pesticide use by PUR database crops for 16 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	1	0	0	0	0	0	0
	Pounds	54	0	0	0	0	0	0
plum	Apps	0	0	0	1	0	0	0
	Pounds	0	0	0	60	0	0	0
orange	Apps	3	1	7	1	1	3	0
	Pounds	248	38	260	90	81	131	0

Iprodione pesticide use by PUR database crops for 16 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apricot	Apps	2	1	0	0	0	0	0
	Pounds	6	4	0	0	0	0	0
cherry	Apps	0	1	0	0	1	0	0
	Pounds	0	1	0	0	1	0	0
nectarine	Apps	0	0	0	0	0	1	1
	Pounds	0	0	0	0	0	2	2
peach	Apps	1	1	1	1	1	2	2
	Pounds	8	8	8	4	3	9	11
plum	Apps	1	2	1	0	0	0	4
	Pounds	2	10	2	0	0	0	14
prune	Apps	0	0	0	0	1	0	1
	Pounds	0	0	0	0	0	0	4
almond	Apps	1	1	0	0	0	0	0
	Pounds	1	1	0	0	0	0	0

Phosmet pesticide use by PUR database crops for 16 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	3	9	5	2	0	0	1
	Pounds	281	599	134	105	0	0	59
pear	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	8	0
apple	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	8	0
apricot	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	14	0
cherry	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	8	0
nectarine	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	18	0
peach	Apps	0	0	1	0	0	2	0
	Pounds	0	0	20	0	0	25	0
plum	Apps	0	8	0	1	7	11	11
	Pounds	0	309	0	168	481	508	461
prune	Apps	0	0	0	0	0	1	3
	Pounds	0	0	0	0	0	3	124

Simazine pesticide use by PUR database crops for 16 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	2	0	0	0	0	1	0
	Pounds	54	0	0	0	0	3	0
pear	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	3	0
walnut	Apps	4	4	3	2	0	4	4
	Pounds	84	78	69	54	0	103	120
cherry	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	3	0
nectarine	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	5	0
peach	Apps	0	0	0	0	0	2	0
	Pounds	0	0	0	0	0	8	0
plum	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	4	0
olive	Apps	1	0	4	0	1	1	0
	Pounds	90	0	225	0	45	45	0
citrus fruits	Apps	1	1	1	2	1	1	2
	Pounds	5	9	9	18	9	9	40
grapefruit	Apps	1	0	0	0	0	0	0
	Pounds	14	0	0	0	0	0	0
grapes (table/raisin)	Apps	0	0	0	0	1	0	0
	Pounds	0	0	0	0	9	0	0
orange	Apps	25	18	25	19	23	25	21
	Pounds	864	663	955	644	916	1262	943
tangerine (mandarin satsuma murcott)	Apps	0	0	0	0	1	0	0
	Pounds	0	0	0	0	7	0	0

Trifluralin pesticide use by PUR database crops for 16 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
tangerine (mandarin satsuma murcott)	Apps	0	0	2	0	0	0	0
	Pounds	0	0	42	0	0	0	0
uncultivated agricultural areas	Apps	0	1	0	0	0	0	0
	Pounds	0	45	0	0	0	0	0
plum	Apps	0	1	0	0	0	1	0
	Pounds	0	27	0	0	0	20	0
orange	Apps	0	1	4	0	0	0	0
	Pounds	0	20	63	0	0	0	0

Pesticide Use Proximate to Participant 17

Chlorpyrifos pesticide use by PUR database crops for 17 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	1	0	1	0	0	0	0
	Pounds	4	0	4	0	0	0	0
orange	Apps	2	0	3	0	0	0	0
	Pounds	316	0	374	0	0	0	0

Phosmet pesticide use by PUR database crops for 17 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
nectarine	Apps	3	1	0	0	0	0	0
	Pounds	49	24	0	0	0	0	0

Simazine pesticide use by PUR database crops for 17 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
nectarine	Apps	2	2	0	0	0	0	0
	Pounds	12	9	0	0	0	0	0
orange	Apps	1	2	2	1	1	0	0
	Pounds	90	54	68	27	27	0	0

Pesticide Use Proximate to Participant 18

Chlorpyrifos pesticide use by PUR database crops for 18 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
nectarine	Apps	1	1	1	0	0	0	0
	Pounds	28	26	26	0	0	0	0
peach	Apps	16	18	15	6	2	0	0
	Pounds	196	203	194	62	14	0	0
orange	Apps	0	0	0	1	0	0	0
	Pounds	0	0	0	3	0	0	0

Iprodione pesticide use by PUR database crops for 18 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apricot	Apps	4	1	1	1	1	0	0
	Pounds	74	19	14	9	8	0	0
nectarine	Apps	0	2	3	2	2	1	0
	Pounds	0	16	34	27	12	10	0
peach	Apps	6	22	23	6	4	0	0
	Pounds	26	82	104	15	11	0	0
plum	Apps	1	0	1	1	2	1	1
	Pounds	21	0	21	21	19	11	11
grapes (table/raisin)	Apps	1	0	0	0	0	0	0
	Pounds	23	0	0	0	0	0	0
grapes (wine)	Apps	1	1	0	0	0	0	0
	Pounds	3	2	0	0	0	0	0
strawberry	Apps	1	1	0	0	0	0	0
	Pounds	6	3	0	0	0	0	0
almond	Apps	1	2	1	0	1	0	0
	Pounds	10	15	10	0	5	0	0

Phosmet pesticide use by PUR database crops for 18 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
alfalfa	Apps	0	2	0	0	0	0	0
	Pounds	0	27	0	0	0	0	0
nectarine	Apps	0	0	0	0	0	0	2
	Pounds	0	0	0	0	0	0	46
peach	Apps	3	13	22	9	7	4	2
	Pounds	71	318	407	127	79	41	28

Simazine pesticide use by PUR database crops for 18 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	0	0	1	0	0	0	0
	Pounds	0	0	5	0	0	0	0
nectarine	Apps	0	0	1	0	2	0	0
	Pounds	0	0	5	0	14	0	0
peach	Apps	8	7	0	6	3	3	1
	Pounds	22	20	0	10	5	3	1
grapes (table/raisin)	Apps	0	0	1	0	0	0	0
	Pounds	0	0	40	0	0	0	0
grapes (wine)	Apps	0	0	1	0	0	0	0
	Pounds	0	0	7	0	0	0	0

Pesticide Use Proximate to Participant 19

Chlorpyrifos pesticide use by PUR database crops for 19 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
alfalfa	Apps	5	5	6	3	0	4	6
	Pounds	149	271	197	328	0	320	223
corn (forage - fodder)	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
prune	Apps	3	3	0	0	3	2	2
	Pounds	138	165	0	0	710	196	147
cotton (general)	Apps	2	4	0	0	0	0	0
	Pounds	291	389	0	0	0	0	0

Dicofol pesticide use by PUR database crops for 19 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
cotton (general)	Apps	0	3	0	0	0	0	0
	Pounds	0	291	0	0	0	0	0

Iprodione pesticide use by PUR database crops for 19 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
prune	Apps	3	0	0	0	0	0	0
	Pounds	67	0	0	0	0	0	0
grapes (wine)	Apps	0	1	0	0	0	2	0
	Pounds	0	58	0	0	0	113	0

Phosmet pesticide use by PUR database crops for 19 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
alfalfa	Apps	0	1	0	0	0	0	0
	Pounds	0	98	0	0	0	0	0
grapes (table/raisin)	Apps	0	2	0	0	0	0	0
	Pounds	0	203	0	0	0	0	0
grapes (wine)	Apps	0	2	0	0	0	0	0
	Pounds	0	203	0	0	0	0	0

Simazine pesticide use by PUR database crops for 19 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
grapes (table/raisin)	Apps	2	0	0	0	1	1	0
	Pounds	458	0	0	0	80	100	0
grapes (wine)	Apps	2	3	5	6	6	2	0
	Pounds	111	298	435	443	263	139	0

Trifluralin pesticide use by PUR database crops for 19 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
cotton (general)	Apps	9	1	1	0	0	0	0
	Pounds	577	72	17	0	0	0	0
peas (general)	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
soil preplant application	Apps	1	0	0	0	0	0	0
	Pounds	50	0	0	0	0	0	0
sugarbeet (general)	Apps	2	0	0	0	0	0	0
	Pounds	105	0	0	0	0	0	0
tomatoes (processing/canning)	Apps	6	3	4	0	2	0	0
	Pounds	159	52	194	0	84	0	0
alfalfa	Apps	2	0	1	0	2	0	0
	Pounds	297	0	280	0	582	0	0
onion (dry, spanish, white)	Apps	0	0	0	0	0	2	0
	Pounds	0	0	0	0	0	109	0
tomatoes (fresh market)	Apps	0	0	0	0	0	0	5
	Pounds	0	0	0	0	0	0	198

Pesticide Use Proximate to Participant 20

Chlorpyrifos pesticide use by PUR database crops for 20 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
alfalfa	Apps	9	7	3	5	5	7	1
	Pounds	219	116	15	110	177	149	25
cotton (general)	Apps	3	0	15	0	0	0	0
	Pounds	61	0	427	0	0	0	0

Iprodione pesticide use by PUR database crops for 20 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
onion (dry, spanish, white)	Apps	0	0	4	0	0	0	0
	Pounds	0	0	20	0	0	0	0
carrots general	Apps	0	0	4	0	0	0	0
	Pounds	0	0	319	0	0	0	0

Trifluralin pesticide use by PUR database crops for 20 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
alfalfa	Apps	0	0	0	1	0	2	2
	Pounds	0	0	0	80	0	289	258
carrots general	Apps	0	0	1	0	0	0	0
	Pounds	0	0	155	0	0	0	0
cotton (general)	Apps	0	1	4	14	6	0	6
	Pounds	0	35	127	436	131	0	198

Pesticide Use Proximate to Participant 21

Azinphos methyl pesticide use by PUR database crops for 21 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	2	1	0	0	0	0	0
	Pounds	16	6	0	0	0	0	0
pistachio	Apps	2	0	0	0	0	0	0
	Pounds	45	0	0	0	0	0	0

Chlorpyrifos pesticide use by PUR database crops for 21 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	2	1	2	1	0	0	0
	Pounds	36	17	36	18	0	0	0
nectarine	Apps	0	1	2	1	1	0	0
	Pounds	0	17	59	24	24	0	0
peach	Apps	1	3	1	1	1	1	0
	Pounds	10	33	10	10	10	10	0
grapes (table/raisin)	Apps	2	3	2	6	8	6	2
	Pounds	284	152	163	281	395	225	113

Dicofol pesticide use by PUR database crops for 21 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
grapes (table/raisin)	Apps	6	0	1	0	0	0	0
	Pounds	201	0	25	0	0	0	0

Iprodione pesticide use by PUR database crops for 21 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
nectarine	Apps	0	1	1	0	0	0	1
	Pounds	0	5	15	0	0	0	6
peach	Apps	1	1	0	0	0	0	1
	Pounds	4	4	0	0	0	0	8
grapes (table/raisin)	Apps	13	6	7	3	3	8	7
	Pounds	181	56	100	12	41	54	52
grapes (wine)	Apps	1	0	0	0	0	0	1
	Pounds	5	0	0	0	0	0	6

Phosmet pesticide use by PUR database crops for 21 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	3	3	2	2	0	0	0
	Pounds	111	112	101	66	0	0	0
apricot	Apps	2	3	3	1	0	0	1
	Pounds	28	33	10	4	0	0	16
nectarine	Apps	0	0	2	1	2	4	1
	Pounds	0	0	89	8	63	152	34
peach	Apps	0	1	0	1	0	2	2
	Pounds	0	14	0	14	0	31	16
plum	Apps	1	0	0	0	0	0	1
	Pounds	17	0	0	0	0	0	16
grapes (table/raisin)	Apps	0	0	0	0	1	0	0
	Pounds	0	0	0	0	14	0	0
grapes (wine)	Apps	1	0	0	0	0	0	0
	Pounds	5	0	0	0	0	0	0

Simazine pesticide use by PUR database crops for 21 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
peach	Apps	0	1	0	0	0	0	0
	Pounds	0	5	0	0	0	0	0
grapes (table/raisin)	Apps	40	37	27	27	16	12	7
	Pounds	536	673	629	526	249	211	144
grapes (wine)	Apps	3	3	3	6	2	0	2
	Pounds	73	19	61	105	18	0	18

Pesticide Use Proximate to Participant 22

Azinphos methyl pesticide use by PUR database crops for 22 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	0	0	5	3	0	0	0
	Pounds	0	0	87	90	0	0	0
nectarine	Apps	3	1	2	0	0	3	0
	Pounds	43	14	27	0	0	44	0
peach	Apps	0	0	0	1	0	0	0
	Pounds	0	0	0	12	0	0	0

Chlorpyrifos pesticide use by PUR database crops for 22 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	0	8	3	0	0	0	0
	Pounds	0	190	72	0	0	0	0
pear	Apps	0	0	1	1	0	0	1
	Pounds	0	0	6	2	0	0	4
nectarine	Apps	13	6	4	5	7	5	12
	Pounds	196	98	36	54	119	62	167
peach	Apps	12	9	6	5	5	3	4
	Pounds	284	157	166	96	114	31	71
plum	Apps	6	7	4	4	4	5	3
	Pounds	50	129	51	50	119	85	32
grapes (table/raisin)	Apps	7	12	13	4	3	15	16
	Pounds	246	162	295	265	220	423	685
orange	Apps	0	1	0	0	2	0	0
	Pounds	0	2	0	0	276	0	0
tangerine (mandarin sat- suma murcott)	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
almond	Apps	1	1	0	0	0	0	0
	Pounds	20	28	0	0	0	0	0

Dicofol pesticide use by PUR database crops for 22 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	5	4	0	0	0	0	0
	Pounds	106	144	0	0	0	0	0
nectarine	Apps	6	0	0	0	0	0	0
	Pounds	55	0	0	0	0	0	0
peach	Apps	8	1	2	0	0	0	0
	Pounds	103	4	6	0	0	0	0
plum	Apps	2	2	1	1	0	0	0
	Pounds	18	43	6	50	0	0	0
grapes (table/raisin)	Apps	7	1	2	0	0	0	0
	Pounds	137	18	34	0	0	0	0

Iprodione pesticide use by PUR database crops for 22 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apricot	Apps	15	8	3	5	2	0	0
	Pounds	160	83	45	31	14	0	0
nectarine	Apps	0	2	2	0	3	6	0
	Pounds	0	18	14	0	25	35	0
peach	Apps	3	1	5	4	5	6	2
	Pounds	8	4	20	11	24	35	1
plum	Apps	6	5	2	2	3	4	2
	Pounds	15	31	6	7	26	7	20
grapes (table/raisin)	Apps	34	4	8	6	6	15	4
	Pounds	267	50	442	78	75	127	84
grapes (wine)	Apps	3	3	1	1	0	0	0
	Pounds	30	32	27	9	0	0	0
almond	Apps	1	1	0	0	0	0	0
	Pounds	5	33	0	0	0	0	0

Phosmet pesticide use by PUR database crops for 22 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	7	21	13	4	0	0	0
	Pounds	471	155	717	413	0	0	0
pear	Apps	0	0	1	0	0	0	0
	Pounds	0	0	8	0	0	0	0
apricot	Apps	3	3	3	3	3	3	0
	Pounds	146	155	155	155	155	153	0
nectarine	Apps	11	10	5	4	6	2	10
	Pounds	171	211	98	92	88	25	177
peach	Apps	10	9	5	8	12	1	6
	Pounds	112	71	160	169	362	10	125
plum	Apps	3	3	0	0	3	0	0
	Pounds	18	33	0	0	147	0	0
grapes (table/raisin)	Apps	1	11	9	2	0	0	1
	Pounds	14	316	157	38	0	0	6
grapes (wine)	Apps	1	7	2	0	0	0	0
	Pounds	14	90	20	0	0	0	0
almond	Apps	0	1	0	0	0	0	0
	Pounds	0	37	0	0	0	0	0

Simazine pesticide use by PUR database crops for 22 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
nectarine	Apps	3	4	2	4	3	2	4
	Pounds	17	19	7	25	33	26	34
peach	Apps	0	0	0	0	1	1	4
	Pounds	0	0	0	0	18	7	38
plum	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	8	0
grapes (table/raisin)	Apps	28	10	32	8	12	3	19
	Pounds	532	130	334	141	97	184	230
orange	Apps	0	0	0	0	0	0	2
	Pounds	0	0	0	0	0	0	84
grapes (wine)	Apps	0	0	0	0	0	0	1
	Pounds	0	0	0	0	0	0	16

Trifluralin pesticide use by PUR database crops for 22 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
peach	Apps	0	0	0	0	1	0	0
	Pounds	0	0	0	0	4	0	0
grapes (table/raisin)	Apps	0	0	1	1	1	1	0
	Pounds	0	0	4	4	10	18	0
grapes (wine)	Apps	0	0	0	0	1	3	0
	Pounds	0	0	0	0	1	30	0

Pesticide Use Proximate to Participant 23

Chlorpyrifos pesticide use by PUR database crops for 23 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
nectarine	Apps	0	1	0	0	0	0	0
	Pounds	0	17	0	0	0	0	0
peach	Apps	1	1	0	0	0	0	0
	Pounds	10	15	0	0	0	0	0
grapes (table/raisin)	Apps	5	5	4	7	7	9	5
	Pounds	476	279	282	372	373	356	225
orange	Apps	0	0	1	1	1	1	1
	Pounds	0	0	7	6	16	2	8

Dicofol pesticide use by PUR database crops for 23 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
grapes (table/raisin)	Apps	4	2	2	0	0	0	0
	Pounds	173	21	38	0	0	0	0

Iprodione pesticide use by PUR database crops for 23 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
cherry	Apps	0	0	0	0	0	0	1
	Pounds	0	0	0	0	0	0	10
nectarine	Apps	0	1	0	0	0	0	1
	Pounds	0	5	0	0	0	0	6
peach	Apps	0	1	0	0	0	0	1
	Pounds	0	4	0	0	0	0	8
grapes (table/raisin)	Apps	19	9	12	11	8	14	10
	Pounds	170	75	206	70	60	86	68
grapes (wine)	Apps	1	0	0	0	0	0	1
	Pounds	2	0	0	0	0	0	6

Phosmet pesticide use by PUR database crops for 23 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
nectarine	Apps	0	0	0	1	1	2	0
	Pounds	0	0	0	8	30	47	0
peach	Apps	1	0	0	0	0	1	0
	Pounds	10	0	0	0	0	17	0
grapes (table/raisin)	Apps	0	2	1	0	0	0	0
	Pounds	0	28	7	0	0	0	0
grapes (wine)	Apps	1	0	0	0	0	0	0
	Pounds	2	0	0	0	0	0	0

Simazine pesticide use by PUR database crops for 23 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apricot	Apps	0	0	0	1	0	0	0
	Pounds	0	0	0	1	0	0	0
peach	Apps	0	0	0	1	0	0	0
	Pounds	0	0	0	2	0	0	0
grapes (table/raisin)	Apps	46	39	11	11	4	6	5
	Pounds	888	765	169	158	60	58	82
grapes (wine)	Apps	2	2	0	0	0	1	0
	Pounds	6	4	0	0	0	1	0

Trifluralin pesticide use by PUR database crops for 23 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
soil preplant application	Apps	0	0	0	1	0	0	0
	Pounds	0	0	0	30	0	0	0
grapes (table/raisin)	Apps	2	0	0	0	0	0	0
	Pounds	27	0	0	0	0	0	0

Pesticide Use Proximate to Participant 24

Simazine pesticide use by PUR database crops for 24 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
grapes (wine)	Apps	0	0	0	1	0	1	2
	Pounds	0	0	0	8	0	25	40

Pesticide Use Proximate to Participant 25

Azinphos methyl pesticide use by PUR database crops for 25 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	2	1	0	0	0	0	0
	Pounds	99	36	0	0	0	0	0

Chlorpyrifos pesticide use by PUR database crops for 25 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	15	21	4	9	10	5	22
	Pounds	1057	1481	215	590	604	319	2653
alfalfa	Apps	2	0	0	0	0	0	0
	Pounds	38	0	0	0	0	0	0

Dicofol pesticide use by PUR database crops for 25 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
watermelons	Apps	0	0	0	0	1	0	0
	Pounds	0	0	0	0	9	0	0
grapes (wine)	Apps	0	0	0	0	0	0	1
	Pounds	0	0	0	0	0	0	1

Iprodione pesticide use by PUR database crops for 25 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	27	22	29	22	8	20	14
	Pounds	597	517	586	498	119	706	561
onion (dry, spanish, white)	Apps	1	0	0	0	0	0	0
	Pounds	4	0	0	0	0	0	0
peach	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	7	0
grapes (wine)	Apps	6	4	2	0	0	0	0
	Pounds	205	158	68	0	0	0	0

Phosmet pesticide use by PUR database crops for 25 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	1	1	0	0	2	0	0
	Pounds	72	256	0	0	196	0	0

Simazine pesticide use by PUR database crops for 25 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	10	19	14	12	23	31	26
	Pounds	341	429	284	300	425	663	574
grapes (table/raisin)	Apps	1	0	0	1	1	0	1
	Pounds	6	0	0	16	16	0	21
grapes (wine)	Apps	8	5	3	3	4	4	2
	Pounds	446	171	203	200	200	143	73

Trifluralin pesticide use by PUR database crops for 25 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
beans (dried)	Apps	1	2	2	2	0	0	0
	Pounds	10	20	11	13	0	0	0
almond	Apps	0	1	0	0	0	0	0
	Pounds	0	223	0	0	0	0	0
grapes (wine)	Apps	2	0	0	0	0	0	0
	Pounds	158	0	0	0	0	0	0
alfalfa	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	80	0

Pesticide Use Proximate to Participant 26

Chlorpyrifos pesticide use by PUR database crops for 26 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	1	0	0	0	0	0	0
	Pounds	15	0	0	0	0	0	0
peach	Apps	3	0	0	0	1	0	1
	Pounds	16	0	0	0	24	0	2
grapes (table/raisin)	Apps	1	2	0	0	2	0	0
	Pounds	27	58	0	0	20	0	0

Dicofol pesticide use by PUR database crops for 26 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
grapes (table/raisin)	Apps	0	2	1	0	0	0	0
	Pounds	0	21	13	0	0	0	0

Iprodione pesticide use by PUR database crops for 26 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
cherry	Apps	0	0	0	0	1	1	2
	Pounds	0	0	0	0	1	0	17
grapes (table/raisin)	Apps	9	7	7	3	2	3	6
	Pounds	165	113	180	59	49	63	68
peach	Apps	1	0	1	2	1	0	0
	Pounds	12	0	10	15	8	0	0
plum	Apps	2	2	0	0	0	0	0
	Pounds	5	8	0	0	0	0	0
grapes (wine)	Apps	1	0	0	0	0	0	1
	Pounds	6	0	0	0	0	0	6

Phosmet pesticide use by PUR database crops for 26 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
grapes (table/raisin)	Apps	0	3	1	0	0	0	0
	Pounds	0	52	7	0	0	0	0
peach	Apps	5	5	5	1	6	0	2
	Pounds	135	178	180	56	198	0	42
plum	Apps	2	0	2	1	0	1	0
	Pounds	29	0	20	42	0	70	0
grapes (wine)	Apps	1	0	0	0	0	0	0
	Pounds	6	0	0	0	0	0	0

Simazine pesticide use by PUR database crops for 26 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
peach	Apps	1	0	1	2	1	0	0
	Pounds	6	0	10	12	6	0	0
grapes (table/raisin)	Apps	41	40	9	8	7	7	4
	Pounds	667	865	150	169	123	84	57
grapes (wine)	Apps	5	4	0	1	0	1	0
	Pounds	47	30	0	5	0	4	0

Trifluralin pesticide use by PUR database crops for 26 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
grapes (table/raisin)	Apps	2	0	0	0	0	0	0
	Pounds	27	0	0	0	0	0	0

Pesticide Use Proximate to Participant 27

Chlorpyrifos pesticide use by PUR database crops for 27 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
alfalfa	Apps	2	3	1	5	9	21	8
	Pounds	107	75	40	130	203	617	271
cotton (general)	Apps	0	6	0	1	0	0	0
	Pounds	0	127	0	80	0	0	0

Iprodione pesticide use by PUR database crops for 27 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
onion (dry, spanish, white)	Apps	0	1	0	0	0	0	0
	Pounds	0	8	0	0	0	0	0
carrots general	Apps	1	0	3	0	0	0	2
	Pounds	45	0	166	0	0	0	108

Pendimethalin pesticide use by PUR database crops for 27 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
cotton (general)	Apps	0	3	0	2	0	0	0
	Pounds	0	56	0	58	0	0	0
onion (dry, spanish, white)	Apps	0	1	0	0	0	0	0
	Pounds	0	6	0	0	0	0	0

Trifluralin pesticide use by PUR database crops for 27 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
cotton (general)	Apps	0	5	0	0	0	0	0
	Pounds	0	64	0	0	0	0	0
carrots general	Apps	0	0	1	0	0	0	2
	Pounds	0	0	34	0	0	0	48

Pesticide Use Proximate to Participant 28

Azinphos methyl pesticide use by PUR database crops for 28 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
nectarine	Apps	4	1	2	0	0	1	0
	Pounds	60	14	30	0	0	14	0
peach	Apps	2	3	2	0	0	4	0
	Pounds	26	37	22	0	0	53	0
plum	Apps	0	0	0	0	0	2	0
	Pounds	0	0	0	0	0	24	0

Chlorpyrifos pesticide use by PUR database crops for 28 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	1	0	0	0	0	0	0
	Pounds	2	0	0	0	0	0	0
nectarine	Apps	12	3	9	7	10	7	7
	Pounds	246	28	80	60	82	65	59
peach	Apps	13	7	12	16	9	9	11
	Pounds	243	158	119	165	88	146	100
plum	Apps	9	5	13	9	5	7	3
	Pounds	182	34	149	108	38	123	13
prune	Apps	0	2	0	1	0	0	0
	Pounds	0	82	0	80	0	0	0
grapes (table/raisin)	Apps	6	11	8	1	0	5	5
	Pounds	127	226	151	36	0	107	107
orange	Apps	1	0	0	0	0	0	1
	Pounds	2	0	0	0	0	0	3
almond	Apps	1	1	0	0	0	1	0
	Pounds	3	42	0	0	0	48	0

Dicofol pesticide use by PUR database crops for 28 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
citrus fruits	Apps	2	0	0	0	0	0	0
	Pounds	2	0	0	0	0	0	0
nectarine	Apps	2	0	0	0	0	0	0
	Pounds	33	0	0	0	0	0	0
peach	Apps	3	0	0	0	0	0	0
	Pounds	39	0	0	0	0	0	0
plum	Apps	2	0	0	0	0	0	0
	Pounds	28	0	0	0	0	0	0
grapes (table/raisin)	Apps	5	0	1	0	0	0	0
	Pounds	66	0	13	0	0	0	0

Iprodione pesticide use by PUR database crops for 28 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
nectarine	Apps	3	3	2	0	1	3	0
	Pounds	34	11	8	0	10	6	0
peach	Apps	2	5	7	0	1	4	0
	Pounds	16	43	41	0	10	9	0
plum	Apps	3	3	5	0	0	0	0
	Pounds	34	11	40	0	0	0	0
prune	Apps	2	0	0	0	0	0	0
	Pounds	40	0	0	0	0	0	0
grapes (table/raisin)	Apps	28	0	0	0	0	0	0
	Pounds	172	0	0	0	0	0	0
strawberry	Apps	1	4	1	0	0	0	0
	Pounds	1	8	3	0	0	0	0
almond	Apps	1	2	1	0	0	1	0
	Pounds	12	24	12	0	0	8	0
onion (dry, spanish, white)	Apps	4	4	0	0	0	1	0
	Pounds	65	90	0	0	0	20	0

Phosmet pesticide use by PUR database crops for 28 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	1	1	0	0	0	0	0
	Pounds	2	2	0	0	0	0	0
nectarine	Apps	6	8	8	2	7	4	10
	Pounds	70	104	140	32	79	45	105
peach	Apps	7	14	7	11	7	4	13
	Pounds	90	336	192	334	233	93	186
plum	Apps	4	4	5	5	1	1	7
	Pounds	113	75	143	129	3	7	77
grapes (table/raisin)	Apps	2	3	1	0	0	0	0
	Pounds	17	67	46	0	0	0	0
grapes (wine)	Apps	0	1	0	0	0	0	0
	Pounds	0	56	0	0	0	0	0

Simazine pesticide use by PUR database crops for 28 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
nectarine	Apps	9	8	0	4	0	1	7
	Pounds	40	42	0	25	0	1	48
peach	Apps	9	11	0	11	0	2	11
	Pounds	40	60	0	57	0	3	106
plum	Apps	5	2	0	0	0	2	0
	Pounds	28	9	0	0	0	15	0
prune	Apps	0	0	0	1	0	0	0
	Pounds	0	0	0	27	0	0	0
grapes (table/raisin)	Apps	61	56	62	37	34	18	43
	Pounds	1032	888	882	519	541	409	996
grapes (wine)	Apps	2	3	0	0	0	1	2
	Pounds	39	53	0	0	0	18	89
almond	Apps	1	1	0	0	0	0	0
	Pounds	7	3	0	0	0	0	0
buildings and structures (non-ag outdoor)	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0

Trifluralin pesticide use by PUR database crops for 28 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
soil preplant application	Apps	0	0	0	0	1	0	0
	Pounds	0	0	0	0	4	0	0
grapes (table/raisin)	Apps	0	0	0	4	0	0	0
	Pounds	0	0	0	4	0	0	0
okra (gumbo)	Apps	0	0	1	0	0	0	0
	Pounds	0	0	4	0	0	0	0

Pesticide Use Proximate to Participant 29

Chlorpyrifos pesticide use by PUR database crops for 29 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	2	0	0	0	0	2	1
	Pounds	76	0	0	0	0	99	40
walnut	Apps	3	0	3	0	0	0	3
	Pounds	340	0	600	0	0	0	594
corn (forage - fodder)	Apps	0	3	0	1	0	0	0
	Pounds	0	45	0	10	0	0	0
alfalfa	Apps	34	7	1	1	1	1	3
	Pounds	768	141	38	38	80	38	83

Dicofol pesticide use by PUR database crops for 29 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
beans (dried)	Apps	1	0	1	0	0	0	0
	Pounds	10	0	40	0	0	0	0
cucumber (pickling chinese etc.)	Apps	1	0	0	0	0	0	0
	Pounds	3	0	0	0	0	0	0
beans succulent (other than lima)	Apps	0	2	7	7	1	3	2
	Pounds	0	90	260	291	40	118	65
squash	Apps	1	0	0	0	0	0	0
	Pounds	1	0	0	0	0	0	0
cotton (general)	Apps	0	2	0	0	0	0	0
	Pounds	0	50	0	0	0	0	0

Iprodione pesticide use by PUR database crops for 29 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	5	1	2	0	0	0	3
	Pounds	105	8	38	0	0	0	147

Phosmet pesticide use by PUR database crops for 29 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
alfalfa	Apps	0	3	0	0	0	0	0
	Pounds	0	53	0	0	0	0	0

Simazine pesticide use by PUR database crops for 29 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	0	0	5	0	2	2	2
	Pounds	0	0	119	0	209	25	81
walnut	Apps	0	0	3	0	0	2	1
	Pounds	0	0	167	0	0	101	80

Trifluralin pesticide use by PUR database crops for 29 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
cauliflower	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
beans (dried)	Apps	0	0	0	0	0	1	1
	Pounds	0	0	0	0	0	29	31
beans succulent (other than lima)	Apps	0	0	4	1	0	0	1
	Pounds	0	0	70	16	0	0	17
tomatoes (processing/canning)	Apps	0	0	0	0	2	2	4
	Pounds	0	0	0	0	55	38	63
alfalfa	Apps	2	2	3	0	0	0	1
	Pounds	120	120	300	0	0	0	20

Pesticide Use Proximate to Participant 30

Azinphos methyl pesticide use by PUR database crops for 30 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
pear	Apps	1	1	2	0	1	0	0
	Pounds	5	3	5	0	5	0	0
plum	Apps	1	0	1	0	0	0	0
	Pounds	15	0	8	0	0	0	0
apple	Apps	0	0	2	5	3	0	0
	Pounds	0	0	44	89	45	0	0

Chlorpyrifos pesticide use by PUR database crops for 30 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	1	1	1	1	1	2	1
	Pounds	16	15	15	16	16	32	13
pear	Apps	2	6	6	5	6	7	1
	Pounds	5	191	193	206	258	283	8
apple	Apps	1	8	14	9	2	2	2
	Pounds	1	278	377	205	62	59	59
apricot	Apps	0	1	0	0	0	0	0
	Pounds	0	14	0	0	0	0	0
nectarine	Apps	29	46	42	24	18	19	12
	Pounds	243	708	772	534	183	217	136
peach	Apps	21	33	33	17	8	6	4
	Pounds	248	538	561	313	118	179	81
plum	Apps	18	34	29	19	19	16	11
	Pounds	168	402	365	211	204	703	56
citrus fruits	Apps	0	0	3	0	0	0	1
	Pounds	0	0	3	0	0	0	6
grapes (table/raisin)	Apps	2	2	2	0	1	0	0
	Pounds	74	12	42	0	40	0	0
orange	Apps	1	0	0	0	0	0	0
	Pounds	18	0	0	0	0	0	0
tangerine (mandarin satsuma murcott)	Apps	0	0	0	0	0	1	1
	Pounds	0	0	0	0	0	60	50
almond	Apps	1	2	2	2	2	3	1
	Pounds	228	153	424	455	456	491	74

Dicofol pesticide use by PUR database crops for 30 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
nectarine	Apps	3	0	0	0	0	1	0
	Pounds	43	0	0	0	0	11	0
pear	Apps	1	1	0	0	0	0	0
	Pounds	4	9	0	0	0	0	0
peach	Apps	2	0	0	0	0	1	0
	Pounds	25	0	0	0	0	13	0
plum	Apps	2	0	0	0	0	0	0
	Pounds	64	0	0	0	0	0	0

Iprodione pesticide use by PUR database crops for 30 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apricot	Apps	9	5	4	4	0	4	2
	Pounds	20	11	17	5	0	21	9
nectarine	Apps	38	52	46	28	17	16	25
	Pounds	172	235	215	132	133	128	147
peach	Apps	26	35	29	24	15	10	30
	Pounds	105	158	167	127	93	84	118
plum	Apps	33	25	23	30	17	17	28
	Pounds	185	175	142	153	179	99	135
grapes (table/raisin)	Apps	2	0	0	0	0	0	0
	Pounds	141	0	0	0	0	0	0
almond	Apps	1	1	0	1	1	2	3
	Pounds	8	57	0	15	10	100	33

Phosmet pesticide use by PUR database crops for 30 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	2	3	4	4	0	0	2
	Pounds	32	59	66	116	0	0	6
pear	Apps	3	12	1	5	6	13	0
	Pounds	15	91	6	81	109	405	0
apricot	Apps	5	0	0	0	0	0	0
	Pounds	28	0	0	0	0	0	0
cherry	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
nectarine	Apps	13	35	14	49	55	32	35
	Pounds	378	845	326	1115	1673	1031	844
peach	Apps	16	24	11	21	20	18	17
	Pounds	416	679	253	519	401	625	344
plum	Apps	11	10	13	7	25	17	22
	Pounds	366	268	418	106	1064	243	914
grapes (table/raisin)	Apps	0	0	1	0	0	0	0
	Pounds	0	0	56	0	0	0	0
grapes (wine)	Apps	0	0	1	1	0	0	0
	Pounds	0	0	29	29	0	0	0
almond	Apps	0	1	0	0	0	0	0
	Pounds	0	346	0	0	0	0	0

Simazine pesticide use by PUR database crops for 30 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	2	5	4	3	3	0	0
	Pounds	11	55	18	14	14	0	0
pear	Apps	0	5	5	4	4	5	1
	Pounds	0	43	43	52	45	50	1
nectarine	Apps	17	38	31	28	49	25	25
	Pounds	79	208	201	138	273	175	75
peach	Apps	16	38	26	23	31	19	21
	Pounds	100	181	146	131	142	117	79
plum	Apps	0	1	0	0	2	0	0
	Pounds	0	4	0	0	5	0	0
citrus fruits	Apps	0	0	0	0	2	0	2
	Pounds	0	0	0	0	29	0	11
grapes (table/raisin)	Apps	7	10	5	9	5	3	6
	Pounds	132	218	120	171	51	15	192
grapes (wine)	Apps	1	1	1	2	2	1	1
	Pounds	19	19	8	84	24	1	19
almond	Apps	0	0	1	1	3	1	2
	Pounds	0	0	37	37	77	6	40

Trifluralin pesticide use by PUR database crops for 30 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
citrus fruits	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	22	0
almond	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	66	0
pastures	Apps	1	0	1	0	0	0	0
	Pounds	13	0	12	0	0	0	0
peach	Apps	1	0	0	0	0	0	0
	Pounds	6	0	0	0	0	0	0

Pesticide Use Proximate to Participant 31

Chlorpyrifos pesticide use by PUR database crops for 31 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
alfalfa	Apps	6	2	0	2	0	1	2
	Pounds	49	25	0	23	0	3	15
corn (forage - fodder)	Apps	2	0	0	0	0	2	1
	Pounds	51	0	0	0	0	17	6

Dicofol pesticide use by PUR database crops for 31 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
cotton (general)	Apps	5	8	1	0	1	0	0
	Pounds	134	329	18	0	23	0	0
cantaloupe	Apps	2	0	0	0	0	0	0
	Pounds	44	0	0	0	0	0	0

Iprodione pesticide use by PUR database crops for 31 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	0	1	1	0	0	0	0
	Pounds	0	3	3	0	0	0	0

Phosmet pesticide use by PUR database crops for 31 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	1	0	0	0	0	0	0
	Pounds	42	0	0	0	0	0	0
alfalfa	Apps	7	1	0	1	0	0	0
	Pounds	110	23	0	42	0	0	0

Trifluralin pesticide use by PUR database crops for 31 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
cotton (general)	Apps	13	12	14	13	13	10	9
	Pounds	343	725	366	335	341	207	239
barley (general)	Apps	0	0	1	0	0	0	0
	Pounds	0	0	43	0	0	0	0
tomatoes (processing/canning)	Apps	0	1	0	6	0	0	0
	Pounds	0	99	0	197	0	0	0
corn (forage - fodder)	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
alfalfa	Apps	6	6	7	13	9	7	10
	Pounds	315	404	469	842	556	468	960
tomatoes (fresh market)	Apps	0	0	2	1	1	5	1
	Pounds	0	0	33	47	60	95	28

Pesticide Use Proximate to Participant 32

Azinphos methyl pesticide use by PUR database crops for 32 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	0	0	0	3	3	0	0
	Pounds	0	0	0	45	45	0	0
plum	Apps	0	0	1	1	1	0	1
	Pounds	0	0	39	8	10	0	6

Chlorpyrifos pesticide use by PUR database crops for 32 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	0	5	8	6	1	0	0
	Pounds	0	134	124	106	22	0	0
pear	Apps	0	5	5	5	5	5	1
	Pounds	0	182	183	206	248	273	8
nectarine	Apps	32	53	60	32	38	16	15
	Pounds	250	820	931	555	448	188	143
peach	Apps	27	44	42	25	24	9	12
	Pounds	290	597	609	272	330	221	211
plum	Apps	27	46	36	23	25	14	17
	Pounds	334	446	374	216	187	260	133
grapes (table/raisin)	Apps	7	10	10	3	0	1	0
	Pounds	131	201	205	34	0	5	0
orange	Apps	1	1	1	0	1	0	0
	Pounds	18	7	9	0	12	0	0
tangerine (mandarin satsuma murcott)	Apps	1	1	1	0	1	1	2
	Pounds	2	20	5	0	35	26	66

Dicofol pesticide use by PUR database crops for 32 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
outdoor grown plants	Apps	2	1	0	0	0	0	0
	Pounds	3	1	0	0	0	0	0
nectarine	Apps	5	0	0	0	1	1	0
	Pounds	75	0	0	0	3	3	0
peach	Apps	1	0	0	0	0	1	0
	Pounds	8	0	0	0	0	13	0
plum	Apps	0	2	0	0	2	0	0
	Pounds	0	1	0	0	8	0	0
christmas tree plantations	Apps	0	0	0	1	1	0	0
	Pounds	0	0	0	1	1	0	0

Iprodione pesticide use by PUR database crops for 32 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apricot	Apps	9	5	3	5	2	1	3
	Pounds	20	11	7	5	3	8	14
nectarine	Apps	49	58	50	41	19	21	33
	Pounds	230	236	225	186	132	152	179
peach	Apps	32	41	39	33	18	15	33
	Pounds	122	176	212	166	111	113	142
plum	Apps	35	25	24	32	15	20	30
	Pounds	184	171	141	155	149	106	136
grapes (table/raisin)	Apps	7	0	3	0	0	0	1
	Pounds	161	0	8	0	0	0	1

Phosmet pesticide use by PUR database crops for 32 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	1	2	2	3	0	0	2
	Pounds	31	3	7	105	0	0	6
pear	Apps	0	11	0	2	3	5	0
	Pounds	0	87	0	22	56	342	0
apricot	Apps	6	0	0	0	0	0	0
	Pounds	49	0	0	0	0	0	0
nectarine	Apps	17	40	14	49	51	34	33
	Pounds	309	906	334	1124	1320	993	669
peach	Apps	22	22	15	15	18	22	19
	Pounds	384	479	282	359	303	688	417
plum	Apps	10	13	13	12	24	20	17
	Pounds	105	176	306	260	641	343	338
grapes (table/raisin)	Apps	0	0	0	0	0	0	1
	Pounds	0	0	0	0	0	0	55
grapes (wine)	Apps	0	0	1	1	0	0	0
	Pounds	0	0	29	29	0	0	0

Simazine pesticide use by PUR database crops for 32 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	2	4	4	3	3	0	0
	Pounds	11	34	18	14	14	0	0
pear	Apps	0	5	5	4	4	5	1
	Pounds	0	43	43	52	45	50	1
nectarine	Apps	34	44	44	40	58	27	35
	Pounds	132	208	304	156	360	183	122
peach	Apps	37	44	38	30	38	23	34
	Pounds	177	161	202	143	196	145	115
plum	Apps	5	0	1	0	2	0	1
	Pounds	24	0	14	0	6	0	10
grapes (table/raisin)	Apps	18	13	9	13	13	13	7
	Pounds	183	206	136	214	103	75	188
orange	Apps	1	0	0	0	0	0	0
	Pounds	4	0	0	0	0	0	0
grapes (wine)	Apps	1	1	1	1	2	1	1
	Pounds	19	19	8	19	24	1	19
tangerine (mandarin satsuma murcott)	Apps	2	1	0	0	1	0	1
	Pounds	13	8	0	0	10	0	10

Trifluralin pesticide use by PUR database crops for 32 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
tangerine (mandarin satsuma murcott)	Apps	1	2	0	0	0	0	0
	Pounds	2	4	0	0	0	0	0
peach	Apps	2	2	2	0	0	0	0
	Pounds	8	2	6	0	0	0	0
pastures	Apps	1	0	1	0	0	0	0
	Pounds	13	0	12	0	0	0	0
nectarine	Apps	2	3	4	0	0	0	0
	Pounds	4	4	20	0	0	0	0
grapes (table/raisin)	Apps	0	0	0	1	0	0	0
	Pounds	0	0	0	2	0	0	0

Pesticide Use Proximate to Participant 33

Azinphos methyl pesticide use by PUR database crops for 33 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	1	4	2	2	0	0	0
	Pounds	75	198	76	55	0	0	0

Chlorpyrifos pesticide use by PUR database crops for 33 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	8	6	4	4	0	3	3
	Pounds	321	189	175	225	0	86	138
cotton (general)	Apps	0	0	1	4	0	0	0
	Pounds	0	0	22	108	0	0	0
prune	Apps	0	1	1	1	0	0	0
	Pounds	0	168	335	335	0	0	0
corn (forage - fodder)	Apps	2	2	1	2	3	0	5
	Pounds	71	80	50	56	77	0	238
orange	Apps	1	1	0	0	0	0	0
	Pounds	60	112	0	0	0	0	0
alfalfa	Apps	1	0	1	9	0	9	2
	Pounds	11	0	15	90	0	225	38
grapes (table/raisin)	Apps	5	5	5	4	1	4	4
	Pounds	231	232	230	215	145	720	187

Dicofol pesticide use by PUR database crops for 33 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
beans (dried)	Apps	0	0	0	0	3	0	0
	Pounds	0	0	0	0	133	0	0
walnut	Apps	1	3	0	0	0	0	0
	Pounds	91	108	0	0	0	0	0
grapes (table/raisin)	Apps	0	1	0	0	0	0	0
	Pounds	0	1	0	0	0	0	0
cotton (general)	Apps	0	1	3	1	6	4	3
	Pounds	0	26	81	30	158	100	84

Iprodione pesticide use by PUR database crops for 33 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
plum	Apps	1	0	1	2	0	0	0
	Pounds	21	0	1	25	0	0	0
grapes (wine)	Apps	0	1	0	0	0	0	0
	Pounds	0	38	0	0	0	0	0

Methidathion pesticide use by PUR database crops for 33 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	1	1	2	1	0	0	0
	Pounds	60	49	81	1	0	0	0
plum	Apps	1	1	1	0	0	0	0
	Pounds	125	77	100	0	0	0	0

Phosmet pesticide use by PUR database crops for 33 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	9	8	5	2	2	3	5
	Pounds	703	652	433	73	356	424	681
plum	Apps	0	0	0	2	8	0	0
	Pounds	0	0	0	196	466	0	0
alfalfa	Apps	0	0	0	0	0	2	2
	Pounds	0	0	0	0	0	53	53

Simazine pesticide use by PUR database crops for 33 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
uncultivated agricultural areas	Apps	0	0	0	1	0	0	0
	Pounds	0	0	0	923	0	0	0
walnut	Apps	7	9	4	1	7	2	3
	Pounds	168	215	105	9	189	79	71
grapes (table/raisin)	Apps	10	10	7	5	5	5	3
	Pounds	108	89	52	87	18	80	25
grapes (wine)	Apps	6	7	4	2	0	0	0
	Pounds	265	278	75	39	0	0	0

Trifluralin pesticide use by PUR database crops for 33 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	0	0	0	0	0	0	1
	Pounds	0	0	0	0	0	0	5
cotton (general)	Apps	0	5	0	1	6	8	7
	Pounds	0	151	0	22	226	286	217
orange	Apps	1	0	1	0	0	0	0
	Pounds	5	0	13	0	0	0	0
alfalfa	Apps	2	0	0	1	4	3	5
	Pounds	140	0	0	57	152	304	484
beans (dried)	Apps	0	1	0	0	3	0	0
	Pounds	0	55	0	0	66	0	0
outdoor grown plants	Apps	0	2	0	0	0	0	0
	Pounds	0	97	0	0	0	0	0

Pesticide Use Proximate to Participant 34

Chlorpyrifos pesticide use by PUR database crops for 34 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
pecan	Apps	0	1	0	0	0	0	0
	Pounds	0	6	0	0	0	0	0
apple	Apps	3	0	0	0	0	0	0
	Pounds	63	0	0	0	0	0	0
walnut	Apps	0	0	1	0	0	0	0
	Pounds	0	0	28	0	0	0	0
nectarine	Apps	0	0	4	0	2	1	0
	Pounds	0	0	125	0	17	40	0
peach	Apps	6	2	5	0	2	0	1
	Pounds	50	7	67	0	20	0	10
plum	Apps	3	2	4	5	8	3	3
	Pounds	75	65	96	123	134	59	59
prune	Apps	2	2	2	2	0	0	0
	Pounds	48	89	92	48	0	0	0
grapefruit	Apps	1	0	1	1	1	0	1
	Pounds	48	0	45	48	48	0	40
grapes (table/raisin)	Apps	0	0	0	0	0	0	5
	Pounds	0	0	0	0	0	0	131
orange	Apps	1	1	1	1	1	2	1
	Pounds	48	4	45	48	48	10	40
almond	Apps	2	1	3	3	0	0	1
	Pounds	62	112	157	259	0	0	128

Dicofol pesticide use by PUR database crops for 34 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
peach	Apps	0	0	0	1	0	0	0
	Pounds	0	0	0	8	0	0	0

Iprodione pesticide use by PUR database crops for 34 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	1	1	1	1	0	0	0
	Pounds	13	18	20	24	0	0	0
nectarine	Apps	0	1	1	0	1	1	0
	Pounds	0	15	15	0	3	13	0
peach	Apps	11	3	1	0	1	0	0
	Pounds	15	4	4	0	4	0	0
plum	Apps	4	3	3	1	0	0	0
	Pounds	14	7	12	4	0	0	0
prune	Apps	2	2	2	2	0	0	0
	Pounds	18	36	40	18	0	0	0

Phosmet pesticide use by PUR database crops for 34 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	2	0	0	0	0	0	0
	Pounds	90	0	0	0	0	0	0
nectarine	Apps	0	1	0	5	2	1	0
	Pounds	0	15	0	214	62	28	0
peach	Apps	5	1	1	5	1	3	0
	Pounds	40	15	15	117	14	39	0
plum	Apps	1	4	0	4	0	0	0
	Pounds	8	41	0	66	0	0	0
grapes (wine)	Apps	0	0	0	2	0	0	0
	Pounds	0	0	0	9	0	0	0

Simazine pesticide use by PUR database crops for 34 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	0	1	1	1	0	0	1
	Pounds	0	9	9	9	0	0	16
apple	Apps	1	0	0	0	0	0	0
	Pounds	10	0	0	0	0	0	0
nectarine	Apps	1	1	4	0	3	0	0
	Pounds	6	6	88	0	61	0	0
peach	Apps	1	0	4	0	4	0	0
	Pounds	5	0	47	0	59	0	0
plum	Apps	0	0	0	0	1	0	0
	Pounds	0	0	0	0	14	0	0
grapefruit	Apps	2	0	0	0	0	0	0
	Pounds	29	0	0	0	0	0	0
grapes (table/raisin)	Apps	5	9	3	2	2	0	0
	Pounds	31	58	17	13	13	0	0
orange	Apps	2	1	0	0	0	0	0
	Pounds	29	14	0	0	0	0	0
grapes (wine)	Apps	5	7	2	1	6	0	0
	Pounds	43	94	50	42	143	0	0

Trifluralin pesticide use by PUR database crops for 34 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
kiwi fruit	Apps	0	1	0	0	0	0	0
	Pounds	0	10	0	0	0	0	0

Pesticide Use Proximate to Participant 35

Azinphos methyl pesticide use by PUR database crops for 35 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	0	1	1	0	0	0	0
	Pounds	0	4	20	0	0	0	0
pear	Apps	0	1	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
plum	Apps	0	1	0	0	0	0	0
	Pounds	0	8	0	0	0	0	0

Chlorpyrifos pesticide use by PUR database crops for 35 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	1	1	2	1	0	0	1
	Pounds	8	7	13	8	0	0	8
pear	Apps	1	1	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
cotton (general)	Apps	0	0	1	0	0	0	0
	Pounds	0	0	33	0	0	0	0
cherry	Apps	1	0	0	0	0	0	0
	Pounds	2	0	0	0	0	0	0
nectarine	Apps	1	0	0	2	2	3	0
	Pounds	1	0	0	26	27	28	0
peach	Apps	1	0	0	1	1	2	0
	Pounds	10	0	0	20	20	22	0
plum	Apps	1	0	0	1	2	2	0
	Pounds	16	0	0	0	16	16	0
citrus fruits	Apps	0	0	0	0	0	0	1
	Pounds	0	0	0	0	0	0	20
almond	Apps	3	1	2	1	5	2	2
	Pounds	123	35	68	90	140	76	27
grapefruit	Apps	0	0	0	0	0	0	1
	Pounds	0	0	0	0	0	0	0
lemon	Apps	0	0	0	0	0	0	1
	Pounds	0	0	0	0	0	0	1
orange	Apps	0	1	0	0	3	2	5
	Pounds	0	19	0	0	36	72	92
grapes (wine)	Apps	0	0	0	0	0	0	1
	Pounds	0	0	0	0	0	0	10
greenhouse grown plants in containers	Apps	2	3	1	3	6	6	7
	Pounds	0	0	0	0	0	0	0
alfalfa	Apps	0	0	0	4	1	0	0
	Pounds	0	0	0	142	27	0	0

Dacthal pesticide use by PUR database crops for 35 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
onion (dry, spanish, white)	Apps	1	0	0	0	0	0	0
	Pounds	11	0	0	0	0	0	0
broccoli	Apps	0	1	0	0	0	0	0
	Pounds	0	5	0	0	0	0	0
cabbage	Apps	0	1	0	0	0	0	0
	Pounds	0	5	0	0	0	0	0
corn (human consumption)	Apps	1	0	0	0	0	0	0
	Pounds	6	0	0	0	0	0	0

Dicofol pesticide use by PUR database crops for 35 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
strawberry	Apps	0	0	0	1	1	0	0
	Pounds	0	0	0	2	2	0	0
cotton (general)	Apps	2	0	0	2	0	0	0
	Pounds	72	0	0	60	0	0	0

Iprodione pesticide use by PUR database crops for 35 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apricot	Apps	0	2	0	3	0	3	2
	Pounds	0	0	0	3	0	3	0
cherry	Apps	0	0	0	0	0	1	2
	Pounds	0	0	0	0	0	0	1
nectarine	Apps	0	1	1	2	2	0	2
	Pounds	0	1	6	11	12	0	1
peach	Apps	0	2	0	1	2	2	2
	Pounds	0	8	0	4	8	8	8
plum	Apps	0	2	0	2	0	1	2
	Pounds	0	2	0	3	0	6	6
oats (forage - fodder)	Apps	0	1	0	0	0	0	0
	Pounds	0	9	0	0	0	0	0
grapes (wine)	Apps	2	0	0	0	0	0	0
	Pounds	11	0	0	0	0	0	0
strawberry	Apps	1	2	1	1	1	1	0
	Pounds	6	10	7	0	0	0	0
almond	Apps	7	8	1	1	0	2	2
	Pounds	29	34	10	1	0	20	36

Phosmet pesticide use by PUR database crops for 35 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	1	4	3	4	4	3	1
	Pounds	6	44	29	45	42	31	11
pear	Apps	0	1	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
apricot	Apps	0	1	0	0	0	0	0
	Pounds	0	10	0	0	0	0	0
nectarine	Apps	2	0	1	2	5	0	1
	Pounds	28	0	34	38	91	0	34
peach	Apps	0	2	1	1	3	0	1
	Pounds	0	56	28	28	70	0	28
plum	Apps	0	0	1	1	1	0	0
	Pounds	0	0	24	34	22	0	0
grapes (wine)	Apps	0	0	0	0	0	0	1
	Pounds	0	0	0	0	0	0	59

Simazine pesticide use by PUR database crops for 35 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apricot	Apps	0	0	0	0	1	0	0
	Pounds	0	0	0	0	0	0	0
nectarine	Apps	0	0	0	0	2	0	0
	Pounds	0	0	0	0	22	0	0
peach	Apps	0	0	0	0	3	0	0
	Pounds	0	0	0	0	31	0	0
grapes (table/raisin)	Apps	7	7	5	4	5	0	0
	Pounds	101	64	37	4	41	0	0
orange	Apps	0	0	0	0	1	0	0
	Pounds	0	0	0	0	19	0	0
grapes (wine)	Apps	5	6	4	7	6	0	0
	Pounds	117	40	17	39	31	0	0
almond	Apps	0	0	1	0	0	0	0
	Pounds	0	0	5	0	0	0	0

Trifluralin pesticide use by PUR database crops for 35 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
cotton (general)	Apps	2	0	0	0	0	0	0
	Pounds	36	0	0	0	0	0	0
eggplant (oriental egg-plant)	Apps	0	0	1	1	1	0	0
	Pounds	0	0	1	0	0	0	0
beans succulent (other than lima)	Apps	0	1	0	1	0	0	0
	Pounds	0	0	0	1	0	0	0
okra (gumbo)	Apps	0	1	1	1	1	0	0
	Pounds	0	0	0	0	0	0	0
apricot	Apps	0	0	0	1	0	0	0
	Pounds	0	0	0	7	0	0	0
sugarcane (sugar crop) (ratoon sugarcane stubble)	Apps	0	1	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
plum	Apps	1	0	0	0	0	0	0
	Pounds	16	0	0	0	0	0	0
peppers	Apps	1	1	1	1	1	0	0
	Pounds	0	0	1	0	1	0	0
broccoli	Apps	1	0	0	2	0	0	0
	Pounds	1	0	0	1	0	0	0
tomatoes (fresh market)	Apps	1	1	1	1	1	1	0
	Pounds	0	0	0	0	0	1	0
almond	Apps	0	0	0	1	0	0	0
	Pounds	0	0	0	112	0	0	0
grapes (table/raisin)	Apps	2	0	4	6	5	0	0
	Pounds	29	0	19	33	19	0	0
grapes (wine)	Apps	0	0	1	1	1	0	0
	Pounds	0	0	1	1	1	0	0
watermelons	Apps	0	0	0	1	1	0	0
	Pounds	0	0	0	1	1	0	0
alfalfa	Apps	1	0	0	0	2	3	3
	Pounds	60	0	0	0	144	216	216
gai lon	Apps	0	1	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
onion (dry, spanish, white)	Apps	0	0	0	1	0	0	0
	Pounds	0	0	0	0	0	0	0
cucumber (pickling chinese etc.)	Apps	0	0	0	2	1	0	0
	Pounds	0	0	0	1	0	0	0
cabbage	Apps	0	0	0	1	0	0	0
	Pounds	0	0	0	1	0	0	0
corn (human consumption)	Apps	0	0	0	3	0	0	0
	Pounds	0	0	0	2	0	0	0

Pesticide Use Proximate to Participant 36

Azinphos methyl pesticide use by PUR database crops for 36 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	1	0	2	0	0	0	0
	Pounds	23	0	32	0	0	0	0
apple	Apps	1	0	0	0	0	0	0
	Pounds	15	0	0	0	0	0	0
nectarine	Apps	0	0	0	2	1	2	0
	Pounds	0	0	0	9	5	11	0
peach	Apps	0	0	2	0	0	0	0
	Pounds	0	0	33	0	0	0	0
plum	Apps	1	0	0	0	1	0	0
	Pounds	10	0	0	0	12	0	0
grapes (table/raisin)	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	18	0

Chlorpyrifos pesticide use by PUR database crops for 36 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	1	0	0	0	0	0	0
	Pounds	18	0	0	0	0	0	0
apple	Apps	1	0	0	0	0	0	0
	Pounds	15	0	0	0	0	0	0
nectarine	Apps	12	11	14	10	5	3	1
	Pounds	151	147	216	159	136	36	12
peach	Apps	11	11	12	9	6	8	6
	Pounds	249	217	334	154	90	144	120
plum	Apps	6	8	3	6	6	7	5
	Pounds	284	249	50	102	74	70	56
grapes (table/raisin)	Apps	1	0	0	2	1	1	1
	Pounds	8	0	0	70	10	28	28

Dicofol pesticide use by PUR database crops for 36 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	0	1	0	0	0	0	0
	Pounds	0	4	0	0	0	0	0
nectarine	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	6	0
peach	Apps	1	1	0	0	0	1	0
	Pounds	60	74	0	0	0	5	0
plum	Apps	0	0	0	2	0	1	0
	Pounds	0	0	0	9	0	30	0
grapes (table/raisin)	Apps	1	2	0	0	0	0	0
	Pounds	28	43	0	0	0	0	0
outdoor grown plants	Apps	0	1	0	0	0	0	0
	Pounds	0	6	0	0	0	0	0

Iprodione pesticide use by PUR database crops for 36 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apricot	Apps	6	4	2	3	2	2	0
	Pounds	29	22	14	23	11	5	0
cherry	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
nectarine	Apps	8	13	9	11	4	3	3
	Pounds	25	52	35	52	18	10	14
peach	Apps	6	8	7	6	3	3	4
	Pounds	46	39	31	31	16	43	58
plum	Apps	3	1	5	3	0	5	0
	Pounds	17	5	19	11	0	16	0
grapes (table/raisin)	Apps	5	1	0	0	0	0	0
	Pounds	62	2	0	0	0	0	0

Phosmet pesticide use by PUR database crops for 36 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	0	4	2	0	0	0	0
	Pounds	0	131	11	0	0	0	0
apple	Apps	1	2	0	0	0	0	0
	Pounds	20	16	0	0	0	0	0
apricot	Apps	1	0	0	0	0	0	0
	Pounds	14	0	0	0	0	0	0
nectarine	Apps	12	13	20	19	16	5	6
	Pounds	150	153	249	250	301	98	190
peach	Apps	10	11	10	14	5	14	9
	Pounds	372	295	200	266	123	374	316
plum	Apps	2	7	2	2	4	23	4
	Pounds	35	178	73	30	0	279	55
grapes (table/raisin)	Apps	4	1	9	4	0	0	0
	Pounds	57	4	66	102	0	0	0
grapes (wine)	Apps	0	0	2	2	0	0	0
	Pounds	0	0	63	63	0	0	0

Simazine pesticide use by PUR database crops for 36 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	1	0	0	0	0	0	0
	Pounds	5	0	0	0	0	0	0
nectarine	Apps	4	7	7	4	3	3	1
	Pounds	15	23	28	22	12	8	4
peach	Apps	3	6	8	6	2	4	2
	Pounds	8	46	47	22	10	40	17
citrus fruits	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	17	0
grapes (table/raisin)	Apps	38	44	32	31	25	15	18
	Pounds	548	705	430	439	1476	273	281
grapes (wine)	Apps	4	7	5	4	2	2	3
	Pounds	25	171	25	24	12	5	12

Trifluralin pesticide use by PUR database crops for 36 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
nectarine	Apps	0	1	0	0	0	0	0
	Pounds	0	4	0	0	0	0	0
grapes (table/raisin)	Apps	0	0	0	0	1	0	0
	Pounds	0	0	0	0	6	0	0

Pesticide Use Proximate to Participant 37

Simazine pesticide use by PUR database crops for 37 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
grapes (wine)	Apps	0	0	0	0	0	0	2
	Pounds	0	0	0	0	0	0	134

Pesticide Use Proximate to Participant 38

Chlorpyrifos pesticide use by PUR database crops for 38 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
alfalfa	Apps	4	4	13	9	4	10	2
	Pounds	504	343	1199	704	272	870	166
cotton (general)	Apps	1	10	9	2	4	1	0
	Pounds	120	854	781	70	635	10	0
sugarbeet (general)	Apps	2	2	0	1	2	4	1
	Pounds	270	278	0	99	238	514	169

Dicofol pesticide use by PUR database crops for 38 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
cotton (general)	Apps	0	0	3	0	0	0	0
	Pounds	0	0	308	0	0	0	0

Dimethoate pesticide use by PUR database crops for 38 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
alfalfa	Apps	0	1	0	0	0	1	0
	Pounds	0	24	0	0	0	111	0
cotton (general)	Apps	13	16	13	0	0	0	0
	Pounds	435	720	560	0	0	0	0
wheat (general)	Apps	0	1	1	0	0	0	0
	Pounds	0	37	17	0	0	0	0
corn (forage - fodder)	Apps	1	0	0	0	0	0	0
	Pounds	7	0	0	0	0	0	0
safflower (general)	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	45	0

Iprodione pesticide use by PUR database crops for 38 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
garlic	Apps	0	0	0	0	0	0	1
	Pounds	0	0	0	0	0	0	316

Metolachlor pesticide use by PUR database crops for 38 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
tomatoes (process-ing/canning)	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
cotton (general)	Apps	0	0	1	2	1	0	0
	Pounds	0	0	171	448	205	0	0

Trifluralin pesticide use by PUR database crops for 38 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
tomatoes (process-ing/canning)	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
alfalfa	Apps	2	0	0	0	0	2	1
	Pounds	404	0	0	0	0	632	167
cotton (general)	Apps	3	18	4	15	11	12	13
	Pounds	382	835	292	1204	680	768	1255
sugarbeet (general)	Apps	0	0	0	0	1	2	1
	Pounds	0	0	0	0	112	148	116

Pesticide Use Proximate to Participant 39

Chlorpyrifos pesticide use by PUR database crops for 39 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	17	7	15	11	4	7	5
	Pounds	250	107	282	142	210	197	186
grapes (wine)	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
cauliflower	Apps	3	8	5	0	0	0	0
	Pounds	47	70	30	0	0	0	0
strawberry	Apps	0	0	0	0	0	3	0
	Pounds	0	0	0	0	0	25	0
greenhouse grown cut flowers or greens	Apps	0	2	0	0	2	12	0
	Pounds	0	7	0	0	2	5	0
outdoor grown cut flowers or greens	Apps	0	0	7	1	2	1	0
	Pounds	0	0	3	1	3	1	0
greenhouse grown plants in containers	Apps	6	2	3	2	1	1	0
	Pounds	2	0	0	3	0	1	0
outdoor grown plants	Apps	9	2	2	15	5	1	1
	Pounds	3	0	2	8	1	0	0

Dacthal pesticide use by PUR database crops for 39 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
cauliflower	Apps	3	3	4	0	0	0	0
	Pounds	105	105	54	0	0	0	0

Dicofol pesticide use by PUR database crops for 39 at distance 1250m.								
Crop	Type	1998	1999	2000	2001	2002	2003	2004
strawberry	Apps	5	1	0	0	1	0	0
	Pounds	53	38	0	0	64	0	0
apple	Apps	1	0	0	0	0	0	0
	Pounds	3	0	0	0	0	0	0

Iprodione pesticide use by PUR database crops for 39 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
beans (fresh market)	Apps	0	0	3	1	0	0	0
	Pounds	0	0	9	2	0	0	0
lettuce (leaf)	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	8	0
blackberry	Apps	5	2	5	3	5	16	1
	Pounds	46	13	42	26	16	74	4
greenhouse grown cut flowers or greens	Apps	17	7	10	14	2	5	2
	Pounds	28	11	20	34	11	24	11
raspberry	Apps	8	0	0	1	2	1	2
	Pounds	57	0	0	5	17	12	10
outdoor grown cut flowers or greens	Apps	0	0	1	1	0	0	0
	Pounds	0	0	0	3	0	0	0
lettuce (head)	Apps	3	0	0	0	0	1	0
	Pounds	31	0	0	0	0	6	0
grapes (wine)	Apps	2	0	0	0	0	0	0
	Pounds	5	0	0	0	0	0	0
strawberry	Apps	27	6	14	6	3	0	0
	Pounds	516	163	335	117	66	0	0
greenhouse grown plants in containers	Apps	5	2	9	10	6	12	61
	Pounds	10	5	3	2	3	14	50
outdoor grown plants	Apps	39	13	10	8	16	11	10
	Pounds	62	32	61	61	96	45	61
greenhouse grown transplant	Apps	0	0	36	0	0	0	0
	Pounds	0	0	18	0	0	0	0
outdoor grown transplant	Apps	1	2	3	3	0	5	0
	Pounds	6	14	48	13	0	12	0

Phosmet pesticide use by PUR database crops for 39 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	0	0	1	1	5	4	3
	Pounds	0	0	11	70	83	13	60
outdoor grown plants	Apps	0	0	0	0	1	0	0
	Pounds	0	0	0	0	13	0	0
grapes (wine)	Apps	1	0	0	0	0	0	0
	Pounds	6	0	0	0	0	0	0

Trifluralin pesticide use by PUR database crops for 39 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
greenhouse grown plants in containers	Apps	0	0	0	0	0	1	1
	Pounds	0	0	0	0	0	2	1
outdoor grown plants	Apps	0	0	1	0	2	3	8
	Pounds	0	0	1	0	10	10	31
endive (escarole)	Apps	1	0	0	0	0	0	0
	Pounds	2	0	0	0	0	0	0
chicory	Apps	4	0	0	0	0	0	0
	Pounds	21	0	0	0	0	0	0
beans (fresh market)	Apps	0	0	0	0	9	0	0
	Pounds	0	0	0	0	25	0	0

Pesticide Use Proximate to Participant 40

Azinphos methyl pesticide use by PUR database crops for 40 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
nectarine	Apps	4	1	2	0	0	3	0
	Pounds	60	14	30	0	0	71	0
peach	Apps	2	3	2	0	0	4	0
	Pounds	26	37	22	0	0	53	0
plum	Apps	0	0	0	0	0	2	0
	Pounds	0	0	0	0	0	24	0

Chlorpyrifos pesticide use by PUR database crops for 40 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	1	0	0	0	0	0	0
	Pounds	2	0	0	0	0	0	0
nectarine	Apps	10	3	8	7	6	5	6
	Pounds	219	73	100	96	71	65	56
peach	Apps	10	6	7	14	5	8	10
	Pounds	199	174	74	156	49	177	96
plum	Apps	5	2	6	5	1	3	0
	Pounds	148	18	56	110	4	51	0
grapes (table/raisin)	Apps	6	11	8	1	0	5	5
	Pounds	127	226	151	36	0	107	107
orange	Apps	1	0	0	0	0	0	1
	Pounds	2	0	0	0	0	0	3
grapes (wine)	Apps	0	0	0	0	0	0	1
	Pounds	0	0	0	0	0	0	15
almond	Apps	0	1	0	0	0	1	0
	Pounds	0	42	0	0	0	48	0

Dicofol pesticide use by PUR database crops for 40 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
nectarine	Apps	2	0	0	0	0	0	0
	Pounds	33	0	0	0	0	0	0
peach	Apps	3	0	0	0	0	0	0
	Pounds	39	0	0	0	0	0	0
plum	Apps	2	0	0	0	0	0	0
	Pounds	28	0	0	0	0	0	0
grapes (table/raisin)	Apps	5	0	1	0	0	0	0
	Pounds	66	0	7	0	0	0	0

Iprodione pesticide use by PUR database crops for 40 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
nectarine	Apps	3	4	2	0	0	3	0
	Pounds	34	21	8	0	0	6	0
peach	Apps	2	6	6	1	1	4	1
	Pounds	15	50	38	5	10	9	5
plum	Apps	3	0	2	0	0	0	0
	Pounds	34	0	26	0	0	0	0
grapes (table/raisin)	Apps	27	1	0	1	0	0	0
	Pounds	168	5	0	5	0	0	0
strawberry	Apps	1	4	1	0	0	0	0
	Pounds	1	8	3	0	0	0	0
almond	Apps	1	2	1	0	0	1	0
	Pounds	12	24	12	0	0	8	0

Phosmet pesticide use by PUR database crops for 40 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	1	1	0	0	0	0	0
	Pounds	2	2	0	0	0	0	0
nectarine	Apps	4	7	6	4	9	3	10
	Pounds	56	124	151	100	159	83	142
peach	Apps	5	14	5	12	9	4	13
	Pounds	69	339	148	341	275	111	186
plum	Apps	2	3	4	3	0	0	6
	Pounds	98	72	140	123	0	0	70
grapes (table/raisin)	Apps	1	2	2	0	0	0	0
	Pounds	56	54	56	0	0	0	0

Simazine pesticide use by PUR database crops for 40 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
nectarine	Apps	9	9	1	4	0	0	5
	Pounds	40	53	4	25	0	0	41
peach	Apps	9	11	1	10	0	0	9
	Pounds	35	63	4	53	0	0	98
plum	Apps	4	2	1	0	0	0	0
	Pounds	23	9	1	0	0	0	0
grapes (table/raisin)	Apps	36	26	24	12	11	0	27
	Pounds	675	555	223	190	90	0	234
grapes (wine)	Apps	1	3	0	1	0	0	1
	Pounds	5	35	0	12	0	0	71
almond	Apps	1	1	0	0	0	0	0
	Pounds	7	3	0	0	0	0	0

Pesticide Use Proximate to Participant 41

Azinphos methyl pesticide use by PUR database crops for 41 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	1	1	2	0	0	0	0
	Pounds	80	80	228	0	0	0	0

Chlorpyrifos pesticide use by PUR database crops for 41 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	2	2	1	1	0	1	0
	Pounds	232	216	141	152	0	74	0
alfalfa	Apps	2	1	0	2	7	5	7
	Pounds	45	19	0	16	56	75	63
cotton (general)	Apps	5	0	9	5	4	2	0
	Pounds	144	0	342	204	160	31	0

Dicofol pesticide use by PUR database crops for 41 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
beans (dried)	Apps	0	0	1	0	0	0	0
	Pounds	0	0	44	0	0	0	0
cotton (general)	Apps	2	1	1	0	0	0	0
	Pounds	24	89	17	0	0	0	0

Iprodione pesticide use by PUR database crops for 41 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	8	12	3	3	6	1	5
	Pounds	216	259	74	84	148	26	110
grapes (table/raisin)	Apps	1	0	0	0	0	0	0
	Pounds	15	0	0	0	0	0	0
carrots general	Apps	0	3	0	3	1	1	0
	Pounds	0	70	0	44	14	9	0

Phosmet pesticide use by PUR database crops for 41 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	0	1	1	1	1	0	0
	Pounds	0	266	229	230	266	0	0

Simazine pesticide use by PUR database crops for 41 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
grapes (table/raisin)	Apps	0	1	0	0	1	0	0
	Pounds	0	9	0	0	9	0	0
grapes (wine)	Apps	0	1	1	0	0	0	0
	Pounds	0	18	18	0	0	0	0

Trifluralin pesticide use by PUR database crops for 41 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
alfalfa	Apps	0	0	0	0	0	2	4
	Pounds	0	0	0	0	0	64	128
carrots general	Apps	0	3	1	2	0	1	0
	Pounds	0	100	18	55	0	40	0
cotton (general)	Apps	4	1	5	6	1	2	0
	Pounds	89	47	109	135	11	30	0

Pesticide Use Proximate to Participant 42

Chlorpyrifos pesticide use by PUR database crops for 42 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
pecan	Apps	1	2	0	0	0	0	0
	Pounds	60	56	0	0	0	0	0
apple	Apps	4	6	4	0	0	0	0
	Pounds	129	292	218	0	0	0	0
walnut	Apps	2	0	0	2	1	0	1
	Pounds	7	0	0	18	10	0	8
cherry	Apps	0	1	0	0	0	1	0
	Pounds	0	33	0	0	0	34	0
nectarine	Apps	0	1	1	0	0	0	0
	Pounds	0	75	20	0	0	0	0
peach	Apps	0	1	1	0	0	1	2
	Pounds	0	20	22	0	0	22	58
plum	Apps	0	2	1	0	0	1	0
	Pounds	0	139	72	0	0	72	0
grapes (table/raisin)	Apps	3	3	0	2	0	2	2
	Pounds	245	247	0	136	0	215	393
tangerine (mandarin satsuma murcott)	Apps	0	1	0	0	2	3	2
	Pounds	0	0	0	0	1	1	1
alfalfa	Apps	0	0	4	0	0	1	1
	Pounds	0	0	165	0	0	33	33

Dicofol pesticide use by PUR database crops for 42 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
cotton (general)	Apps	0	0	0	1	0	0	0
	Pounds	0	0	0	40	0	0	0
nectarine	Apps	1	0	0	0	0	0	0
	Pounds	39	0	0	0	0	0	0
grapes (table/raisin)	Apps	0	2	0	0	0	0	0
	Pounds	0	80	0	0	0	0	0

Iprodione pesticide use by PUR database crops for 42 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
cherry	Apps	3	1	0	1	0	0	1
	Pounds	42	9	0	13	0	0	8
nectarine	Apps	2	1	0	2	0	0	0
	Pounds	65	19	0	29	0	0	0
peach	Apps	0	1	0	0	0	0	1
	Pounds	0	6	0	0	0	0	9
plum	Apps	0	0	0	1	0	0	0
	Pounds	0	0	0	27	0	0	0
grapes (table/raisin)	Apps	0	4	0	0	0	0	0
	Pounds	0	100	0	0	0	0	0
grapes (wine)	Apps	0	0	1	0	0	0	0
	Pounds	0	0	11	0	0	0	0

Phosmet pesticide use by PUR database crops for 42 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	0	1	1	0	0	0	1
	Pounds	0	34	22	0	0	0	17
pistachio	Apps	0	1	0	0	1	0	0
	Pounds	0	200	0	0	146	0	0
apple	Apps	8	3	3	0	0	0	0
	Pounds	663	298	240	0	0	0	0
nectarine	Apps	0	1	1	2	2	2	0
	Pounds	0	76	114	106	106	106	0
peach	Apps	0	1	0	1	0	1	2
	Pounds	0	22	0	31	0	31	62
plum	Apps	0	1	0	0	0	0	0
	Pounds	0	72	0	0	0	0	0
grapes (wine)	Apps	0	0	0	0	1	0	0
	Pounds	0	0	0	0	23	0	0

Simazine pesticide use by PUR database crops for 42 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
pecan	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	22	0
walnut	Apps	1	1	1	0	0	0	1
	Pounds	4	5	5	0	0	0	4
apple	Apps	0	3	1	0	0	0	0
	Pounds	0	43	16	0	0	0	0
cherry	Apps	0	0	1	0	1	0	0
	Pounds	0	0	9	0	11	0	0
nectarine	Apps	0	0	2	1	1	0	0
	Pounds	0	0	21	13	13	0	0
peach	Apps	0	1	1	1	1	2	0
	Pounds	0	6	6	7	7	17	0
plum	Apps	0	0	0	1	1	0	0
	Pounds	0	0	0	24	24	0	0
grapes (table/raisin)	Apps	5	7	7	1	3	7	0
	Pounds	123	279	188	34	149	337	0
grapes (wine)	Apps	6	4	0	0	0	0	0
	Pounds	119	67	0	0	0	0	0

Trifluralin pesticide use by PUR database crops for 42 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
alfalfa	Apps	2	0	0	0	1	0	0
	Pounds	160	0	0	0	108	0	0

Pesticide Use Proximate to Participant 43

Azinphos methyl pesticide use by PUR database crops for 43 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	3	3	0	1	0	1	0
	Pounds	141	180	0	75	0	20	0

Chlorpyrifos pesticide use by PUR database crops for 43 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	17	26	18	0	0	0	0
	Pounds	390	597	434	0	0	0	0
walnut	Apps	5	9	6	8	6	10	10
	Pounds	233	729	247	412	278	495	510
peach	Apps	0	0	0	0	0	2	3
	Pounds	0	0	0	0	0	56	103
cabbage	Apps	0	0	0	0	0	0	2
	Pounds	0	0	0	0	0	0	4
corn (forage - fodder)	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
almond	Apps	10	6	5	5	5	13	11
	Pounds	444	303	199	222	180	405	362
alfalfa	Apps	1	2	4	0	0	4	2
	Pounds	7	26	98	0	0	84	51
outdoor grown transplant	Apps	0	0	0	0	0	0	1
	Pounds	0	0	0	0	0	0	18

Dacthal pesticide use by PUR database crops for 43 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
mustard (general)	Apps	0	0	0	8	11	13	13
	Pounds	0	0	0	46	51	95	93
onions (green)	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
turnip (general)	Apps	0	0	0	5	0	0	0
	Pounds	0	0	0	19	0	0	0
chinese radish/daikon	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
cabbage	Apps	0	0	0	4	20	0	7
	Pounds	0	0	0	35	142	0	49
collards	Apps	0	0	0	3	8	7	8
	Pounds	0	0	0	20	75	54	80
kale	Apps	0	0	0	6	6	5	8
	Pounds	0	0	0	16	28	30	58
kohlrabi	Apps	0	0	0	0	4	1	8
	Pounds	0	0	0	0	14	5	73
leek	Apps	0	0	0	0	2	3	0
	Pounds	0	0	0	0	16	13	0
bok choy	Apps	0	0	0	7	11	4	7
	Pounds	0	0	0	34	57	31	42

Dicofol pesticide use by PUR database crops for 43 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
peach	Apps	2	0	0	0	0	0	0
	Pounds	4	0	0	0	0	0	0

Dimethoate pesticide use by PUR database crops for 43 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
beans (dried)	Apps	0	2	0	0	0	0	0
	Pounds	0	17	0	0	0	0	0
swiss chard	Apps	0	2	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
alfalfa	Apps	1	2	4	1	2	0	0
	Pounds	9	20	68	38	64	0	0

Iprodione pesticide use by PUR database crops for 43 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	25	28	19	12	9	14	11
	Pounds	277	309	216	71	48	135	110
cherry	Apps	0	0	0	0	0	0	1
	Pounds	0	0	0	0	0	0	1
lettuce (leaf)	Apps	24	10	8	10	13	48	8
	Pounds	21	10	8	6	16	52	11
peach	Apps	4	6	6	6	5	6	5
	Pounds	72	56	58	50	73	71	47
grapes (wine)	Apps	10	5	3	1	1	0	0
	Pounds	68	37	22	3	3	0	0

Phosmet pesticide use by PUR database crops for 43 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	4	5	4	1	0	0	0
	Pounds	362	658	446	58	0	0	0
walnut	Apps	2	0	0	0	1	1	1
	Pounds	102	0	0	0	84	84	84
peach	Apps	0	1	5	4	4	0	0
	Pounds	0	42	142	95	118	0	0
apple	Apps	22	8	5	18	18	24	0
	Pounds	956	336	280	784	815	1059	0
alfalfa	Apps	1	2	4	0	1	0	0
	Pounds	20	34	118	0	56	0	0

Simazine pesticide use by PUR database crops for 43 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	9	0	10	5	5	5	10
	Pounds	80	0	60	31	40	25	39
walnut	Apps	1	8	2	0	2	5	7
	Pounds	1	113	19	0	37	44	55
cherry	Apps	0	0	0	0	2	1	0
	Pounds	0	0	0	0	0	1	0
peach	Apps	2	5	5	3	7	6	5
	Pounds	8	46	36	11	44	97	40
uncultivated agricultural areas	Apps	0	0	0	0	1	0	0
	Pounds	0	0	0	0	8	0	0
grapes (wine)	Apps	8	16	8	4	5	3	8
	Pounds	137	208	94	21	89	54	96
almond	Apps	11	8	11	7	11	17	20
	Pounds	92	94	192	39	95	184	162
outdoor grown plants	Apps	0	0	0	0	0	0	1
	Pounds	0	0	0	0	0	0	9

Trifluralin pesticide use by PUR database crops for 43 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
mustard (general)	Apps	0	44	50	27	18	0	0
	Pounds	0	4	15	3	2	0	0
collards	Apps	0	22	23	19	12	0	0
	Pounds	0	3	6	4	2	0	0
fennel	Apps	0	1	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
cabbage	Apps	0	34	26	18	19	0	0
	Pounds	0	12	5	3	4	0	0
turnip (general)	Apps	0	22	19	13	1	0	0
	Pounds	0	1	1	1	0	0	0
kale	Apps	0	25	21	24	10	0	0
	Pounds	0	3	3	2	1	0	0
kohlrabi	Apps	0	3	4	3	3	0	0
	Pounds	0	0	0	0	0	0	0
almond	Apps	1	0	0	0	0	0	0
	Pounds	5	0	0	0	0	0	0
alfalfa	Apps	0	0	3	3	2	0	1
	Pounds	0	0	176	176	120	0	160
bok choy	Apps	0	33	36	25	15	0	0
	Pounds	0	3	8	3	1	0	0

Pesticide Use Proximate to Participant 44

Chlorpyrifos pesticide use by PUR database crops for 44 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
sugarbeet (general)	Apps	1	0	0	0	0	0	0
	Pounds	75	0	0	0	0	0	0

Dicofol pesticide use by PUR database crops for 44 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
melons	Apps	1	1	0	0	0	0	0
	Pounds	6	9	0	0	0	0	0
pumpkin	Apps	1	0	0	0	0	0	0
	Pounds	12	0	0	0	0	0	0

Trifluralin pesticide use by PUR database crops for 44 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
tomatoes (processing/canning)	Apps	0	1	0	3	4	9	1
	Pounds	0	13	0	8	35	84	6
safflower (general)	Apps	5	6	3	4	6	8	4
	Pounds	111	110	63	68	119	125	41
sunflower general	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
corn (human consumption)	Apps	0	0	1	0	0	0	0
	Pounds	0	0	25	0	0	0	0

Pesticide Use Proximate to Participant 45

Azinphos methyl pesticide use by PUR database crops for 45 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	2	0	2	2	2	2	2
	Pounds	284	0	142	142	142	213	213
plum	Apps	0	0	0	1	1	0	0
	Pounds	0	0	0	40	15	0	0
walnut	Apps	0	0	1	0	0	0	0
	Pounds	0	0	14	0	0	0	0

Chlorpyrifos pesticide use by PUR database crops for 45 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	15	10	16	13	2	9	8
	Pounds	554	484	444	486	96	238	228
pear	Apps	0	0	1	0	0	0	0
	Pounds	0	0	3	0	0	0	0
apple	Apps	0	0	1	1	0	0	0
	Pounds	0	0	3	3	0	0	0
peach	Apps	0	0	1	0	0	0	0
	Pounds	0	0	3	0	0	0	0
plum	Apps	5	0	0	0	0	1	1
	Pounds	107	0	0	0	0	60	60
prune	Apps	1	1	0	0	0	1	1
	Pounds	40	32	0	0	0	34	34
orange	Apps	3	0	1	0	1	1	0
	Pounds	182	0	37	0	16	16	0
almond	Apps	2	0	0	2	0	0	2
	Pounds	284	0	0	284	0	0	284
tangerine (mandarin satsuma murcott)	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
alfalfa	Apps	1	2	3	2	0	4	4
	Pounds	15	11	24	13	0	86	49
greenhouse grown transplant	Apps	3	2	8	0	0	0	0
	Pounds	1	1	1	0	0	0	0
outdoor grown transplant	Apps	5	1	4	0	0	0	0
	Pounds	1	3	1	0	0	0	0

Dicofol pesticide use by PUR database crops for 45 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
prune	Apps	1	0	0	0	0	0	0
	Pounds	28	0	0	0	0	0	0

Iprodione pesticide use by PUR database crops for 45 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apricot	Apps	1	0	0	0	0	0	0
	Pounds	1	0	0	0	0	0	0
peach	Apps	1	0	0	0	0	1	1
	Pounds	1	0	0	0	0	1	1
plum	Apps	8	6	5	4	1	4	0
	Pounds	111	49	64	45	22	45	0
prune	Apps	3	1	0	0	0	0	0
	Pounds	41	12	0	0	0	0	0
greenhouse grown transplant	Apps	4	4	11	7	0	2	0
	Pounds	5	4	5	3	0	3	0
outdoor grown transplant	Apps	4	4	4	0	0	1	0
	Pounds	3	4	1	0	0	2	0

Phosmet pesticide use by PUR database crops for 45 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	8	10	12	1	0	4	2
	Pounds	649	866	1357	38	0	183	78
pear	Apps	2	1	2	0	0	0	0
	Pounds	20	7	15	0	0	0	0
plum	Apps	0	0	3	3	0	2	1
	Pounds	0	0	258	60	0	112	112
prune	Apps	0	0	0	1	1	1	0
	Pounds	0	0	0	28	20	39	0
apple	Apps	0	1	1	0	0	0	0
	Pounds	0	7	7	0	0	0	0

Simazine pesticide use by PUR database crops for 45 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	2	0
pear	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	2	0
walnut	Apps	20	15	7	8	11	12	10
	Pounds	602	264	97	190	228	144	464
peach	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	2	0
prune	Apps	0	3	0	0	0	0	0
	Pounds	0	99	0	0	0	0	0
orange	Apps	1	0	0	0	0	2	0
	Pounds	41	0	0	0	0	117	0
almond	Apps	2	0	0	0	0	2	3
	Pounds	141	0	0	0	0	37	55

Trifluralin pesticide use by PUR database crops for 45 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
beans (dried)	Apps	0	0	0	0	0	3	0
	Pounds	0	0	0	0	0	26	0
alfalfa	Apps	0	0	0	2	0	2	5
	Pounds	0	0	0	38	0	66	155
beans (fresh market)	Apps	3	0	0	0	0	0	0
	Pounds	43	0	0	0	0	0	0

Pesticide Use Proximate to Participant 46

Azinphos methyl pesticide use by PUR database crops for 46 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	1	1	0	0	0	0	0
	Pounds	4	8	0	0	0	0	0
plum	Apps	0	0	6	0	0	0	0
	Pounds	0	0	96	0	0	0	0

Chlorpyrifos pesticide use by PUR database crops for 46 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	3	3	2	1	3	2	3
	Pounds	16	44	6	11	26	17	30
pear	Apps	1	0	0	1	0	0	1
	Pounds	2	0	0	2	0	0	0
walnut	Apps	0	2	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
cherry	Apps	3	2	4	6	5	6	3
	Pounds	31	30	45	49	59	63	66
nectarine	Apps	23	55	47	61	53	31	28
	Pounds	286	538	566	665	573	324	284
peach	Apps	28	49	41	56	52	24	24
	Pounds	360	435	458	525	603	218	157
plum	Apps	20	34	27	39	42	34	33
	Pounds	227	375	231	399	402	290	257
prune	Apps	0	1	0	3	1	0	0
	Pounds	0	13	0	9	2	0	0
citrus fruits	Apps	0	0	0	0	0	1	1
	Pounds	0	0	0	0	0	35	10
grapes (table/raisin)	Apps	6	3	1	3	2	9	14
	Pounds	116	83	17	46	28	62	88
grapes (wine)	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
tangerine (mandarin satsuma murcott)	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
alfalfa	Apps	0	0	1	3	0	0	0
	Pounds	0	0	4	17	0	0	0

Dicofol pesticide use by PUR database crops for 46 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
nectarine	Apps	6	1	0	11	0	6	0
	Pounds	70	7	0	41	0	36	0
peach	Apps	7	3	0	11	3	7	0
	Pounds	66	25	0	45	38	37	0
plum	Apps	1	0	0	7	1	5	0
	Pounds	5	0	0	20	8	23	0

Iprodione pesticide use by PUR database crops for 46 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apricot	Apps	3	1	3	3	1	0	0
	Pounds	8	2	4	6	2	0	0
cherry	Apps	10	8	6	1	0	0	0
	Pounds	34	25	12	1	0	0	0
nectarine	Apps	54	40	66	73	25	33	26
	Pounds	213	146	231	198	83	132	112
peach	Apps	45	31	60	54	17	20	31
	Pounds	186	136	205	167	91	81	122
plum	Apps	16	10	28	28	8	24	18
	Pounds	45	32	83	76	36	86	71
prune	Apps	2	0	0	0	0	0	2
	Pounds	5	0	0	0	0	0	0
blueberry	Apps	0	0	0	2	0	0	0
	Pounds	0	0	0	3	0	0	0
grapes (table/raisin)	Apps	6	4	2	2	0	0	0
	Pounds	45	142	2	2	0	0	0
grapes (wine)	Apps	2	0	1	1	0	0	0
	Pounds	17	0	12	12	0	0	0

Phosmet pesticide use by PUR database crops for 46 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
pear	Apps	0	0	3	2	2	2	0
	Pounds	0	0	12	5	1	11	0
apple	Apps	0	4	6	7	5	6	6
	Pounds	0	39	52	79	58	157	121
cherry	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	3	0
nectarine	Apps	38	36	35	61	71	50	67
	Pounds	557	687	614	815	861	564	763
peach	Apps	27	41	42	55	45	42	54
	Pounds	377	550	533	645	537	431	628
plum	Apps	24	14	14	25	13	36	25
	Pounds	436	112	100	390	265	577	324
grapes (table/raisin)	Apps	0	0	1	1	1	0	0
	Pounds	0	0	14	10	224	0	0
grapes (wine)	Apps	0	0	2	9	1	0	0
	Pounds	0	0	18	64	6	0	0

Simazine pesticide use by PUR database crops for 46 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	1	2	1	0	1	0	1
	Pounds	1	9	1	0	1	0	1
pear	Apps	0	0	0	0	1	0	0
	Pounds	0	0	0	0	1	0	0
walnut	Apps	1	1	1	0	0	0	0
	Pounds	0	1	1	0	0	0	0
rights of way	Apps	0	0	0	0	0	0	1
	Pounds	0	0	0	0	0	0	5
apricot	Apps	0	0	1	0	0	0	0
	Pounds	0	0	1	0	0	0	0
cherry	Apps	0	0	0	0	1	0	0
	Pounds	0	0	0	0	0	0	0
nectarine	Apps	55	45	44	54	43	55	60
	Pounds	144	114	126	122	152	149	153
peach	Apps	46	51	44	49	50	48	62
	Pounds	135	124	121	120	156	134	154
plum	Apps	8	0	0	0	2	3	2
	Pounds	25	0	0	0	7	7	9
citrus fruits	Apps	0	0	0	0	0	1	2
	Pounds	0	0	0	0	0	1	14
grapes (table/raisin)	Apps	10	10	11	21	23	5	19
	Pounds	19	161	168	226	78	106	259
grapes (wine)	Apps	14	12	13	14	4	7	4
	Pounds	116	52	87	83	23	18	16

Trifluralin pesticide use by PUR database crops for 46 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
cotton (general)	Apps	1	0	0	0	0	0	0
	Pounds	2	0	0	0	0	0	0
safflower (general)	Apps	0	0	0	1	1	0	0
	Pounds	0	0	0	4	6	0	0
soil preplant application	Apps	0	1	0	0	0	0	0
	Pounds	0	2	0	0	0	0	0
apricot	Apps	0	0	0	0	0	0	2
	Pounds	0	0	0	0	0	0	4
nectarine	Apps	0	0	0	0	0	0	2
	Pounds	0	0	0	0	0	0	6
peach	Apps	0	0	0	0	0	0	7
	Pounds	0	0	0	0	0	0	16
plum	Apps	0	0	0	0	0	0	5
	Pounds	0	0	0	0	0	0	9
squash (summer)	Apps	1	0	0	0	0	0	0
	Pounds	1	0	0	0	0	0	0
grapes (wine)	Apps	0	0	0	2	3	0	0
	Pounds	0	0	0	2	3	0	0
eggplant (oriental egg-plant)	Apps	1	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
alfalfa	Apps	2	2	0	2	1	1	0
	Pounds	59	51	0	36	35	6	0
tomatoes (fresh market)	Apps	0	1	0	0	0	0	0
	Pounds	0	1	0	0	0	0	0
corn (human consumption)	Apps	1	0	0	0	0	0	0
	Pounds	1	0	0	0	0	0	0

Pesticide Use Proximate to Participant 47

Azinphos methyl pesticide use by PUR database crops for 47 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	1	1	0	0	0	0	0
	Pounds	4	8	0	0	0	0	0
plum	Apps	0	0	4	1	1	0	1
	Pounds	0	0	113	8	10	0	6

Chlorpyrifos pesticide use by PUR database crops for 47 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	3	3	1	2	2	1	0
	Pounds	16	58	20	33	44	17	0
pear	Apps	1	2	2	3	2	2	0
	Pounds	2	126	130	152	170	181	0
cherry	Apps	1	0	0	1	0	0	0
	Pounds	1	0	0	2	0	0	0
nectarine	Apps	12	42	57	34	36	17	13
	Pounds	193	555	810	416	462	168	101
peach	Apps	19	49	41	31	37	10	11
	Pounds	197	443	393	316	365	73	123
plum	Apps	18	28	26	21	17	12	9
	Pounds	254	338	314	260	175	244	60
citrus fruits	Apps	0	0	0	0	0	1	1
	Pounds	0	0	0	0	0	35	10
grapes (table/raisin)	Apps	4	3	2	1	0	1	1
	Pounds	102	97	88	22	0	22	22
tangerine (mandarin sat-suma murcott)	Apps	1	1	1	0	1	0	1
	Pounds	2	20	5	0	35	0	45
alfalfa	Apps	0	0	1	3	0	0	0
	Pounds	0	0	4	17	0	0	0

Dicofol pesticide use by PUR database crops for 47 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
nectarine	Apps	9	0	0	6	0	4	0
	Pounds	129	0	0	31	0	30	0
peach	Apps	5	0	0	5	0	3	0
	Pounds	56	0	0	32	0	26	0
plum	Apps	0	2	0	2	0	3	0
	Pounds	0	1	0	8	0	12	0

Iprodione pesticide use by PUR database crops for 47 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apricot	Apps	3	1	3	3	1	0	0
	Pounds	12	5	6	6	2	0	0
cherry	Apps	1	1	1	1	0	0	0
	Pounds	1	1	1	1	0	0	0
nectarine	Apps	33	30	43	47	19	20	24
	Pounds	172	177	205	150	114	117	154
peach	Apps	26	28	36	38	21	12	24
	Pounds	124	140	160	171	125	61	109
plum	Apps	20	16	25	26	10	20	20
	Pounds	133	108	142	114	78	97	104
grapes (table/raisin)	Apps	7	0	1	0	0	0	1
	Pounds	169	0	6	0	0	0	6

Phosmet pesticide use by PUR database crops for 47 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	0	0	4	5	4	5	4
	Pounds	0	0	46	74	55	154	116
pear	Apps	0	0	3	4	5	4	0
	Pounds	0	0	12	27	57	265	0
apricot	Apps	2	0	0	0	0	0	0
	Pounds	17	0	0	0	0	0	0
cherry	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	3	0
nectarine	Apps	18	34	17	68	46	47	45
	Pounds	294	836	388	1287	839	829	630
peach	Apps	15	23	24	33	21	27	27
	Pounds	206	417	295	452	290	391	327
plum	Apps	7	6	13	8	12	20	15
	Pounds	87	90	225	249	272	537	257
grapes (table/raisin)	Apps	0	0	1	1	0	0	1
	Pounds	0	0	14	10	0	0	55
grapes (wine)	Apps	0	0	3	3	0	0	0
	Pounds	0	0	48	41	0	0	0

Simazine pesticide use by PUR database crops for 47 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	2	3	2	0	1	0	0
	Pounds	11	14	6	0	1	0	0
pear	Apps	0	2	2	2	3	3	0
	Pounds	0	31	32	41	35	37	0
apricot	Apps	0	0	1	0	0	0	0
	Pounds	0	0	1	0	0	0	0
cherry	Apps	0	0	0	0	1	0	0
	Pounds	0	0	0	0	0	0	0
nectarine	Apps	43	37	38	33	52	26	38
	Pounds	168	171	263	77	342	109	132
peach	Apps	38	42	36	35	46	25	37
	Pounds	135	127	175	80	217	107	98
plum	Apps	4	0	1	0	2	0	1
	Pounds	14	0	14	0	41	0	7
citrus fruits	Apps	0	0	0	0	0	1	2
	Pounds	0	0	0	0	0	1	14
grapes (table/raisin)	Apps	10	8	4	7	7	8	5
	Pounds	144	205	154	210	107	92	229
grapes (wine)	Apps	4	4	4	5	2	3	2
	Pounds	34	33	18	36	24	3	24

Trifluralin pesticide use by PUR database crops for 47 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
pastures	Apps	1	0	1	0	0	0	0
	Pounds	13	0	12	0	0	0	0
peach	Apps	1	0	0	0	0	0	0
	Pounds	6	0	0	0	0	0	0
grapes (table/raisin)	Apps	0	0	0	1	1	0	1
	Pounds	0	0	0	20	24	0	24
grapes (wine)	Apps	0	0	0	2	3	0	0
	Pounds	0	0	0	2	3	0	0

Pesticide Use Proximate to Participant 48

Azinphos methyl pesticide use by PUR database crops for 48 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	0	4	0	3	0	0	0
	Pounds	0	544	0	544	0	0	0

Chlorpyrifos pesticide use by PUR database crops for 48 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	3	6	0	0	0	0	0
	Pounds	570	272	0	0	0	0	0
alfalfa	Apps	23	22	15	10	29	21	4
	Pounds	463	352	342	221	593	278	88

Iprodione pesticide use by PUR database crops for 48 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	2	6	6	0	2	3	9
	Pounds	68	166	272	0	85	101	202

Phosmet pesticide use by PUR database crops for 48 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	0	0	3	0	0	0	0
	Pounds	0	0	970	0	0	0	0

Simazine pesticide use by PUR database crops for 48 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
grapes (table/raisin)	Apps	0	1	1	0	0	0	0
	Pounds	0	23	22	0	0	0	0

Trifluralin pesticide use by PUR database crops for 48 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
alfalfa	Apps	0	2	0	0	0	0	0
	Pounds	0	128	0	0	0	0	0
grapes (table/raisin)	Apps	0	1	0	0	0	0	0
	Pounds	0	50	0	0	0	0	0

Pesticide Use Proximate to Participant 49

Azinphos methyl pesticide use by PUR database crops for 49 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	1	0	0	0	0	0	0
	Pounds	150	0	0	0	0	0	0

Chlorpyrifos pesticide use by PUR database crops for 49 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	0	0	0	1	0	0	0
	Pounds	0	0	0	200	0	0	0
alfalfa	Apps	0	2	3	1	0	6	3
	Pounds	0	14	30	17	0	122	71
corn (forage - fodder)	Apps	0	0	0	0	0	1	1
	Pounds	0	0	0	0	0	70	20
cotton (general)	Apps	0	0	0	0	1	0	0
	Pounds	0	0	0	0	27	0	0

Dicofol pesticide use by PUR database crops for 49 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
cotton (general)	Apps	2	3	0	3	0	4	0
	Pounds	184	170	0	331	0	241	0

Iprodione pesticide use by PUR database crops for 49 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	1	1	1	1	0	0	0
	Pounds	50	50	50	50	0	0	0
peach	Apps	0	0	0	1	0	1	0
	Pounds	0	0	0	10	0	10	0

Phosmet pesticide use by PUR database crops for 49 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	1	1	1	0	1	3	1
	Pounds	280	280	280	0	280	1050	280
peach	Apps	0	0	0	2	1	0	1
	Pounds	0	0	0	112	60	0	56

Simazine pesticide use by PUR database crops for 49 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	0	1	1	0	0	0	0
	Pounds	0	16	18	0	0	0	0

Trifluralin pesticide use by PUR database crops for 49 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
alfalfa	Apps	0	4	0	0	0	0	0
	Pounds	0	109	0	0	0	0	0
cotton (general)	Apps	2	3	2	1	1	5	3
	Pounds	173	423	73	39	34	333	217

Pesticide Use Proximate to Participant 50

Azinphos methyl pesticide use by PUR database crops for 50 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	0	0	5	3	1	1	0
	Pounds	0	0	57	33	15	9	0

Chlorpyrifos pesticide use by PUR database crops for 50 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	2	1	3	1	1	2	0
	Pounds	15	8	27	9	9	21	0
sweet potato	Apps	0	0	0	2	0	2	3
	Pounds	0	0	0	61	0	109	121
cherry	Apps	0	6	0	0	0	0	0
	Pounds	0	20	0	0	0	0	0
corn (forage - fodder)	Apps	0	0	0	0	0	0	1
	Pounds	0	0	0	0	0	0	4
alfalfa	Apps	9	5	6	3	3	0	0
	Pounds	157	50	160	74	9	0	0
almond	Apps	11	14	7	6	7	3	2
	Pounds	608	693	281	411	435	231	138

Iprodione pesticide use by PUR database crops for 50 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
strawberry	Apps	4	0	1	0	1	1	1
	Pounds	6	0	3	0	12	3	3
almond	Apps	19	15	17	12	6	8	4
	Pounds	303	274	243	200	62	138	56
nectarine	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	4	0
apricot	Apps	1	0	0	0	0	0	0
	Pounds	3	0	0	0	0	0	0

Phosmet pesticide use by PUR database crops for 50 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	1	0	1	1	0	0	0
	Pounds	112	0	88	3	0	0	0
apple	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	17	0
alfalfa	Apps	1	1	0	2	0	0	0
	Pounds	14	3	0	28	0	0	0

Simazine pesticide use by PUR database crops for 50 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	8	7	2	11	3	4	5
	Pounds	76	65	8	104	28	31	90
apple	Apps	0	1	1	1	1	1	0
	Pounds	0	5	11	7	12	12	0
grapes (wine)	Apps	3	4	3	3	2	2	4
	Pounds	49	80	49	49	62	46	56

Trifluralin pesticide use by PUR database crops for 50 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
alfalfa	Apps	1	1	0	0	0	0	0
	Pounds	36	36	0	0	0	0	0

Pesticide Use Proximate to Participant 51

Chlorpyrifos pesticide use by PUR database crops for 51 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
chinese cabbage	Apps	0	0	2	0	0	0	0
	Pounds	0	0	2	0	0	0	0

Trifluralin pesticide use by PUR database crops for 51 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
barley (general)	Apps	0	0	0	0	0	0	2
	Pounds	0	0	0	0	0	0	15

Pesticide Use Proximate to Participant 52

Azinphos methyl pesticide use by PUR database crops for 52 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	2	1	0	0	0	0	0
	Pounds	16	6	0	0	0	0	0

Chlorpyrifos pesticide use by PUR database crops for 52 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	2	1	2	1	0	0	0
	Pounds	36	17	36	18	0	0	0
nectarine	Apps	0	1	1	0	0	2	0
	Pounds	0	17	9	0	0	20	0
peach	Apps	0	1	0	0	0	0	0
	Pounds	0	15	0	0	0	0	0
prune	Apps	1	1	0	1	0	0	0
	Pounds	23	26	0	26	0	0	0
citrus fruits	Apps	0	1	0	0	0	0	1
	Pounds	0	26	0	0	0	0	14
grapes (table/raisin)	Apps	9	7	8	11	9	13	11
	Pounds	711	392	475	510	514	522	576
orange	Apps	0	0	1	1	1	1	1
	Pounds	0	0	7	6	16	2	8
tangerine (mandarin satsuma murcott)	Apps	1	0	0	0	0	0	0
	Pounds	14	0	0	0	0	0	0
outdoor grown plants	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	24	0

Dicofol pesticide use by PUR database crops for 52 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
outdoor grown plants	Apps	1	1	1	2	0	0	1
	Pounds	14	6	18	13	0	0	38
grapes (table/raisin)	Apps	12	0	1	1	0	0	0
	Pounds	332	0	25	15	0	0	0

Iprodione pesticide use by PUR database crops for 52 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
nectarine	Apps	1	2	1	1	0	0	1
	Pounds	4	7	4	4	0	0	6
peach	Apps	0	1	0	0	0	0	1
	Pounds	0	4	0	0	0	0	8
prune	Apps	0	0	0	1	1	1	0
	Pounds	0	0	0	8	8	6	0
grapes (table/raisin)	Apps	31	17	19	14	21	19	10
	Pounds	323	201	247	99	151	118	92
grapes (wine)	Apps	2	1	0	1	0	1	1
	Pounds	17	10	0	10	0	10	10
outdoor grown plants	Apps	1	0	0	0	0	0	0
	Pounds	7	0	0	0	0	0	0

Phosmet pesticide use by PUR database crops for 52 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	3	3	2	2	0	0	0
	Pounds	111	112	101	66	0	0	0
apricot	Apps	1	2	3	1	0	0	1
	Pounds	17	21	10	4	0	0	16
nectarine	Apps	0	0	0	1	1	2	0
	Pounds	0	0	0	8	30	47	0
peach	Apps	0	0	0	0	0	1	1
	Pounds	0	0	0	0	0	17	2
plum	Apps	1	0	0	0	0	0	1
	Pounds	17	0	0	0	0	0	16
grapes (table/raisin)	Apps	1	2	0	0	0	0	0
	Pounds	56	56	0	0	0	0	0
grapes (wine)	Apps	1	1	1	0	0	0	0
	Pounds	2	21	20	0	0	0	0
outdoor grown plants	Apps	0	0	0	1	0	1	0
	Pounds	0	0	0	28	0	56	0

Simazine pesticide use by PUR database crops for 52 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
boysenberry (boysens)	Apps	1	0	0	0	0	0	0
	Pounds	2	0	0	0	0	0	0
commercial institutional or industrial areas	Apps	0	1	0	0	0	0	0
	Pounds	0	9	0	0	0	0	0
apricot	Apps	0	0	0	1	0	0	0
	Pounds	0	0	0	1	0	0	0
nectarine	Apps	1	0	0	1	1	0	0
	Pounds	0	0	0	1	0	0	0
grapes (table/raisin)	Apps	67	58	37	33	16	11	13
	Pounds	1425	1493	759	650	341	147	307
orange	Apps	1	0	0	0	0	0	0
	Pounds	4	0	0	0	0	0	0
grapes (wine)	Apps	4	2	1	2	3	1	2
	Pounds	165	55	7	40	28	1	18
uncultivated non-ag areas	Apps	1	0	0	0	0	0	0
	Pounds	14	0	0	0	0	0	0

Trifluralin pesticide use by PUR database crops for 52 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
soil preplant application	Apps	0	0	0	1	0	0	0
	Pounds	0	0	0	30	0	0	0
grapes (table/raisin)	Apps	2	0	0	0	0	0	0
	Pounds	86	0	0	0	0	0	0

Pesticide Use Proximate to Participant 53

Azinphos methyl pesticide use by PUR database crops for 53 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
plum	Apps	3	0	0	0	0	0	0
	Pounds	23	0	0	0	0	0	0

Chlorpyrifos pesticide use by PUR database crops for 53 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	1	2	0	1	1	0	0
	Pounds	80	90	0	80	80	0	0
pear	Apps	0	0	0	0	0	0	1
	Pounds	0	0	0	0	0	0	0
cherry	Apps	0	0	0	2	2	2	0
	Pounds	0	0	0	38	11	11	0
nectarine	Apps	14	25	34	47	50	27	29
	Pounds	136	338	426	535	653	387	377
peach	Apps	24	23	34	51	53	48	41
	Pounds	276	258	395	452	521	457	376
plum	Apps	12	12	24	23	27	20	25
	Pounds	150	280	222	349	338	222	172
citrus fruits	Apps	0	1	1	0	1	0	1
	Pounds	0	8	21	0	22	0	3
grapes (table/raisin)	Apps	1	0	0	2	1	0	0
	Pounds	10	0	0	28	10	0	0
orange	Apps	3	0	0	0	0	0	0
	Pounds	22	0	0	0	0	0	0
tangerine (mandarin satsuma murcott)	Apps	1	0	0	0	0	0	0
	Pounds	5	0	0	0	0	0	0

Dicofol pesticide use by PUR database crops for 53 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
nectarine	Apps	4	1	0	4	1	4	0
	Pounds	25	5	0	6	22	23	0
peach	Apps	5	0	0	9	4	4	0
	Pounds	23	0	0	31	42	24	0
plum	Apps	0	0	0	6	1	2	0
	Pounds	0	0	0	7	4	11	0

Iprodione pesticide use by PUR database crops for 53 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apricot	Apps	7	3	2	3	0	2	0
	Pounds	28	19	4	6	0	2	0
cherry	Apps	1	0	2	2	2	2	2
	Pounds	9	0	10	14	14	14	9
nectarine	Apps	57	46	55	65	14	43	17
	Pounds	308	218	222	271	91	162	65
peach	Apps	67	61	64	56	8	25	14
	Pounds	200	205	202	146	39	79	51
plum	Apps	18	10	6	10	0	13	5
	Pounds	52	47	36	17	0	27	10
grapes (table/raisin)	Apps	1	2	0	0	0	0	0
	Pounds	3	168	0	0	0	0	0

Phosmet pesticide use by PUR database crops for 53 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	3	3	3	3	3	0	0
	Pounds	315	350	420	420	392	0	0
nectarine	Apps	46	30	18	51	56	27	41
	Pounds	727	459	289	631	945	517	852
peach	Apps	40	35	15	55	38	29	41
	Pounds	436	299	132	641	473	346	556
plum	Apps	13	12	8	19	14	12	14
	Pounds	127	93	115	299	197	189	237
grapes (table/raisin)	Apps	1	0	2	0	0	0	0
	Pounds	13	0	41	0	0	0	0
grapes (wine)	Apps	0	1	2	0	0	0	0
	Pounds	0	7	28	0	0	0	0

Simazine pesticide use by PUR database crops for 53 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	2	1	1	1	0	0	0
	Pounds	45	27	27	40	0	0	0
soil preplant application	Apps	0	1	0	0	0	0	0
	Pounds	0	9	0	0	0	0	0
nectarine	Apps	34	46	28	55	50	31	41
	Pounds	141	169	96	193	228	138	185
peach	Apps	66	65	35	61	51	52	44
	Pounds	235	210	104	187	174	174	160
plum	Apps	7	2	1	2	4	6	9
	Pounds	14	7	1	6	8	15	30
citrus fruits	Apps	0	0	1	0	0	0	0
	Pounds	0	0	7	0	0	0	0
uncultivated agricultural areas	Apps	0	0	1	1	1	0	0
	Pounds	0	0	9	56	28	0	0
grapes (table/raisin)	Apps	8	10	9	11	6	3	2
	Pounds	71	158	64	293	47	163	13
orange	Apps	3	2	1	0	1	0	2
	Pounds	12	4	14	0	1	0	5
grapes (wine)	Apps	3	3	1	2	0	0	0
	Pounds	32	45	6	12	0	0	0
tangerine (mandarin sat-suma murcott)	Apps	1	1	0	0	1	0	0
	Pounds	4	1	0	0	1	0	0

Trifluralin pesticide use by PUR database crops for 53 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apricot	Apps	0	0	0	0	0	0	2
	Pounds	0	0	0	0	0	0	4
nectarine	Apps	2	4	3	0	0	0	2
	Pounds	6	9	22	0	0	0	6
peach	Apps	0	0	0	0	0	0	7
	Pounds	0	0	0	0	0	0	16
plum	Apps	0	0	0	0	0	0	7
	Pounds	0	0	0	0	0	0	32
orange	Apps	2	2	0	0	0	0	0
	Pounds	2	1	0	0	0	0	0
tangerine (mandarin sat-suma murcott)	Apps	1	2	0	0	0	0	0
	Pounds	1	1	0	0	0	0	0

Pesticide Use Proximate to Participant 54

Azinphos methyl pesticide use by PUR database crops for 54 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	4	1	1	0	0	0	0
	Pounds	584	330	300	0	0	0	0
cherry	Apps	0	1	0	1	0	0	0
	Pounds	0	27	0	6	0	0	0

Chlorpyrifos pesticide use by PUR database crops for 54 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
cherry	Apps	1	0	0	0	2	0	1
	Pounds	17	0	0	0	10	0	0
grapes (table/raisin)	Apps	2	2	1	4	8	3	12
	Pounds	200	61	24	218	509	96	665
orange	Apps	1	1	2	1	0	0	3
	Pounds	18	9	51	5	0	0	80
almond	Apps	8	5	3	1	1	1	1
	Pounds	979	511	551	280	280	150	640
tangerine (mandarin sat-suma murcott)	Apps	2	2	4	2	2	0	4
	Pounds	22	11	65	6	4	0	84
alfalfa	Apps	4	1	1	0	0	1	0
	Pounds	129	18	28	0	0	19	0

Dicofol pesticide use by PUR database crops for 54 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
grapes (table/raisin)	Apps	3	1	0	0	0	0	0
	Pounds	95	18	0	0	0	0	0

Iprodione pesticide use by PUR database crops for 54 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	13	7	7	3	2	2	1
	Pounds	505	256	360	147	109	77	40
cherry	Apps	0	2	1	1	1	1	0
	Pounds	0	4	5	5	5	4	0
grapes (table/raisin)	Apps	21	2	3	3	2	0	0
	Pounds	458	89	98	98	40	0	0
grapes (wine)	Apps	1	0	0	0	0	0	0
	Pounds	106	0	0	0	0	0	0

Phosmet pesticide use by PUR database crops for 54 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	1	0	0	0	0	1	3
	Pounds	67	0	0	0	0	140	1638
grapes (table/raisin)	Apps	6	2	0	2	1	0	0
	Pounds	239	58	0	45	16	0	0
pistachio	Apps	0	0	1	0	0	0	0
	Pounds	0	0	652	0	0	0	0
plum	Apps	0	0	1	0	0	0	0
	Pounds	0	0	80	0	0	0	0
grapes (wine)	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	169	0

Simazine pesticide use by PUR database crops for 54 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	0	0	1	1	0	0	0
	Pounds	0	0	173	169	0	0	0
olive	Apps	1	0	0	0	0	0	0
	Pounds	96	0	0	0	0	0	0
uncultivated agricultural areas	Apps	0	0	0	0	0	0	2
	Pounds	0	0	0	0	0	0	7
tangerine (mandarin sat-suma murcott)	Apps	2	0	1	2	0	0	0
	Pounds	18	0	31	67	0	0	0
grapes (table/raisin)	Apps	7	17	17	17	19	38	24
	Pounds	341	585	1105	410	543	1010	728
orange	Apps	1	1	1	1	0	1	0
	Pounds	29	120	45	55	0	90	0
grapes (wine)	Apps	1	0	2	0	0	0	0
	Pounds	48	0	105	0	0	0	0
uncultivated non-ag areas	Apps	0	1	0	0	5	5	7
	Pounds	0	7	0	0	360	164	243
almond	Apps	4	2	4	0	2	3	2
	Pounds	115	110	211	0	45	79	45

Trifluralin pesticide use by PUR database crops for 54 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	0	0	0	1	0	0	0
	Pounds	0	0	0	35	0	0	0
walnut	Apps	0	1	0	0	0	0	0
	Pounds	0	83	0	0	0	0	0
grapes (wine)	Apps	0	0	1	0	0	0	0
	Pounds	0	0	39	0	0	0	0
grapes (table/raisin)	Apps	1	0	2	0	6	6	3
	Pounds	74	0	42	0	92	65	80
alfalfa	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	290	0

Pesticide Use Proximate to Participant 55

Azinphos methyl pesticide use by PUR database crops for 55 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	1	0	0	0	0	0	0
	Pounds	36	0	0	0	0	0	0
nectarine	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
peach	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
plum	Apps	3	3	3	2	2	0	0
	Pounds	29	38	37	20	42	0	0

Chlorpyrifos pesticide use by PUR database crops for 55 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
nectarine	Apps	5	17	26	13	16	6	0
	Pounds	143	322	705	230	229	275	0
peach	Apps	4	9	13	8	11	1	0
	Pounds	70	247	306	85	114	40	0
plum	Apps	10	20	12	10	10	2	0
	Pounds	156	272	139	117	140	50	0
grapes (table/raisin)	Apps	3	2	3	0	1	2	0
	Pounds	90	48	20	0	4	24	0
orange	Apps	2	3	2	1	1	2	2
	Pounds	22	32	21	1	1	31	10
almond	Apps	2	1	2	1	1	1	1
	Pounds	26	14	22	14	14	14	14

Dicofol pesticide use by PUR database crops for 55 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
nectarine	Apps	2	0	0	0	0	0	0
	Pounds	39	0	0	0	0	0	0
peach	Apps	1	0	0	0	0	0	0
	Pounds	14	0	0	0	0	0	0

Iprodione pesticide use by PUR database crops for 55 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apricot	Apps	0	3	1	0	0	0	0
	Pounds	0	8	2	0	0	0	0
nectarine	Apps	19	13	13	7	8	7	9
	Pounds	241	119	213	96	75	94	98
peach	Apps	6	6	12	5	4	1	2
	Pounds	54	39	161	44	43	15	17
plum	Apps	1	1	2	0	0	1	0
	Pounds	8	11	13	0	0	11	0
grapes (table/raisin)	Apps	0	1	0	0	2	1	0
	Pounds	0	3	0	0	29	3	0
strawberry	Apps	1	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
almond	Apps	2	3	1	1	0	1	1
	Pounds	7	9	4	4	0	4	4

Phosmet pesticide use by PUR database crops for 55 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apricot	Apps	0	0	0	1	1	1	0
	Pounds	0	0	0	11	11	11	0
cherry	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
nectarine	Apps	11	13	16	30	18	8	12
	Pounds	377	657	778	1270	1002	406	399
peach	Apps	8	6	3	9	6	3	2
	Pounds	116	221	159	370	336	74	32
plum	Apps	4	2	1	4	0	0	0
	Pounds	88	49	2	87	0	0	0
grapes (table/raisin)	Apps	0	0	0	1	0	0	0
	Pounds	0	0	0	28	0	0	0

Simazine pesticide use by PUR database crops for 55 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	1	0	0	0	0	0	0
	Pounds	16	0	0	0	0	0	0
nectarine	Apps	19	18	13	16	16	5	16
	Pounds	148	246	177	286	307	173	333
peach	Apps	9	9	11	16	10	1	7
	Pounds	85	96	102	179	120	40	49
plum	Apps	0	0	0	1	0	0	0
	Pounds	0	0	0	2	0	0	0
grapes (table/raisin)	Apps	6	2	1	2	1	2	1
	Pounds	95	23	18	70	1	13	5
orange	Apps	1	2	0	1	1	3	1
	Pounds	6	16	0	8	9	32	23
almond	Apps	1	0	1	0	0	0	0
	Pounds	4	0	4	0	0	0	0

Trifluralin pesticide use by PUR database crops for 55 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apricot	Apps	0	0	1	0	0	0	0
	Pounds	0	0	4	0	0	0	0

Pesticide Use Proximate to Participant 56

Azinphos methyl pesticide use by PUR database crops for 56 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	1	2	2	0	0	0	0
	Pounds	60	113	112	0	0	0	0

Chlorpyrifos pesticide use by PUR database crops for 56 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
cotton (general)	Apps	3	2	0	0	0	0	0
	Pounds	91	68	0	0	0	0	0
plum	Apps	0	0	0	0	1	1	1
	Pounds	0	0	0	0	40	40	40
prune	Apps	0	0	2	0	2	2	0
	Pounds	0	0	112	0	102	103	0
almond	Apps	10	12	10	9	4	4	6
	Pounds	806	667	630	474	401	241	345
chinese cabbage	Apps	0	3	0	1	0	2	0
	Pounds	0	43	0	7	0	8	0
corn (forage - fodder)	Apps	0	6	3	0	0	0	0
	Pounds	0	301	96	0	0	0	0
grapes (wine)	Apps	0	3	0	0	0	0	0
	Pounds	0	154	0	0	0	0	0
alfalfa	Apps	3	2	4	12	1	12	8
	Pounds	70	102	105	569	17	258	190
bok choy	Apps	0	0	0	0	0	2	0
	Pounds	0	0	0	0	0	5	0
grapes (table/raisin)	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	9	0

Dacthal pesticide use by PUR database crops for 56 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
chinese cabbage	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
gai lon	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0

Dicofol pesticide use by PUR database crops for 56 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
cotton (general)	Apps	3	4	0	0	0	0	0
	Pounds	77	125	0	0	0	0	0

Iprodione pesticide use by PUR database crops for 56 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	20	8	9	13	3	13	7
	Pounds	369	83	110	96	66	237	121
peach	Apps	1	0	0	0	0	0	0
	Pounds	1	0	0	0	0	0	0
grapes (table/raisin)	Apps	0	0	0	2	0	1	0
	Pounds	0	0	0	23	0	15	0
prune	Apps	0	0	2	0	0	0	0
	Pounds	0	0	30	0	0	0	0
grapes (wine)	Apps	0	3	0	0	0	0	0
	Pounds	0	29	0	0	0	0	0

Phosmet pesticide use by PUR database crops for 56 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
nectarine	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	82	0
peach	Apps	0	0	0	1	0	0	0
	Pounds	0	0	0	103	0	0	0
plum	Apps	1	0	0	1	1	0	0
	Pounds	38	0	0	38	38	0	0
almond	Apps	1	2	1	1	0	1	1
	Pounds	112	224	112	112	0	63	112
grapes (table/raisin)	Apps	2	1	1	0	0	1	3
	Pounds	24	7	70	0	0	16	43
grapes (wine)	Apps	0	3	4	0	0	0	0
	Pounds	0	57	140	0	0	0	0
alfalfa	Apps	4	0	0	0	0	0	0
	Pounds	65	0	0	0	0	0	0

Simazine pesticide use by PUR database crops for 56 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	5	1	3	1	0	1	2
	Pounds	144	9	16	4	0	3	26
grapes (table/raisin)	Apps	7	7	7	5	5	6	7
	Pounds	75	244	232	58	28	163	260
grapes (wine)	Apps	4	0	5	2	0	0	2
	Pounds	107	0	81	20	0	0	54

Trifluralin pesticide use by PUR database crops for 56 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
cotton (general)	Apps	3	2	0	3	0	0	0
	Pounds	70	53	0	53	0	0	0
chinese cabbage	Apps	0	0	0	0	0	2	0
	Pounds	0	0	0	0	0	8	0
grapes (table/raisin)	Apps	1	3	2	0	2	0	0
	Pounds	97	192	29	0	170	0	0
grapes (wine)	Apps	0	0	1	0	0	0	0
	Pounds	0	0	5	0	0	0	0
alfalfa	Apps	0	2	1	6	5	0	2
	Pounds	0	120	30	740	400	0	80
bok choy	Apps	0	0	0	0	0	2	0
	Pounds	0	0	0	0	0	5	0

Pesticide Use Proximate to Participant 57

Chlorpyrifos pesticide use by PUR database crops for 57 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
alfalfa	Apps	0	0	1	7	15	27	0
	Pounds	0	0	55	153	338	563	0
cotton (general)	Apps	13	28	21	26	12	6	9
	Pounds	726	1057	994	1070	430	407	480
sugarbeet (general)	Apps	0	0	1	0	0	0	0
	Pounds	0	0	50	0	0	0	0

Dicofol pesticide use by PUR database crops for 57 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
cotton (general)	Apps	0	0	2	0	1	0	3
	Pounds	0	0	262	0	56	0	90

Iprodione pesticide use by PUR database crops for 57 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
onion (dry, spanish, white)	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0

Phosmet pesticide use by PUR database crops for 57 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
alfalfa	Apps	0	0	2	0	0	0	0
	Pounds	0	0	78	0	0	0	0

Trifluralin pesticide use by PUR database crops for 57 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
cotton (general)	Apps	2	17	9	7	15	25	19
	Pounds	146	517	454	418	634	1176	694
safflower (general)	Apps	0	2	0	0	1	0	0
	Pounds	0	18	0	0	56	0	0
wheat (general)	Apps	0	0	0	0	0	1	0
	Pounds	0	0	0	0	0	41	0
corn (forage - fodder)	Apps	0	1	0	0	0	0	0
	Pounds	0	150	0	0	0	0	0
sugarbeet (general)	Apps	0	0	1	0	0	0	0
	Pounds	0	0	44	0	0	0	0

Pesticide Use Proximate to Participant 58

Azinphos methyl pesticide use by PUR database crops for 58 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	1	0	0	0	0	0	0
	Pounds	23	0	0	0	0	0	0

Chlorpyrifos pesticide use by PUR database crops for 58 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	9	9	13	18	3	2	3
	Pounds	296	405	495	653	80	53	102
cotton (general)	Apps	2	3	4	3	2	3	0
	Pounds	38	144	100	89	60	67	0
cherry	Apps	0	1	0	0	0	0	0
	Pounds	0	43	0	0	0	0	0
nectarine	Apps	0	2	0	0	0	0	0
	Pounds	0	73	0	0	0	0	0
peach	Apps	0	4	0	0	0	0	0
	Pounds	0	162	0	0	0	0	0
wheat (general)	Apps	0	0	1	0	0	0	0
	Pounds	0	0	19	0	0	0	0
corn (forage - fodder)	Apps	0	0	1	0	0	0	1
	Pounds	0	0	45	0	0	0	39
almond	Apps	1	6	6	2	1	1	1
	Pounds	40	173	279	230	120	130	81
alfalfa	Apps	2	6	2	1	2	5	3
	Pounds	45	83	30	23	38	93	57

Dicofol pesticide use by PUR database crops for 58 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	0	1	0	0	0	0	0
	Pounds	0	24	0	0	0	0	0
nectarine	Apps	2	0	0	0	0	0	0
	Pounds	54	0	0	0	0	0	0
cotton (general)	Apps	1	3	3	5	4	0	1
	Pounds	28	353	218	269	235	0	198

Iprodione pesticide use by PUR database crops for 58 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
cherry	Apps	0	0	0	1	2	1	1
	Pounds	0	0	0	13	28	11	11
nectarine	Apps	4	0	2	0	2	2	2
	Pounds	43	0	27	0	18	18	18
peach	Apps	4	0	4	0	4	6	5
	Pounds	53	0	60	0	38	51	43
plum	Apps	0	0	0	0	0	0	1
	Pounds	0	0	0	0	0	0	10
grapes (table/raisin)	Apps	1	0	0	0	0	1	1
	Pounds	28	0	0	0	0	5	5
almond	Apps	12	14	20	9	3	9	7
	Pounds	197	184	315	132	82	152	158

Phosmet pesticide use by PUR database crops for 58 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	0	3	0	0	0	0	0
	Pounds	0	381	0	0	0	0	0
nectarine	Apps	0	0	0	2	0	0	1
	Pounds	0	0	0	102	0	0	14
peach	Apps	4	0	0	5	6	5	8
	Pounds	211	0	0	240	223	190	224
plum	Apps	0	0	0	0	0	0	1
	Pounds	0	0	0	0	0	0	57
alfalfa	Apps	1	1	0	0	0	0	0
	Pounds	17	20	0	0	0	0	0
almond	Apps	6	3	1	2	1	0	1
	Pounds	315	4113	228	455	228	0	228

Simazine pesticide use by PUR database crops for 58 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
almond	Apps	0	0	0	1	1	0	3
	Pounds	0	0	0	16	16	0	69
nectarine	Apps	0	0	0	0	2	2	2
	Pounds	0	0	0	0	13	13	13
peach	Apps	0	0	0	0	4	4	4
	Pounds	0	0	0	0	28	28	28
grapes (table/raisin)	Apps	1	1	0	0	0	0	2
	Pounds	22	2253	0	0	0	0	48
walnut	Apps	0	0	0	0	4	0	1
	Pounds	0	0	0	0	58	0	19

Trifluralin pesticide use by PUR database crops for 58 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
cotton (general)	Apps	1	1	2	0	0	0	0
	Pounds	8	60	42	0	0	0	0
mustard (general)	Apps	1	0	0	0	0	0	0
	Pounds	1	0	0	0	0	0	0
walnut	Apps	0	0	0	0	2	2	0
	Pounds	0	0	0	0	56	80	0
corn (forage - fodder)	Apps	1	0	0	0	0	0	0
	Pounds	74	0	0	0	0	0	0
alfalfa	Apps	2	1	1	3	2	3	0
	Pounds	240	96	200	300	194	244	0
almond	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0

Pesticide Use Proximate to Participant 59

Azinphos methyl pesticide use by PUR database crops for 59 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	1	9	1	3	2	2	0
	Pounds	24	323	15	20	53	46	0

Chlorpyrifos pesticide use by PUR database crops for 59 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	27	24	28	43	40	42	39
	Pounds	1050	1002	874	1876	2033	1824	2186
peach	Apps	0	0	0	1	1	1	1
	Pounds	0	0	0	81	50	100	100

Iprodione pesticide use by PUR database crops for 59 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
peach	Apps	2	2	0	0	0	0	0
	Pounds	33	19	0	0	0	0	0

Phosmet pesticide use by PUR database crops for 59 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	8	2	1	2	2	8	0
	Pounds	194	53	28	17	488	490	0

Simazine pesticide use by PUR database crops for 59 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
walnut	Apps	4	4	4	7	2	8	3
	Pounds	65	279	66	374	72	455	287

Pesticide Use Proximate to Participant 60

Alachlor pesticide use by PUR database crops for 60 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
corn (forage - fodder)	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0

Azinphos methyl pesticide use by PUR database crops for 60 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	0	1	2	0	0	0	0
	Pounds	0	1	3	0	0	0	0
pear	Apps	0	1	2	0	0	0	0
	Pounds	0	0	2	0	0	0	0

Chlorpyrifos pesticide use by PUR database crops for 60 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
alfalfa	Apps	4	4	3	2	6	4	2
	Pounds	339	164	63	67	274	129	63
research commodity	Apps	1	0	0	0	0	0	0
	Pounds	1	0	0	0	0	0	0
sunflower (general)	Apps	0	2	0	0	0	0	0
	Pounds	0	240	0	0	0	0	0

Dicofol pesticide use by PUR database crops for 60 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
beans (dried)	Apps	1	0	0	0	0	0	0
	Pounds	18	0	0	0	0	0	0

Iprodione pesticide use by PUR database crops for 60 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apricot	Apps	0	2	0	0	0	0	0
	Pounds	0	1	0	0	0	0	0
outdoor grown plants	Apps	0	1	0	0	0	0	0
	Pounds	0	1	0	0	0	0	0
nectarine	Apps	0	1	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
peach	Apps	0	3	0	0	0	0	0
	Pounds	0	3	0	0	0	0	0
onion (dry, spanish, white)	Apps	0	0	5	1	0	0	0
	Pounds	0	0	20	7	0	0	0

Phosmet pesticide use by PUR database crops for 60 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
apple	Apps	0	1	1	0	0	0	0
	Pounds	0	2	1	0	0	0	0
pear	Apps	0	1	2	0	0	0	0
	Pounds	0	2	4	0	0	0	0
alfalfa	Apps	4	2	2	2	2	0	0
	Pounds	62	62	62	55	74	0	0

Simazine pesticide use by PUR database crops for 60 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
peach	Apps	1	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
grapes (table/raisin)	Apps	0	0	1	0	0	0	0
	Pounds	0	0	3	0	0	0	0
grapes (wine)	Apps	8	8	0	2	0	6	5
	Pounds	15	16	0	3	0	13	18

Trifluralin pesticide use by PUR database crops for 60 at distance 1250m.

Crop	Type	1998	1999	2000	2001	2002	2003	2004
research commodity	Apps	1	0	0	0	0	0	0
	Pounds	12	0	0	0	0	0	0
safflower (general)	Apps	1	1	1	4	3	0	0
	Pounds	6	6	6	72	94	0	0
sunflower general	Apps	0	0	0	0	0	0	0
	Pounds	0	0	0	0	0	0	0
tomatoes (processing/canning)	Apps	5	5	6	0	1	2	0
	Pounds	145	185	74	0	17	34	0
alfalfa	Apps	0	2	4	4	9	0	6
	Pounds	0	178	389	528	1000	0	672
onion (dry, spanish, white)	Apps	0	1	0	0	0	0	0
	Pounds	0	4	0	0	0	0	0

Appendix F

Land use and soil Information by participant

Land use information for participant 1.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	7.4	1
Field	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Pasture	0.0	0	1.5	1	3.5	1	3.5	0	12.5	1
Truck	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Decid	0.0	0	5.1	3	12.5	3	12.5	2	12.5	1
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	1.0	1	12.1	6	31.0	7	56.4	7	64.8	5
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	0.5	1	6.1	3	7.7	2	7.8	1	15.8	1
Urban	63.9	92	138.5	71	301.4	69	559.0	72	863.1	71
Urban Landscape	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vacant	4.4	6	31.6	16	80.1	18	133.5	17	213.9	18
Native	0.0	0	0.0	0	0.0	0	3.7	0	21.3	2

Soil information for 1.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	11.5	70.5	16.5	0.75	22	78	0
500	11.5	70.5	16.5	0.75	26	74	0
750	11.5	67.5	16.5	0.75	21	78	0
1000	11.5	67.5	16.5	0.75	17	74	0
1250	11.0	67.5	16.5	0.75	14	68	0

Land use information for participant 2.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	2.6	4	19.2	10	60.1	14	99.4	13	164.0	14
Field	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Pasture	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Truck	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Decid	0.0	0	0.0	0	0.0	0	0.0	0	1.0	0
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Idle	0.0	0	0.5	0	10.3	2	42.6	5	102.4	8
SemiAg	0.0	0	0.0	0	0.0	0	4.4	1	4.4	0
Urban	60.1	86	137.7	71	258.9	59	432.4	56	636.4	52
Urban Landscape	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vacant	7.2	10	17.7	9	25.2	6	25.2	3	25.2	2
Native	0.0	0	19.8	10	81.7	19	172.5	22	279.8	23

Soil information for 2.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	42.5	28.1	29.4	1.50	0	0	12
500	42.5	28.1	29.4	1.50	0	0	27
750	42.5	28.1	29.4	1.50	0	0	54
1000	42.5	22.1	27.9	1.50	0	0	61
1250	42.5	22.1	27.9	1.50	0	0	57

Land use information for participant 3.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	0.3	0
Field	0.0	0	0.0	0	0.0	0	5.5	1	47.3	4
Pasture	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Truck	42.5	61	132.5	68	349.3	80	628.8	81	951.0	78
Decid	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	0.0	0	0.0	0	0.0	0	0.0	0	1.6	0
Urban	27.4	39	62.4	32	86.9	20	142.1	18	179.4	15
Urban Landscape	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vacant	0.0	0	0.0	0	0.0	0	0.0	0	31.0	3
Native	0.0	0	0.0	0	0.0	0	0.0	0	1.3	0

Soil information for 3.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	50.0	5.3	44.7	2.00	0	0	100
500	31.0	5.3	33.6	2.00	0	0	100
750	31.0	5.3	33.6	2.00	0	0	99
1000	31.0	24.8	33.6	2.50	0	0	95
1250	31.0	24.8	33.6	2.50	0	0	89

Land use information for participant 4.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Field	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Pasture	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Truck	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Decid	0.0	0	9.0	5	14.4	3	35.7	5	72.4	6
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Urban	51.5	74	112.4	58	315.5	72	569.5	73	922.2	76
Urban Landscape	0.0	0	0.0	0	0.0	0	6.8	1	29.0	2
Vacant	18.3	26	73.5	38	106.3	24	164.4	21	189.6	16
Native	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0

Soil information for 4.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	20.0	42.0	38.0	0.75	0	19	81
500	15.0	42.0	38.0	0.75	0	19	81
750	15.0	42.0	38.0	0.75	0	27	73
1000	15.0	44.0	19.0	0.50	0	38	62
1250	15.0	44.0	19.0	0.50	0	37	63

Land use information for participant 5.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	3.5	2	10.0	2	21.0	3	48.5	4
Field	2.9	4	45.3	23	144.4	33	258.5	33	368.2	30
Pasture	0.0	0	0.0	0	20.8	5	74.6	10	135.4	11
Truck	0.0	0	0.0	0	1.2	0	2.9	0	2.9	0
Decid	0.0	0	0.0	0	6.4	1	47.3	6	109.3	9
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Idle	0.0	0	0.0	0	0.0	0	1.4	0	21.1	2
SemiAg	0.0	0	1.3	1	15.5	4	24.7	3	55.3	5
Urban	67.0	96	144.8	75	231.9	53	324.9	42	435.1	36
Urban Landscape	0.0	0	0.0	0	5.8	1	9.2	1	21.0	2
Vacant	0.0	0	0.0	0	0.0	0	12.0	2	15.9	1
Native	0.0	0	0.0	0	0.0	0	0.0	0	0.5	0

Soil information for 5.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	14.0	69.6	16.4	1.50	0	96	4
500	14.0	69.6	16.4	1.50	0	84	16
750	14.0	69.6	16.4	1.50	0	76	23
1000	14.0	69.6	16.4	1.50	0	71	29
1250	14.0	69.6	16.4	1.50	0	66	34

Land use information for participant 6.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	5.8	8	43.9	23	81.0	19	92.0	12	133.0	11
Field	0.0	0	3.4	2	26.9	6	77.9	10	199.7	16
Pasture	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Truck	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Decid	0.0	0	0.0	0	0.0	0	0.0	0	4.9	0
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	0.0	0	14.1	7	92.2	21	202.5	26	318.0	26
Idle	0.0	0	0.0	0	3.1	1	29.9	4	68.9	6
SemiAg	0.0	0	0.0	0	0.0	0	1.0	0	1.0	0
Urban	64.1	92	133.4	69	225.2	52	342.8	44	428.2	35
Urban Landscape	0.0	0	0.0	0	0.0	0	0.0	0	0.1	0
Vacant	0.0	0	0.0	0	7.8	2	14.0	2	19.5	2
Native	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0

Soil information for 6.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	13.0	70.5	16.5	0.75	0	100	0
500	13.0	70.5	16.5	0.75	0	100	0
750	12.5	67.9	16.5	0.75	0	100	0
1000	12.5	67.9	16.5	0.75	0	100	0
1250	12.5	67.9	16.5	0.75	0	100	0

Land use information for participant 7.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	30.8	44	89.0	46	161.3	37	179.4	23	179.4	15
Field	0.0	0	5.8	3	23.5	5	28.0	4	28.0	2
Pasture	0.0	0	0.8	0	38.4	9	82.7	11	87.5	7
Truck	0.0	0	4.2	2	4.5	1	4.5	1	12.8	1
Decid	26.2	38	60.0	31	104.9	24	253.9	33	478.8	39
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	0.0	0	2.2	1	28.7	7	74.8	10	148.1	12
Idle	2.8	4	22.5	12	49.5	11	50.2	6	50.2	4
SemiAg	7.5	11	7.6	4	13.0	3	19.6	3	28.1	2
Urban	2.5	4	2.5	1	9.6	2	80.5	10	197.7	16
Urban Landscape	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vacant	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Native	0.0	0	0.1	0	2.7	1	2.7	0	2.7	0

Soil information for 7.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	12.5	70.9	16.6	0.75	0	100	0
500	12.5	70.9	16.6	0.75	0	100	0
750	12.5	67.9	16.6	0.75	0	100	0
1000	12.5	67.9	16.6	0.75	0	100	0
1250	12.5	67.9	16.6	0.75	0	100	0

Land use information for participant 8.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.6	1	30.4	16	129.1	30	290.1	37	416.7	34
Field	4.1	6	41.4	21	86.2	20	98.2	13	176.4	15
Pasture	0.0	0	6.4	3	70.1	16	157.7	20	252.1	21
Truck	0.0	0	0.0	0	0.0	0	14.7	2	76.9	6
Decid	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	3.5	5	3.5	2	5.2	1	20.1	3	20.7	2
Urban	57.3	82	96.2	50	111.8	26	123.1	16	184.1	15
Urban Landscape	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vacant	3.2	5	10.1	5	17.3	4	36.6	5	47.2	4
Native	1.3	2	6.9	4	16.5	4	36.0	5	39.0	3

Soil information for 8.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	50.0	22.1	27.9	1.50	0	1	99
500	50.0	22.1	27.9	1.50	0	12	89
750	50.0	22.1	27.9	1.50	0	22	78
1000	50.0	22.1	27.9	1.50	0	27	73
1250	50.0	22.1	27.9	1.50	0	25	75

Land use information for participant 9.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.1	0	14.8	2	20.3	2
Field	0.0	0	0.0	0	11.0	3	72.7	9	102.1	8
Pasture	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Truck	0.0	0	0.0	0	0.0	0	18.6	2	46.9	4
Decid	49.8	71	128.3	66	282.5	65	416.7	54	622.3	51
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	0.0	0	0.0	0	5.4	1	12.0	2	12.0	1
Idle	14.8	21	57.5	30	105.6	24	132.0	17	143.0	12
SemiAg	5.2	7	9.1	5	19.4	4	33.2	4	50.9	4
Urban	0.0	0	0.0	0	0.1	0	12.8	2	54.7	5
Urban Landscape	0.0	0	0.0	0	1.7	0	23.6	3	30.9	3
Vacant	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Native	0.0	0	0.1	0	10.4	2	40.2	5	130.3	11

Soil information for 9.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	33.5	34.2	32.3	0.75	0	9	91
500	33.5	34.2	32.3	0.75	0	26	75
750	33.5	34.2	32.3	0.75	0	32	66
1000	31.0	34.2	32.3	0.75	0	29	64
1250	31.0	28.1	32.3	0.75	1	29	59

Land use information for participant 10.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Field	1.4	2	12.1	6	16.2	4	29.4	4	81.5	7
Pasture	6.4	9	18.6	10	18.6	4	24.5	3	42.1	3
Truck	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Decid	3.6	5	20.0	10	59.3	14	159.3	21	311.2	26
Citrus	19.2	27	23.5	12	35.1	8	58.8	8	80.7	7
Vineyard	3.3	5	35.3	18	134.4	31	259.5	33	372.5	31
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	15.2	22	16.6	9	16.6	4	18.7	2	23.8	2
Urban	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Urban Landscape	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vacant	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Native	20.7	30	68.8	35	150.4	34	213.1	27	276.5	23

Soil information for 10.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	2.5	66.0	17.0	0.75	21	49	8
500	2.5	46.0	17.0	0.75	12	52	12
750	12.5	66.0	17.0	0.75	5	61	13
1000	12.5	66.0	17.0	0.75	3	64	16
1250	12.5	66.0	17.0	0.75	3	65	16

Land use information for participant 11.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	5.1	3	29.2	7	52.3	7	150.1	12
Field	50.7	73	132.6	68	281.8	65	484.7	62	722.6	60
Pasture	17.5	25	49.4	25	114.1	26	208.5	27	275.4	23
Truck	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Decid	0.0	0	0.0	0	0.0	0	0.0	0	1.4	0
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Idle	0.0	0	0.0	0	0.0	0	0.0	0	1.6	0
SemiAg	1.7	2	4.2	2	6.0	1	26.0	3	57.2	5
Urban	0.0	0	1.4	1	1.9	0	1.9	0	1.9	0
Urban Landscape	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vacant	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Native	0.0	0	2.1	1	3.1	1	3.1	0	3.1	0

Soil information for 11.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	22.5	39.8	37.7	2.00	0	0	100
500	22.5	39.8	37.7	2.00	0	0	100
750	22.5	39.8	37.7	2.00	0	7	93
1000	22.5	39.8	37.7	2.00	0	12	88
1250	22.5	39.8	37.7	2.00	0	18	82

Land use information for participant 12.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Field	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Pasture	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Truck	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Decid	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	30.4	43	93.4	48	216.1	49	387.6	50	647.3	53
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	0.0	0	0.0	0	0.0	0	2.7	0	5.0	0
Urban	39.5	57	101.5	52	220.1	50	363.6	47	504.7	42
Urban Landscape	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vacant	0.0	0	0.0	0	0.0	0	0.0	0	13.6	1
Native	0.0	0	0.0	0	0.0	0	14.1	2	27.7	2

Soil information for 12.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	12.5	68.0	19.5	0.75	22	78	0
500	12.5	68.0	19.5	0.75	20	81	0
750	12.5	68.0	19.5	0.75	16	84	0
1000	12.5	68.0	19.5	0.75	11	88	1
1250	12.5	68.0	19.5	0.75	9	89	3

Land use information for participant 13.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Field	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Pasture	16.5	24	65.3	34	162.8	37	272.5	35	373.3	31
Truck	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Decid	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Idle	0.0	0	0.0	0	0.0	0	15.8	2	62.8	5
SemiAg	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Urban	45.2	65	121.4	63	238.3	55	361.8	47	521.2	43
Urban Landscape	8.2	12	8.2	4	8.2	2	8.2	1	8.2	1
Vacant	0.0	0	0.0	0	26.9	6	107.9	14	229.8	19
Native	0.0	0	0.0	0	0.0	0	10.2	1	17.8	1

Soil information for 13.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	NA	NA	NA	NA	0	0	0
500	0.0	0.0	0.0	0.00	0	0	4
750	0.0	0.0	0.0	0.00	0	0	16
1000	0.0	0.0	0.0	0.00	0	0	32
1250	0.0	0.0	0.0	0.00	0	0	43

Land use information for participant 14.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	30.4	43	68.4	35	123.7	28	193.5	25	270.7	22
Field	1.4	2	24.7	13	109.4	25	211.2	27	276.1	23
Pasture	0.0	0	0.0	0	0.0	0	27.3	4	89.2	7
Truck	32.4	46	90.4	47	177.4	41	280.0	36	429.8	35
Decid	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	0.0	0	1.6	1	1.6	0	1.6	0	4.7	0
Urban	0.0	0	0.2	0	7.7	2	11.0	1	11.0	1
Urban Landscape	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vacant	5.8	8	9.6	5	16.3	4	30.7	4	44.6	4
Native	0.0	0	0.0	0	0.0	0	21.1	3	87.1	7

Soil information for 14.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	50.0	22.1	27.9	2.00	0	0	96
500	50.0	22.1	27.9	2.00	0	0	84
750	50.0	22.1	27.9	1.50	0	0	75
1000	50.0	22.1	27.9	1.50	0	0	75
1250	50.0	22.1	27.9	1.50	0	0	77

Land use information for participant 15.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	22.2	5	59.8	8	62.8	5
Field	67.6	97	154.1	79	256.0	59	426.1	55	628.1	52
Pasture	2.3	3	32.5	17	122.9	28	199.6	26	287.9	24
Truck	0.0	0	0.0	0	0.0	0	10.3	1	52.8	4
Decid	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	0.0	0	8.2	4	25.1	6	40.4	5	52.2	4
Urban	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Urban Landscape	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vacant	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Native	0.0	0	0.0	0	10.0	2	40.2	5	129.4	11

Soil information for 15.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	11.5	65.7	22.8	2.00	0	100	0
500	11.5	65.7	22.8	2.00	0	100	0
750	11.5	65.7	22.8	2.00	0	100	0
1000	11.5	35.4	22.8	2.00	0	100	0
1250	11.5	35.4	22.8	2.00	0	100	0

Land use information for participant 16.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	5.4	1	7.1	1	7.2	1
Field	0.0	0	0.0	0	19.4	4	41.9	5	41.9	3
Pasture	0.0	0	0.0	0	9.6	2	33.3	4	44.1	4
Truck	0.0	0	3.1	2	3.9	1	3.9	1	3.9	0
Decid	0.0	0	14.1	7	49.8	11	103.4	13	237.3	20
Citrus	0.0	0	2.2	1	48.0	11	95.0	12	177.3	15
Vineyard	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Idle	0.0	0	0.0	0	0.0	0	9.7	1	22.0	2
SemiAg	0.7	1	2.5	1	2.8	1	4.3	1	10.6	1
Urban	43.1	62	109.6	56	208.0	48	352.3	45	516.8	43
Urban Landscape	0.0	0	0.0	0	10.7	2	21.6	3	21.6	2
Vacant	24.6	35	39.5	20	43.4	10	43.4	6	49.7	4
Native	1.1	2	15.3	8	26.5	6	51.8	7	72.1	6

Soil information for 16.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	22.5	39.8	37.7	2.50	0	0	100
500	22.5	39.8	37.7	2.50	0	0	100
750	22.5	39.8	37.7	2.50	0	0	100
1000	22.5	39.8	37.7	2.50	0	4	96
1250	22.5	39.8	37.7	2.50	0	12	88

Land use information for participant 17.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Field	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Pasture	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Truck	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Decid	0.0	0	17.3	9	47.0	11	97.2	13	191.8	16
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Urban	54.4	78	110.8	57	261.0	60	474.4	61	667.7	55
Urban Landscape	0.0	0	0.0	0	4.1	1	38.5	5	118.0	10
Vacant	15.5	22	59.8	31	91.9	21	95.8	12	108.4	9
Native	0.0	0	7.0	4	32.2	7	57.7	7	94.1	8

Soil information for 17.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	15.0	44.0	41.0	0.50	0	0	100
500	15.0	44.0	38.0	0.50	0	3	97
750	15.0	42.0	38.0	0.50	0	3	96
1000	15.0	44.0	38.0	0.50	0	8	92
1250	15.0	44.0	41.0	0.50	0	11	89

Land use information for participant 18.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Field	0.0	0	0.0	0	0.0	0	7.6	1	51.8	4
Pasture	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Truck	0.0	0	0.0	0	0.0	0	0.2	0	3.5	0
Decid	0.0	0	0.0	0	7.9	2	13.9	2	30.9	3
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	0.0	0	0.2	0	15.2	3	30.9	4	30.9	3
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	0.0	0	0.5	0	4.9	1	4.9	1	4.9	0
Urban	68.4	98	191.0	98	393.2	90	621.5	80	932.7	77
Urban Landscape	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vacant	1.4	2	3.2	2	15.0	3	75.6	10	122.6	10
Native	0.0	0	0.0	0	0.0	0	5.4	1	15.1	1

Soil information for 18.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	11.5	66.0	22.5	0.75	0	100	0
500	11.5	66.0	22.5	0.75	0	100	0
750	11.5	66.0	22.5	0.75	0	99	1
1000	11.5	66.0	20.0	0.75	0	94	6
1250	11.5	66.0	20.0	0.75	0	86	14

Land use information for participant 19.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	35.2	50	64.3	33	77.9	18	111.3	14	155.1	13
Field	0.0	0	2.8	1	35.9	8	120.9	16	220.3	18
Pasture	0.0	0	0.0	0	0.0	0	18.6	2	124.8	10
Truck	21.3	31	56.9	29	114.9	26	193.3	25	261.3	22
Decid	0.0	0	0.0	0	0.0	0	8.1	1	74.3	6
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	0.0	0	20.6	11	88.7	20	170.1	22	216.8	18
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	13.3	19	50.4	26	118.7	27	152.4	20	155.3	13
Urban	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Urban Landscape	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vacant	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Native	0.0	0	0.0	0	0.0	0	1.8	0	5.3	0

Soil information for 19.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	15.0	69.0	16.0	0.75	0	100	0
500	15.0	69.0	16.0	0.75	12	89	0
750	12.5	69.0	16.0	0.75	8	92	0
1000	11.5	68.0	16.0	0.75	8	92	0
1250	11.5	68.0	16.0	0.75	7	85	0

Land use information for participant 20.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Field	2.0	3	27.5	14	119.2	27	210.2	27	285.7	24
Pasture	3.1	4	21.9	11	63.3	15	165.9	21	311.1	26
Truck	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Decid	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	0.0	0	0.0	0	0.7	0	20.3	3	35.3	3
Urban	61.0	87	139.5	72	239.8	55	332.2	43	474.8	39
Urban Landscape	3.8	5	3.9	2	3.9	1	3.9	1	3.9	0
Vacant	0.0	0	0.0	0	0.8	0	28.9	4	74.7	6
Native	0.0	0	2.1	1	8.4	2	15.1	2	27.8	2

Soil information for 20.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	0.0	0.0	0.0	0.00	0	0	36
500	0.0	0.0	0.0	0.00	0	0	53
750	0.0	0.0	0.0	0.00	0	0	61
1000	0.0	0.0	0.0	0.00	0	0	65
1250	12.0	71.3	16.7	0.75	0	0	74

Land use information for participant 21.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Field	0.0	0	0.0	0	0.0	0	3.4	0	14.1	1
Pasture	0.0	0	0.0	0	0.0	0	0.0	0	0.8	0
Truck	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Decid	0.0	0	0.0	0	0.2	0	13.8	2	34.7	3
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	52.4	75	154.6	80	331.3	76	550.7	71	804.7	66
Idle	0.0	0	0.0	0	3.3	1	7.8	1	7.8	1
SemiAg	0.0	0	0.0	0	2.2	0	6.3	1	7.6	1
Urban	17.5	25	28.2	15	71.8	16	153.7	20	269.2	22
Urban Landscape	0.0	0	0.0	0	0.0	0	5.9	1	15.7	1
Vacant	0.0	0	12.1	6	27.5	6	34.8	4	55.5	5
Native	0.0	0	0.0	0	0.0	0	0.1	0	3.2	0

Soil information for 21.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	12.5	68.0	19.5	0.75	0	100	0
500	12.5	68.0	19.5	0.75	16	84	0
750	12.5	68.0	19.5	0.75	21	79	0
1000	12.5	68.0	19.5	0.75	22	78	0
1250	12.5	68.0	19.5	0.75	22	78	0

Land use information for participant 22.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Field	0.0	0	0.0	0	0.0	0	3.3	0	15.5	1
Pasture	9.7	14	9.7	5	18.5	4	18.6	2	18.6	2
Truck	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Decid	12.1	17	17.2	9	17.2	4	41.5	5	128.0	11
Citrus	5.5	8	53.3	27	136.0	31	187.3	24	229.2	19
Vineyard	36.5	52	106.5	55	243.4	56	463.2	60	711.5	59
Idle	4.1	6	4.4	2	4.4	1	16.2	2	42.8	4
SemiAg	0.7	1	1.4	1	2.0	0	6.0	1	11.3	1
Urban	0.0	0	1.1	1	7.8	2	26.9	3	29.7	2
Urban Landscape	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vacant	0.0	0	0.0	0	2.9	1	3.9	1	3.9	0
Native	1.2	2	1.2	1	3.9	1	9.5	1	22.6	2

Soil information for 22.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	2.5	71.0	16.5	0.75	53	47	0
500	2.5	71.0	16.5	0.75	57	43	0
750	2.5	71.0	17.5	0.75	53	47	0
1000	2.5	68.0	17.5	0.75	45	55	0
1250	2.5	68.0	17.5	0.75	45	55	0

Land use information for participant 23.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Field	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Pasture	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Truck	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Decid	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	30.1	43	82.2	42	209.8	48	414.5	53	707.7	58
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	0.0	0	0.0	0	3.2	1	5.0	1	5.0	0
Urban	39.8	57	112.7	58	216.1	49	313.1	40	435.4	36
Urban Landscape	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vacant	0.0	0	0.0	0	0.0	0	16.5	2	25.6	2
Native	0.0	0	0.0	0	7.1	2	20.2	3	31.6	3

Soil information for 23.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	2.5	68.0	17.5	0.75	58	42	0
500	12.5	68.0	19.5	0.75	32	69	0
750	12.5	68.0	19.5	0.75	16	84	0
1000	12.5	68.0	19.5	0.75	11	89	0
1250	12.5	68.0	19.5	0.75	12	87	1

Land use information for participant 24.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Field	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Pasture	0.0	0	0.0	0	1.6	0	1.6	0	1.6	0
Truck	0.0	0	0.0	0	2.1	0	8.0	1	8.2	1
Decid	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	0.0	0	0.0	0	0.0	0	6.1	1	6.1	1
Urban	69.9	100	174.7	90	332.1	76	598.2	77	914.4	75
Urban Landscape	0.0	0	0.2	0	1.9	0	1.9	0	17.1	1
Vacant	0.0	0	0.0	0	9.6	2	36.5	5	57.8	5
Native	0.0	0	20.0	10	89.0	20	124.2	16	207.9	17

Soil information for 24.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	15.0	68.8	16.2	0.75	0	74	26
500	15.0	68.8	16.2	0.75	5	76	16
750	15.0	68.8	16.2	0.75	11	69	16
1000	15.0	68.8	16.2	0.75	9	60	27
1250	15.0	68.8	16.2	0.75	6	50	36

Land use information for participant 25.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	1.9	0
Field	0.0	0	0.0	0	0.1	0	49.3	6	143.3	12
Pasture	0.0	0	0.0	0	9.0	2	42.9	6	55.5	5
Truck	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Decid	24.4	35	96.9	50	255.2	58	438.2	56	702.5	58
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	13.7	20	45.0	23	117.0	27	183.9	24	239.2	20
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	12.1	17	12.1	6	12.7	3	19.9	3	28.5	2
Urban	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Urban Landscape	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vacant	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Native	19.7	28	40.9	21	42.2	10	42.2	5	42.2	3

Soil information for 25.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	0.0	0.0	0.0	0.00	15	10	1
500	0.0	0.0	0.0	0.00	9	30	9
750	10.0	39.2	21.5	0.75	8	53	12
1000	10.0	43.0	21.5	0.75	7	57	20
1250	10.0	43.0	21.5	0.75	7	59	23

Land use information for participant 26.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Field	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Pasture	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Truck	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Decid	0.0	0	0.0	0	7.5	2	22.5	3	24.2	2
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	44.6	64	133.6	69	321.8	74	566.5	73	894.0	74
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	0.0	0	0.0	0	0.0	0	2.9	0	11.2	1
Urban	25.3	36	58.8	30	90.7	21	162.0	21	261.3	22
Urban Landscape	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vacant	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Native	0.0	0	2.4	1	16.1	4	22.5	3	22.5	2

Soil information for 26.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	12.5	71.0	16.5	0.75	0	100	0
500	12.5	68.0	16.5	0.75	0	100	0
750	12.5	68.0	16.5	0.75	1	96	3
1000	12.5	68.0	16.5	0.75	1	96	3
1250	12.5	68.0	16.5	0.75	2	95	3

Land use information for participant 27.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	13.6	19	25.4	13	75.6	17	133.1	17	166.6	14
Field	0.0	0	5.2	3	50.7	12	100.7	13	127.3	10
Pasture	3.5	5	31.7	16	60.1	14	120.9	16	178.6	15
Truck	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Decid	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Idle	0.0	0	0.0	0	0.0	0	0.0	0	21.8	2
SemiAg	0.0	0	2.4	1	2.6	1	6.2	1	10.9	1
Urban	37.6	54	79.7	41	149.3	34	252.3	33	456.6	38
Urban Landscape	0.0	0	0.0	0	0.0	0	0.0	0	0.6	0
Vacant	0.6	1	10.5	5	45.3	10	107.5	14	184.4	15
Native	14.7	21	39.9	21	52.7	12	55.7	7	66.6	5

Soil information for 27.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	12.0	67.4	16.7	0.50	0	35	65
500	12.0	71.3	16.7	0.75	0	22	79
750	12.0	71.3	16.7	0.75	0	26	74
1000	12.0	71.3	16.7	0.75	0	22	76
1250	12.0	71.3	16.7	0.75	0	18	76

Land use information for participant 28.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Field	0.9	1	15.1	8	29.1	7	67.6	9	98.5	8
Pasture	0.0	0	0.0	0	0.0	0	0.0	0	5.0	0
Truck	0.0	0	0.6	0	36.4	8	77.6	10	92.4	8
Decid	0.0	0	0.0	0	2.7	1	45.3	6	109.9	9
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	68.9	99	171.4	88	310.9	71	441.6	57	575.7	47
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	0.0	0	5.6	3	13.3	3	17.1	2	20.8	2
Urban	0.0	0	2.2	1	43.8	10	126.8	16	285.8	24
Urban Landscape	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vacant	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Native	0.0	0	0.0	0	0.0	0	0.4	0	25.1	2

Soil information for 28.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	2.5	68.0	17.5	0.75	57	41	0
500	2.5	68.0	17.5	0.75	58	41	0
750	2.5	80.0	17.5	0.75	70	28	0
1000	2.5	80.0	17.5	0.75	69	29	0
1250	2.5	79.0	17.5	0.75	65	32	0

Land use information for participant 29.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.2	0	16.7	1
Field	15.2	22	64.4	33	163.2	37	285.4	37	436.7	36
Pasture	2.9	4	35.6	18	109.4	25	188.1	24	261.3	22
Truck	0.0	0	0.0	0	0.0	0	1.6	0	40.3	3
Decid	40.5	58	61.9	32	116.0	27	229.2	30	360.2	30
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	0.3	0	12.3	6	16.1	4	29.7	4	44.4	4
Urban	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Urban Landscape	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vacant	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Native	10.6	15	20.2	10	31.1	7	41.8	5	53.0	4

Soil information for 29.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	45.0	26.1	28.9	2.00	0	100	0
500	37.5	26.1	28.9	1.50	0	95	4
750	37.5	26.1	28.9	1.50	0	89	9
1000	37.5	31.5	31.0	1.50	0	84	15
1250	37.5	31.5	31.0	1.50	0	81	18

Land use information for participant 30.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Field	0.0	0	0.0	0	13.1	3	15.4	2	18.2	2
Pasture	0.0	0	0.0	0	0.0	0	0.0	0	0.2	0
Truck	0.4	1	6.2	3	6.2	1	6.2	1	11.1	1
Decid	51.5	74	153.9	79	307.2	70	577.9	74	897.6	74
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	15.7	22	31.1	16	92.5	21	140.0	18	189.6	16
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	2.3	3	3.3	2	8.6	2	15.6	2	24.4	2
Urban	0.0	0	0.4	0	2.8	1	2.8	0	2.8	0
Urban Landscape	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vacant	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Native	0.0	0	0.0	0	5.8	1	18.5	2	69.3	6

Soil information for 30.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	15.0	66.0	19.0	0.50	14	86	0
500	12.5	66.0	16.5	0.50	11	89	0
750	12.5	66.0	16.5	0.50	9	88	0
1000	12.5	68.0	16.5	0.75	7	90	0
1250	12.5	68.0	16.5	0.75	6	90	1

Land use information for participant 31.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	7.8	4	13.4	3	13.4	2	13.4	1
Field	11.0	16	54.6	28	166.9	38	296.0	38	378.5	31
Pasture	0.0	0	3.6	2	20.8	5	85.7	11	269.6	22
Truck	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Decid	0.0	0	5.6	3	7.6	2	7.6	1	7.6	1
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	0.0	0	0.0	0	5.7	1	20.8	3	33.3	3
Urban	58.9	84	123.3	64	206.4	47	292.9	38	430.9	36
Urban Landscape	0.0	0	0.0	0	9.6	2	46.2	6	46.8	4
Vacant	0.0	0	0.0	0	0.0	0	2.2	0	11.3	1
Native	0.0	0	0.0	0	0.0	0	0.0	0	5.3	0

Soil information for 31.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	22.5	39.8	37.7	1.50	0	100	0
500	22.5	39.8	37.7	1.50	0	81	6
750	22.5	31.5	31.0	1.50	0	77	5
1000	22.5	31.5	31.0	1.50	0	76	8
1250	31.0	31.5	31.0	1.50	0	75	9

Land use information for participant 32.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Field	0.0	0	0.0	0	2.9	1	5.2	1	5.2	0
Pasture	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Truck	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Decid	68.1	97	182.4	94	345.0	79	513.6	66	721.1	59
Citrus	0.0	0	0.0	0	5.9	1	5.9	1	5.9	0
Vineyard	0.0	0	1.6	1	31.0	7	91.0	12	186.3	15
Idle	0.0	0	1.1	1	11.7	3	24.1	3	24.1	2
SemiAg	1.8	3	6.3	3	10.9	2	22.5	3	27.1	2
Urban	0.0	0	0.0	0	7.2	2	12.4	2	13.2	1
Urban Landscape	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vacant	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Native	0.0	0	3.4	2	21.5	5	101.9	13	215.4	18

Soil information for 32.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	12.5	71.0	16.5	0.75	4	97	0
500	12.5	71.0	16.5	0.75	10	90	0
750	12.5	71.0	16.5	0.75	7	89	1
1000	12.5	71.0	16.5	0.75	9	85	1
1250	12.5	71.0	16.5	0.75	12	82	1

Land use information for participant 33.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	7.3	10	33.7	17	96.9	22	236.7	30	357.7	29
Field	0.1	0	15.8	8	43.8	10	74.8	10	157.0	13
Pasture	0.0	0	0.0	0	22.0	5	49.3	6	67.7	6
Truck	0.0	0	2.8	1	9.3	2	9.3	1	9.3	1
Decid	34.2	49	82.2	42	103.0	24	114.6	15	178.1	15
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	1.8	0
Vineyard	0.0	0	1.7	1	28.9	7	82.1	11	143.8	12
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	20.0	29	30.5	16	62.3	14	90.6	12	154.0	13
Urban	8.3	12	28.0	14	70.1	16	116.6	15	137.6	11
Urban Landscape	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vacant	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Native	0.0	0	0.0	0	0.0	0	2.2	0	6.3	1

Soil information for 33.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	14.0	69.6	16.4	1.50	12	68	21
500	14.0	69.6	16.4	1.50	29	44	28
750	14.0	69.6	16.4	1.50	31	36	32
1000	14.0	67.9	16.4	1.50	27	41	32
1250	14.0	67.9	16.4	1.50	23	45	32

Land use information for participant 34.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Field	2.8	4	25.9	13	37.5	9	73.6	9	114.0	9
Pasture	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Truck	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Decid	0.0	0	0.6	0	19.8	5	48.8	6	72.1	6
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	1.8	0
Vineyard	13.0	19	17.7	9	32.3	7	38.6	5	74.5	6
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	0.0	0	0.0	0	1.8	0	5.7	1	5.7	0
Urban	54.2	78	143.3	74	318.2	73	516.2	66	729.5	60
Urban Landscape	0.0	0	5.8	3	6.2	1	6.2	1	6.2	1
Vacant	0.0	0	0.3	0	6.8	2	12.2	2	26.9	2
Native	0.0	0	0.0	0	5.9	1	63.3	8	166.9	14

Soil information for 34.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	2.5	46.0	17.5	0.75	56	4	40
500	2.5	68.0	17.5	0.75	57	18	24
750	2.5	68.0	17.5	0.75	41	34	18
1000	2.5	68.0	17.5	0.75	33	43	13
1250	2.5	66.0	17.5	0.75	27	51	10

Land use information for participant 35.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Field	2.7	4	17.3	9	40.1	9	82.1	11	138.9	11
Pasture	25.1	36	63.7	33	120.6	28	184.2	24	243.7	20
Truck	0.0	0	0.0	0	0.0	0	0.0	0	7.2	1
Decid	0.0	0	4.4	2	30.9	7	61.7	8	114.0	9
Citrus	0.0	0	0.0	0	0.0	0	15.3	2	18.2	1
Vineyard	0.0	0	0.0	0	0.0	0	0.0	0	17.1	1
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Urban	42.0	60	108.0	56	225.3	52	409.0	53	620.1	51
Urban Landscape	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vacant	0.0	0	0.0	0	3.3	1	3.3	0	20.1	2
Native	0.0	0	1.4	1	2.9	1	3.3	0	16.5	1

Soil information for 35.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	12.5	46.0	22.5	0.75	2	40	57
500	11.5	66.0	22.5	0.75	5	61	34
750	11.5	66.0	19.5	0.75	5	72	23
1000	11.5	66.0	19.5	0.75	4	77	18
1250	11.5	66.0	19.5	0.75	5	78	17

Land use information for participant 36.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Field	0.6	1	17.2	9	40.0	9	46.4	6	67.7	6
Pasture	2.2	3	5.3	3	13.9	3	13.9	2	13.9	1
Truck	0.0	0	0.0	0	0.0	0	0.0	0	2.1	0
Decid	0.0	0	0.0	0	10.8	2	73.6	9	182.6	15
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	20.7	30	50.1	26	105.9	24	192.4	25	293.7	24
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	2.6	4	4.9	3	5.6	1	9.7	1	10.7	1
Urban	37.5	54	110.8	57	251.1	57	383.0	49	525.5	43
Urban Landscape	0.0	0	0.0	0	2.3	1	10.1	1	26.4	2
Vacant	6.3	9	6.5	3	6.6	2	47.4	6	90.7	7
Native	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0

Soil information for 36.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	2.5	80.0	17.5	0.75	83	17	0
500	2.5	80.0	17.5	0.75	90	11	0
750	2.5	80.0	16.5	0.75	86	14	0
1000	2.5	80.0	16.5	0.75	77	23	0
1250	2.5	80.0	17.5	0.75	67	31	0

Land use information for participant 37.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Field	0.0	0	0.0	0	10.2	2	42.2	5	57.3	5
Pasture	19.2	28	63.0	32	134.8	31	192.2	25	262.3	22
Truck	0.0	0	6.8	4	29.9	7	33.6	4	33.6	3
Decid	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	0.0	0	0.0	0	0.0	0	0.4	0	8.1	1
Urban	49.7	71	98.2	51	183.5	42	289.7	37	408.1	34
Urban Landscape	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vacant	0.0	0	0.0	0	0.0	0	1.3	0	4.2	0
Native	0.9	1	26.8	14	77.7	18	216.9	28	439.6	36

Soil information for 37.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	50.0	22.1	27.9	2.50	0	0	100
500	50.0	22.1	27.9	2.50	0	2	98
750	50.0	22.1	27.9	2.50	0	11	89
1000	50.0	22.1	27.9	2.50	0	18	82
1250	50.0	22.1	27.9	2.50	0	23	75

Land use information for participant 38.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	11.0	3	77.8	10	213.0	18
Field	52.5	75	172.7	89	374.2	86	581.3	75	790.6	65
Pasture	0.0	0	1.6	1	30.5	7	84.5	11	148.6	12
Truck	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Decid	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	17.4	25	20.6	11	20.6	5	20.6	3	21.8	2
Urban	0.0	0	0.0	0	0.0	0	0.0	0	1.8	0
Urban Landscape	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vacant	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Native	0.0	0	0.0	0	0.0	0	12.3	2	37.4	3

Soil information for 38.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	10.0	66.9	23.1	1.50	0	79	21
500	10.0	66.9	23.1	1.50	0	65	36
750	10.0	65.7	23.1	1.50	0	52	48
1000	10.0	65.7	23.1	1.50	0	47	53
1250	11.5	43.0	23.1	1.50	0	39	60

Land use information for participant 39.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	4.9	0
Field	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Pasture	0.0	0	1.3	1	1.3	0	1.3	0	6.4	1
Truck	24.7	35	72.4	37	178.6	41	358.8	46	559.0	46
Decid	3.7	5	6.3	3	6.3	1	16.7	2	32.8	3
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	0.0	0	0.0	0	0.0	0	5.3	1	7.3	1
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	0.0	0	0.0	0	6.9	2	10.7	1	20.5	2
Urban	29.2	42	69.4	36	126.7	29	201.0	26	265.7	22
Urban Landscape	0.0	0	3.2	2	11.5	3	11.5	1	11.7	1
Vacant	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Native	12.2	18	42.3	22	105.0	24	171.2	22	304.9	25

Soil information for 39.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	15.0	43.0	19.1	0.75	0	33	65
500	15.0	43.0	38.5	0.75	0	29	69
750	15.0	44.3	19.1	0.75	8	32	58
1000	15.0	44.3	19.1	0.75	16	31	52
1250	13.0	44.3	19.1	0.75	15	29	49

Land use information for participant 40.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Field	2.5	4	8.3	4	16.0	4	16.9	2	31.2	3
Pasture	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Truck	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Decid	7.6	11	41.3	21	93.1	21	149.0	19	242.7	20
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	48.3	69	122.4	63	293.3	67	559.3	72	877.7	72
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	10.5	15	10.9	6	11.1	3	18.8	2	21.4	2
Urban	0.0	0	2.9	2	7.0	2	16.7	2	24.5	2
Urban Landscape	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vacant	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Native	1.1	2	9.1	5	15.7	4	15.7	2	15.7	1

Soil information for 40.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	2.5	79.0	16.0	0.75	70	27	0
500	2.5	79.0	16.0	0.75	68	31	0
750	5.0	71.0	16.5	0.75	49	50	0
1000	5.0	71.0	16.5	0.75	39	60	0
1250	12.5	71.0	16.5	0.75	34	66	0

Land use information for participant 41.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	1.9	3	20.6	11	38.1	9	60.1	8	93.0	8
Field	0.0	0	0.0	0	31.2	7	81.0	10	152.5	13
Pasture	21.0	30	40.8	21	51.6	12	75.6	10	85.0	7
Truck	0.0	0	2.1	1	25.1	6	61.7	8	102.4	8
Decid	15.3	22	33.1	17	77.4	18	168.9	22	255.8	21
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	0.0	0	0.0	0	0.0	0	2.4	0	22.0	2
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	1.3	2	1.3	1	7.1	2	10.9	1	13.2	1
Urban	30.4	43	92.1	47	178.5	41	286.7	37	436.9	36
Urban Landscape	0.0	0	4.3	2	6.3	1	6.3	1	8.3	1
Vacant	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Native	0.0	0	0.4	0	15.4	4	17.5	2	38.8	3

Soil information for 41.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	13.0	67.4	19.6	0.25	0	0	100
500	13.0	67.4	19.6	0.25	0	0	100
750	13.0	67.4	19.6	0.25	0	0	100
1000	13.0	67.4	19.6	0.25	0	0	100
1250	13.0	67.4	19.6	0.25	0	0	100

Land use information for participant 42.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.9	0	22.4	5	57.0	7	98.2	8
Field	5.7	8	21.7	11	35.1	8	54.8	7	55.6	5
Pasture	0.0	0	6.7	3	40.3	9	68.7	9	124.2	10
Truck	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Decid	5.2	7	26.3	14	40.6	9	51.0	7	72.4	6
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	0.0	0	0.0	0	33.6	8	154.1	20	273.4	23
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	0.0	0	0.0	0	0.7	0	22.9	3	32.0	3
Urban	36.2	52	92.1	47	170.2	39	239.6	31	406.0	33
Urban Landscape	0.0	0	3.2	2	19.1	4	27.1	3	27.1	2
Vacant	22.7	33	38.6	20	45.6	10	65.4	8	79.2	7
Native	0.0	0	5.4	3	28.5	7	35.4	5	41.8	3

Soil information for 42.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	14.0	69.6	16.4	1.50	0	100	0
500	14.0	69.6	16.4	1.50	0	100	0
750	14.0	69.6	16.4	1.50	0	100	0
1000	14.0	69.6	16.4	1.50	0	100	0
1250	14.0	69.6	16.4	1.50	0	99	1

Land use information for participant 43.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Field	0.0	0	12.3	6	61.1	14	121.0	16	170.5	14
Pasture	18.1	26	52.5	27	83.7	19	116.4	15	118.8	10
Truck	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Decid	0.0	0	2.6	1	23.9	5	75.8	10	189.5	16
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	0.0	0	0.0	0	0.0	0	9.9	1	59.3	5
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	0.6	1	2.4	1	5.7	1	10.5	1	16.6	1
Urban	51.2	73	111.4	57	194.7	45	344.2	44	517.9	43
Urban Landscape	0.0	0	0.0	0	0.0	0	0.8	0	8.5	1
Vacant	0.0	0	13.6	7	67.1	15	97.9	13	132.2	11
Native	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0

Soil information for 43.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	12.5	67.9	19.6	0.75	0	100	0
500	12.5	67.9	19.6	0.75	0	100	0
750	12.5	67.9	19.6	0.75	2	98	0
1000	12.5	67.9	16.6	0.75	3	97	0
1250	12.5	67.9	16.6	0.75	3	96	0

Land use information for participant 44.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	2.7	4	22.7	12	90.7	21	140.7	18	204.5	17
Field	0.0	0	15.8	8	49.0	11	92.7	12	152.1	13
Pasture	0.0	0	0.0	0	4.7	1	4.7	1	4.7	0
Truck	0.1	0	19.7	10	52.9	12	134.6	17	223.5	18
Decid	0.0	0	0.0	0	0.0	0	1.4	0	1.4	0
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	0.0	0	0.0	0	5.8	1	15.2	2	15.2	1
Idle	16.1	23	50.4	26	75.7	17	75.8	10	75.8	6
SemiAg	0.0	0	3.3	2	10.4	2	12.2	2	21.5	2
Urban	51.1	73	74.6	38	94.4	22	178.2	23	302.6	25
Urban Landscape	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vacant	0.0	0	0.0	0	0.0	0	6.1	1	21.8	2
Native	0.0	0	0.0	0	24.7	6	36.9	5	48.5	4

Soil information for 44.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	23.5	21.7	54.8	1.00	0	0	100
500	23.5	21.7	54.8	1.00	0	0	99
750	23.5	21.7	54.8	1.00	0	0	99
1000	23.5	21.7	54.8	1.00	0	0	99
1250	23.5	21.7	54.8	1.00	0	0	99

Land use information for participant 45.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Field	0.0	0	0.0	0	9.1	2	31.0	4	47.8	4
Pasture	2.7	4	2.7	1	2.7	1	19.8	3	41.7	3
Truck	0.0	0	0.0	0	4.7	1	23.5	3	36.1	3
Decid	13.3	19	45.3	23	123.8	28	187.8	24	301.7	25
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.2	0
Vineyard	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Idle	0.0	0	0.0	0	0.0	0	0.0	0	28.2	2
SemiAg	0.1	0	3.6	2	4.3	1	5.9	1	7.9	1
Urban	46.1	66	115.6	60	209.4	48	354.8	46	522.5	43
Urban Landscape	0.0	0	0.0	0	2.6	1	16.1	2	32.9	3
Vacant	7.6	11	27.7	14	79.7	18	114.3	15	131.6	11
Native	0.0	0	0.0	0	0.0	0	8.0	1	47.4	4

Soil information for 45.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	14.0	69.6	16.4	1.50	0	100	0
500	14.0	69.6	16.4	1.50	0	92	8
750	14.0	69.6	16.4	1.50	0	83	17
1000	14.0	69.6	16.4	1.50	0	78	22
1250	14.0	69.6	16.4	1.50	0	77	23

Land use information for participant 46.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Field	0.0	0	0.0	0	0.3	0	35.9	5	108.1	9
Pasture	0.0	0	0.0	0	0.0	0	15.1	2	29.4	2
Truck	0.0	0	0.0	0	0.0	0	8.2	1	17.6	1
Decid	59.6	85	174.5	90	374.1	86	553.5	71	763.4	63
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	3.6	5	11.7	6	44.3	10	104.3	13	160.4	13
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	0.0	0	0.0	0	0.0	0	4.1	1	9.5	1
Urban	6.7	10	8.6	4	14.3	3	28.2	4	68.2	6
Urban Landscape	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vacant	0.0	0	0.0	0	0.0	0	0.0	0	9.1	1
Native	0.0	0	0.0	0	3.1	1	27.1	3	44.1	4

Soil information for 46.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	12.5	71.0	16.5	0.75	0	100	0
500	12.5	71.0	16.5	0.75	0	100	0
750	12.5	71.0	16.5	0.75	11	88	0
1000	12.5	71.0	16.5	0.75	21	78	0
1250	12.5	71.0	16.5	0.75	20	80	0

Land use information for participant 47.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	10.1	1
Field	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Pasture	0.0	0	8.1	4	76.8	18	158.3	20	195.4	16
Truck	0.0	0	0.0	0	0.0	0	0.0	0	4.2	0
Decid	52.2	75	124.6	64	241.6	55	379.1	49	574.2	47
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	8.8	1
Vineyard	3.9	6	29.6	15	44.6	10	81.2	10	125.6	10
Idle	4.9	7	8.1	4	8.1	2	8.1	1	8.2	1
SemiAg	0.0	0	0.0	0	0.0	0	1.5	0	7.3	1
Urban	0.0	0	0.0	0	2.2	1	18.0	2	55.3	5
Urban Landscape	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vacant	0.0	0	0.0	0	3.8	1	17.7	2	26.9	2
Native	8.9	13	24.5	13	59.0	14	112.6	15	197.3	16

Soil information for 47.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	12.5	68.0	17.0	0.75	24	56	14
500	12.5	70.0	16.5	0.75	24	62	7
750	12.5	70.0	16.5	0.75	18	72	3
1000	12.5	70.0	16.5	0.75	15	77	2
1250	12.5	71.0	16.5	0.75	14	80	2

Land use information for participant 48.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Field	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Pasture	0.1	0	20.0	10	76.4	17	132.2	17	219.2	18
Truck	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Decid	0.0	0	0.0	0	2.0	0	36.4	5	91.7	8
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	0.0	0	0.0	0	7.2	2	52.9	7	85.0	7
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	0.0	0	0.1	0	10.7	2	29.7	4	32.0	3
Urban	69.8	100	174.8	90	339.9	78	523.5	67	744.6	61
Urban Landscape	0.0	0	0.0	0	0.0	0	1.8	0	2.4	0
Vacant	0.0	0	0.0	0	0.0	0	0.0	0	17.8	1
Native	0.0	0	0.0	0	0.0	0	0.0	0	5.0	0

Soil information for 48.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	12.5	67.9	19.6	0.75	0	0	100
500	12.5	67.9	19.6	0.75	0	0	100
750	12.5	67.9	19.6	0.75	0	0	100
1000	12.5	67.9	19.6	0.75	0	0	100
1250	12.5	67.9	19.6	0.75	0	0	100

Land use information for participant 49.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Field	6.3	9	52.0	27	151.5	35	302.0	39	463.0	38
Pasture	0.0	0	0.0	0	1.4	0	2.5	0	2.5	0
Truck	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Decid	0.0	0	2.6	1	6.7	2	11.6	1	41.8	3
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	0.3	0	2.3	1	6.2	1	10.2	1	21.2	2
Urban	61.0	87	122.9	63	239.6	55	399.5	51	605.5	50
Urban Landscape	0.0	0	3.2	2	13.0	3	19.5	3	35.8	3
Vacant	2.2	3	11.8	6	13.9	3	25.2	3	37.4	3
Native	0.0	0	0.0	0	3.8	1	6.0	1	6.0	0

Soil information for 49.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	0.0	0.0	0.0	0.00	0	49	0
500	0.0	0.0	0.0	0.00	0	51	0
750	0.0	0.0	0.0	0.00	0	56	0
1000	0.0	0.0	0.0	0.00	0	59	0
1250	0.0	0.0	0.0	0.00	0	60	0

Land use information for participant 50.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	1.4	1	25.9	6	61.2	8	89.4	7
Field	7.2	10	9.5	5	9.5	2	43.1	6	101.0	8
Pasture	0.0	0	0.0	0	0.4	0	12.6	2	16.6	1
Truck	23.0	33	46.2	24	65.9	15	65.9	8	65.9	5
Decid	0.0	0	0.0	0	1.8	0	5.8	1	58.2	5
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	0.0	0	0.0	0	0.0	0	12.5	2	21.7	2
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	6.1	9	6.4	3	16.6	4	23.4	3	31.2	3
Urban	33.6	48	121.5	63	267.6	61	416.9	54	546.0	45
Urban Landscape	0.0	0	0.0	0	0.0	0	19.8	3	74.4	6
Vacant	0.0	0	9.8	5	36.6	8	75.7	10	125.7	10
Native	0.0	0	0.0	0	5.8	1	22.1	3	65.7	5

Soil information for 50.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	2.5	67.9	17.0	0.75	54	46	0
500	2.5	67.9	17.0	0.75	48	52	0
750	2.5	66.0	17.0	0.75	42	58	0
1000	2.5	66.0	17.0	0.75	44	56	0
1250	2.5	66.0	17.0	0.75	39	61	0

Land use information for participant 51.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Field	0.0	0	0.0	0	0.0	0	0.0	0	0.8	0
Pasture	0.0	0	0.0	0	28.4	7	79.1	10	79.3	7
Truck	0.0	0	0.0	0	0.0	0	0.2	0	20.1	2
Decid	0.0	0	0.0	0	0.0	0	0.0	0	0.2	0
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Idle	2.4	4	18.8	10	41.9	10	117.8	15	223.4	18
SemiAg	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Urban	67.4	97	176.0	91	360.0	82	563.8	73	872.5	72
Urban Landscape	0.0	0	0.0	0	5.8	1	15.6	2	16.8	1
Vacant	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Native	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0

Soil information for 51.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	NA	NA	NA	NA	0	0	0
500	NA	NA	NA	NA	0	0	0
750	NA	NA	NA	NA	0	0	0
1000	NA	NA	NA	NA	0	0	0
1250	NA	NA	NA	NA	0	0	0

Land use information for participant 52.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Field	6.2	9	22.6	12	35.5	8	44.6	6	46.1	4
Pasture	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Truck	0.0	0	0.0	0	0.0	0	0.0	0	1.7	0
Decid	23.4	33	24.9	13	24.9	6	24.9	3	31.0	3
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	40.4	58	137.6	71	343.2	79	644.9	83	1013.3	84
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	0.0	0	5.1	3	13.8	3	21.1	3	34.2	3
Urban	0.0	0	4.7	2	18.8	4	24.2	3	61.4	5
Urban Landscape	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vacant	0.0	0	0.0	0	0.0	0	12.5	2	21.3	2
Native	0.0	0	0.0	0	0.0	0	4.2	1	4.2	0

Soil information for 52.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	12.5	68.0	19.5	0.75	33	67	0
500	12.5	68.0	19.5	0.75	21	80	0
750	12.5	68.0	19.5	0.75	20	80	0
1000	12.5	68.0	19.5	0.75	16	84	0
1250	12.5	68.0	19.5	0.75	14	86	0

Land use information for participant 53.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Field	0.0	0	0.0	0	0.0	0	4.8	1	36.3	3
Pasture	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Truck	0.0	0	6.4	3	14.9	3	14.9	2	14.9	1
Decid	17.1	24	71.5	37	152.4	35	342.3	44	542.1	45
Citrus	3.2	5	3.2	2	3.2	1	3.2	0	3.2	0
Vineyard	0.0	0	7.2	4	25.1	6	48.1	6	83.2	7
Idle	2.8	4	3.9	2	3.9	1	3.9	1	3.9	0
SemiAg	0.0	0	1.1	1	4.5	1	5.9	1	13.2	1
Urban	45.8	65	78.2	40	81.1	19	142.7	18	272.6	22
Urban Landscape	0.0	0	0.0	0	16.8	4	26.2	3	26.2	2
Vacant	0.0	0	0.0	0	0.0	0	1.3	0	1.9	0
Native	0.0	0	3.7	2	9.6	2	12.0	2	13.6	1

Soil information for 53.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	2.5	71.0	16.5	0.75	55	42	0
500	2.5	71.0	16.5	0.75	50	40	0
750	2.5	71.0	16.5	0.75	45	46	1
1000	2.5	71.0	16.5	0.75	36	56	1
1250	12.5	70.0	16.5	0.75	29	65	1

Land use information for participant 54.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	13.4	2	54.1	4
Field	0.0	0	0.0	0	3.8	1	5.2	1	23.4	2
Pasture	0.0	0	0.0	0	7.1	2	32.1	4	50.9	4
Truck	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Decid	30.4	43	82.0	42	166.1	38	352.1	45	611.6	50
Citrus	0.0	0	7.0	4	32.3	7	42.8	6	42.8	4
Vineyard	24.5	35	49.5	26	79.6	18	109.2	14	193.6	16
Idle	0.0	0	7.4	4	16.0	4	16.0	2	16.0	1
SemiAg	0.0	0	0.0	0	0.8	0	4.3	1	4.3	0
Urban	15.0	21	49.0	25	130.5	30	178.2	23	179.0	15
Urban Landscape	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vacant	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Native	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0

Soil information for 54.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	12.5	67.9	19.6	0.75	0	100	0
500	12.5	67.4	19.6	0.75	0	94	7
750	12.5	67.4	19.6	0.50	0	81	19
1000	12.5	67.4	19.6	0.50	0	72	26
1250	12.5	67.4	19.6	0.50	0	68	31

Land use information for participant 55.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Field	0.0	0	0.0	0	8.5	2	17.8	2	28.5	2
Pasture	0.0	0	0.0	0	0.0	0	0.2	0	10.0	1
Truck	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Decid	0.0	0	34.7	18	146.3	33	309.8	40	512.9	42
Citrus	0.0	0	6.6	3	6.6	2	6.6	1	6.6	1
Vineyard	0.1	0	3.9	2	3.9	1	3.9	1	14.5	1
Idle	0.0	0	1.6	1	1.6	0	2.6	0	11.0	1
SemiAg	0.0	0	3.0	2	3.6	1	3.6	0	5.7	0
Urban	68.4	98	138.3	71	243.2	56	371.7	48	506.9	42
Urban Landscape	0.0	0	0.0	0	0.0	0	8.3	1	29.9	2
Vacant	1.4	2	6.8	3	21.0	5	47.5	6	82.2	7
Native	0.0	0	0.0	0	1.5	0	4.4	1	5.1	0

Soil information for 55.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	20.0	42.0	38.0	0.75	0	24	76
500	11.5	42.0	23.0	0.75	0	39	62
750	11.5	42.0	23.0	0.75	0	44	56
1000	11.5	42.0	23.0	0.75	4	44	52
1250	11.5	43.0	23.0	0.75	9	42	49

Land use information for participant 56.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	13.9	1
Field	2.5	4	16.6	9	31.6	7	44.6	6	55.5	5
Pasture	1.8	3	22.9	12	66.8	15	142.3	18	257.3	21
Truck	41.4	59	41.5	21	73.2	17	161.6	21	235.2	19
Decid	13.3	19	51.1	26	104.1	24	174.2	22	246.6	20
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	6.6	9	30.8	16	58.2	13	79.2	10	148.8	12
Idle	0.0	0	0.0	0	5.6	1	12.2	2	35.6	3
SemiAg	0.0	0	0.0	0	8.5	2	14.2	2	30.0	2
Urban	0.0	0	0.0	0	14.7	3	48.9	6	81.8	7
Urban Landscape	4.2	6	31.6	16	59.5	14	85.0	11	94.1	8
Vacant	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Native	0.0	0	0.4	0	14.0	3	14.3	2	14.3	1

Soil information for 56.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	12.5	44.0	19.5	0.75	0	36	64
500	12.5	44.0	19.5	0.75	0	46	54
750	12.5	44.0	19.5	0.75	0	64	35
1000	12.5	68.0	19.5	0.75	0	72	24
1250	12.5	68.0	19.5	0.75	0	75	20

Land use information for participant 57.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	6.9	1	34.3	3
Field	9.4	13	86.4	45	244.5	56	484.0	62	790.9	65
Pasture	0.0	0	0.0	0	4.4	1	25.0	3	74.4	6
Truck	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Decid	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	0.0	0	0.9	0	21.6	5	33.7	4	45.4	4
Urban	60.5	87	107.4	55	157.5	36	177.7	23	195.0	16
Urban Landscape	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vacant	0.0	0	0.0	0	1.8	0	1.8	0	1.8	0
Native	0.0	0	0.0	0	3.1	1	32.1	4	46.5	4

Soil information for 57.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	0.0	0.0	0.0	0.00	0	14	8
500	0.0	0.0	0.0	0.00	0	25	13
750	0.0	0.0	0.0	0.00	0	46	17
1000	13.0	43.0	19.6	1.50	0	57	21
1250	13.0	65.7	19.6	1.50	0	56	30

Land use information for participant 58.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.8	1	11.1	6	20.5	5	24.3	3	45.0	4
Field	19.2	28	37.3	19	76.7	18	192.8	25	392.8	32
Pasture	2.7	4	11.1	6	18.2	4	37.8	5	93.9	8
Truck	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Decid	14.0	20	69.1	36	211.6	48	325.6	42	405.8	33
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	0.0	0	0.0	0	0.0	0	0.0	0	0.4	0
Idle	0.0	0	0.0	0	0.0	0	2.0	0	25.5	2
SemiAg	0.1	0	1.9	1	12.8	3	40.0	5	84.5	7
Urban	14.5	21	19.8	10	24.6	6	48.5	6	52.8	4
Urban Landscape	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vacant	12.1	17	20.6	11	28.8	7	41.6	5	47.0	4
Native	0.9	1	5.2	3	24.0	6	44.9	6	45.7	4

Soil information for 58.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	13.0	67.4	19.6	0.75	0	100	0
500	13.0	67.4	19.6	0.75	0	98	0
750	13.0	67.4	19.6	0.75	0	96	0
1000	13.0	67.4	19.6	0.75	0	98	0
1250	13.0	67.4	19.6	0.75	0	97	0

Land use information for participant 59.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Field	0.0	0	0.0	0	8.6	2	12.4	2	12.4	1
Pasture	0.0	0	2.3	1	2.3	1	2.3	0	2.3	0
Truck	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Decid	68.9	99	156.6	81	284.4	65	448.6	58	657.1	54
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Idle	0.0	0	0.0	0	13.0	3	45.1	6	55.7	5
SemiAg	0.2	0	6.7	3	8.2	2	17.9	2	20.2	2
Urban	0.0	0	0.0	0	0.0	0	0.0	0	3.6	0
Urban Landscape	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vacant	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Native	0.0	0	0.0	0	0.0	0	0.8	0	6.9	1

Soil information for 59.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	17.5	43.0	39.5	0.75	0	26	74
500	17.5	43.0	37.9	0.75	0	32	69
750	15.0	43.0	19.1	0.75	6	30	64
1000	15.0	43.0	19.1	0.75	11	29	60
1250	15.0	42.1	19.1	0.75	12	27	61

Land use information for participant 60.

Pesticide	300m buffer		500m buffer		750m buffer		1000m buffer		1250m buffer	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Grain	10.3	15	54.8	28	139.7	32	250.7	32	386.1	32
Field	0.0	0	0.0	0	2.6	1	27.5	4	82.7	7
Pasture	5.7	8	35.4	18	104.2	24	182.0	23	260.5	21
Truck	0.0	0	0.0	0	0.9	0	7.4	1	8.5	1
Decid	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Citrus	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Vineyard	0.0	0	0.0	0	0.0	0	0.8	0	15.2	1
Idle	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
SemiAg	0.0	0	0.0	0	0.1	0	2.7	0	7.6	1
Urban	44.6	64	92.8	48	161.1	37	250.7	32	382.0	31
Urban Landscape	0.0	0	0.0	0	0.0	0	1.4	0	2.2	0
Vacant	0.0	0	0.0	0	0.0	0	5.5	1	6.4	1
Native	9.2	13	11.4	6	11.4	3	11.5	1	23.1	2

Soil information for 60.

Buffer (m)	Median Clay %	Median Sand %	Median Silt %	Organic Matter %	% High Erodibility	% Moderate Erodibility	% Low Erodibility
300	31.0	20.0	27.9	1.25	0	8	92
500	31.0	20.0	49.0	2.00	0	19	82
750	31.0	20.0	49.0	2.00	0	18	82
1000	31.0	20.0	47.8	2.00	0	15	85
1250	31.0	20.0	49.0	2.00	0	12	85

Appendix G

Meteorological data by participant

Participant	Predominate Direction		Direction	IDW - Wind Direction (%)				IDW - Wind Velocity (mph)			
	SP, SU, FA	WI		SP	SU	FA	WI	SP	SU	FA	WI
5	NW	SE	N	14.3	14.0	14.7	13.3	5.8	5.3	4.0	3.4
			NE	11.1	10.5	13.0	12.4	3.5	5.1	3.3	3.0
			E	9.9	8.5	11.7	13.4	3.3	3.2	3.3	3.6
			SE	7.9	7.2	8.1	12.0	3.7	3.4	3.7	4.2
			S	8.9	9.6	9.0	11.3	4.8	4.4	4.5	5.8
			SW	12.0	12.5	11.6	11.6	4.6	4.4	3.9	4.3
			W	21.5	24.6	18.6	14.4	7.6	7.7	6.0	5.2
			NW	14.4	13.2	13.2	11.6	6.7	6.6	5.7	5.1
6	SE	NW	N	14.3	14.0	14.7	13.3	3.6	3.4	3.4	3.4
			NE	11.1	10.5	13.0	12.4	3.8	3.4	3.2	3.6
			E	9.9	8.5	11.7	13.4	3.7	3.6	3.1	3.6
			SE	7.9	7.2	8.1	12.0	4.1	4.4	4.0	4.5
			S	8.9	9.6	9.0	11.3	3.8	3.9	3.4	3.9
			SW	12.0	12.5	11.6	11.6	5.5	5.3	4.3	4.2
			W	21.5	24.6	18.6	14.4	6.3	6.8	5.4	4.2
			NW	14.4	13.2	13.2	11.6	4.4	3.9	3.9	3.6
7	W	E	N	14.3	14.0	14.7	13.3	4.8	4.9	4.6	4.8
			NE	11.1	10.5	13.0	12.4	5.7	5.3	5.6	5.9
			E	9.9	8.5	11.7	13.4	4.9	4.8	4.4	5.1
			SE	7.9	7.2	8.1	12.0	5.3	5.1	4.5	4.9
			S	8.9	9.6	9.0	11.3	5.3	5.0	5.0	5.7
			SW	12.0	12.5	11.6	11.6	7.2	5.5	5.4	7.2
			W	21.5	24.6	18.6	14.4	9.3	10.1	8.3	6.9
			NW	14.4	13.2	13.2	11.6	7.1	6.4	7.0	7.0
8	NW	SE	N	14.3	14.0	14.7	13.3	2.2	2.1	1.9	1.8
			NE	11.1	10.5	13.0	12.4	2.1	1.9	2.0	1.8
			E	9.9	8.5	11.7	13.4	2.7	2.5	1.8	2.2
			SE	7.9	7.2	8.1	12.0	3.0	2.2	1.9	2.3
			S	8.9	9.6	9.0	11.3	3.0	2.4	2.2	2.7
			SW	12.0	12.5	11.6	11.6	3.0	2.6	2.2	2.2
			W	21.5	24.6	18.6	14.4	4.1	3.5	2.6	2.4
			NW	14.4	13.2	13.2	11.6	2.8	2.3	1.9	1.8

Participant	Predominate Direction		Direction	IDW - Wind Direction (%)				IDW - Wind Velocity (mph)			
	SP, SU, FA	WI		SP	SU	FA	WI	SP	SU	FA	WI
9	NW	SE	N	14.3	14.0	14.7	13.3	5.3	4.9	3.7	3.2
			NE	11.1	10.5	13.0	12.4	3.3	4.8	3.2	2.9
			E	9.9	8.5	11.7	13.4	3.2	3.1	3.2	3.5
			SE	7.9	7.2	8.1	12.0	3.5	3.2	3.4	3.8
			S	8.9	9.6	9.0	11.3	4.6	4.3	4.4	5.4
			SW	12.0	12.5	11.6	11.6	4.5	4.4	3.9	4.0
			W	21.5	24.6	18.6	14.4	7.6	7.8	5.9	5.0
			NW	14.4	13.2	13.2	11.6	6.3	6.3	5.4	4.7
			N	14.3	14.0	14.7	13.3	4.2	4.5	3.7	3.3
			NE	11.1	10.5	13.0	12.4	4.3	5.3	4.3	3.7
			E	9.9	8.5	11.7	13.4	3.9	4.4	3.1	3.8
			SE	7.9	7.2	8.1	12.0	4.4	4.4	4.2	5.6
			S	8.9	9.6	9.0	11.3	4.7	5.0	4.4	5.1
			SW	12.0	12.5	11.6	11.6	5.0	4.9	4.1	4.4
10	NW	SE	W	21.5	24.6	18.6	14.4	7.0	7.6	5.8	4.4
			NW	14.4	13.2	13.2	11.6	5.8	5.3	5.0	5.0
			N	14.3	14.0	14.7	13.3	5.1	5.0	3.8	3.2
			NE	11.1	10.5	13.0	12.4	3.1	4.6	3.0	2.7
			E	9.9	8.5	11.7	13.4	3.6	3.2	3.9	4.2
			SE	7.9	7.2	8.1	12.0	3.6	3.6	3.5	3.8
			S	8.9	9.6	9.0	11.3	4.5	4.1	4.2	5.2
11	NW	SE	SW	12.0	12.5	11.6	11.6	4.4	4.3	3.7	3.7
			W	21.5	24.6	18.6	14.4	13.3	12.8	9.8	9.0
			NW	14.4	13.2	13.2	11.6	6.8	7.3	5.9	4.9
			N	14.3	14.0	14.7	13.3	5.3	5.3	3.9	3.2
			NE	11.1	10.5	13.0	12.4	2.7	4.4	2.7	2.4
			E	9.9	8.5	11.7	13.4	3.1	2.8	3.1	3.3
			SE	7.9	7.2	8.1	12.0	3.0	2.7	2.9	3.2
12	NW	SE	S	8.9	9.6	9.0	11.3	4.5	4.1	4.1	4.5
			SW	12.0	12.5	11.6	11.6	4.6	4.6	3.9	3.4
			W	21.5	24.6	18.6	14.4	7.6	8.0	5.7	4.7
			NW	14.4	13.2	13.2	11.6	5.8	6.0	4.9	4.1
			N	14.3	14.0	14.7	13.3	5.3	5.3	3.9	3.2
			NE	11.1	10.5	13.0	12.4	2.7	4.4	2.7	2.4
			E	9.9	8.5	11.7	13.4	3.1	2.8	3.1	3.3

Participant	Predominate Direction		Direction	IDW - Wind Direction (%)				IDW - Wind Velocity (mph)			
	SP, SU, FA	WI		SP	SU	FA	WI	SP	SU	FA	WI
13	NW	SE	N	14.3	14.0	14.7	13.3	4.0	4.3	3.6	3.4
			NE	11.1	10.5	13.0	12.4	4.4	5.3	4.4	4.0
			E	9.9	8.5	11.7	13.4	3.9	4.4	3.2	3.8
			SE	7.9	7.2	8.1	12.0	4.2	4.4	4.1	5.3
			S	8.9	9.6	9.0	11.3	4.8	5.0	4.5	5.3
			SW	12.0	12.5	11.6	11.6	5.1	4.9	4.1	4.7
			W	21.5	24.6	18.6	14.4	7.1	8.1	6.1	4.6
			NW	14.4	13.2	13.2	11.6	5.7	5.0	5.0	5.1
14	SE	NW	N	14.3	14.0	14.7	13.3	4.9	5.0	4.6	4.5
			NE	11.1	10.5	13.0	12.4	4.8	4.3	4.4	4.2
			E	9.9	8.5	11.7	13.4	4.6	4.7	4.0	4.1
			SE	7.9	7.2	8.1	12.0	4.0	4.5	3.8	4.0
			S	8.9	9.6	9.0	11.3	3.1	3.4	3.3	3.6
			SW	12.0	12.5	11.6	11.6	4.5	4.8	3.9	4.3
			W	21.5	24.6	18.6	14.4	5.1	6.2	4.3	3.9
			NW	14.4	13.2	13.2	11.6	3.6	3.0	3.3	3.9
15	NW	SE	N	14.3	14.0	14.7	13.3	5.5	5.1	3.8	3.3
			NE	11.1	10.5	13.0	12.4	3.4	5.0	3.2	3.0
			E	9.9	8.5	11.7	13.4	3.3	3.1	3.2	3.6
			SE	7.9	7.2	8.1	12.0	3.6	3.3	3.6	4.0
			S	8.9	9.6	9.0	11.3	4.7	4.3	4.5	5.6
			SW	12.0	12.5	11.6	11.6	4.6	4.4	3.9	4.1
			W	21.5	24.6	18.6	14.4	7.6	7.8	6.0	5.1
			NW	14.4	13.2	13.2	11.6	6.5	6.5	5.6	4.9
16	NW	SE	N	14.3	14.0	14.7	13.3	4.7	4.3	3.3	2.9
			NE	11.1	10.5	13.0	12.4	3.2	4.4	3.1	2.9
			E	9.9	8.5	11.7	13.4	3.2	3.0	3.2	3.5
			SE	7.9	7.2	8.1	12.0	3.5	3.2	3.4	3.8
			S	8.9	9.6	9.0	11.3	4.5	4.3	4.2	5.0
			SW	12.0	12.5	11.6	11.6	4.4	4.4	3.8	3.8
			W	21.5	24.6	18.6	14.4	7.6	7.9	6.0	5.0
			NW	14.4	13.2	13.2	11.6	6.0	6.0	5.2	4.5

Participant	Predominate Direction		Direction	IDW - Wind Direction (%)				IDW - Wind Velocity (mph)			
	SP, SU, FA	WI		SP	SU	FA	WI	SP	SU	FA	WI
21	NW	SE	N	14.3	14.0	14.7	13.3	5.7	5.5	4.2	3.5
			NE	11.1	10.5	13.0	12.4	3.1	4.9	3.0	2.7
			E	9.9	8.5	11.7	13.4	3.2	3.0	3.3	3.6
			SE	7.9	7.2	8.1	12.0	3.3	3.2	3.3	3.7
			S	8.9	9.6	9.0	11.3	4.6	4.1	4.3	5.4
			SW	12.0	12.5	11.6	11.6	4.5	4.2	3.7	3.9
			W	21.5	24.6	18.6	14.4	10.3	10.2	7.7	6.7
			NW	14.4	13.2	13.2	11.6	6.5	6.6	5.6	4.8
22	NW	SE	N	14.3	14.0	14.7	13.3	1.9	1.7	1.5	1.5
			NE	11.1	10.5	13.0	12.4	2.8	2.7	2.7	2.7
			E	9.9	8.5	11.7	13.4	3.1	2.2	2.7	3.5
			SE	7.9	7.2	8.1	12.0	3.4	3.0	3.4	3.7
			S	8.9	9.6	9.0	11.3	3.7	4.1	3.5	3.1
			SW	12.0	12.5	11.6	11.6	3.6	4.3	3.4	2.8
			W	21.5	24.6	18.6	14.4	4.8	5.5	4.1	3.1
			NW	14.4	13.2	13.2	11.6	3.7	3.6	3.2	2.7
23	SE	NW	N	14.3	14.0	14.7	13.3	3.5	3.2	3.3	3.1
			NE	11.1	10.5	13.0	12.4	3.5	3.3	3.2	3.3
			E	9.9	8.5	11.7	13.4	3.2	3.0	2.8	3.2
			SE	7.9	7.2	8.1	12.0	3.7	3.5	3.6	4.3
			S	8.9	9.6	9.0	11.3	3.9	4.0	3.6	4.0
			SW	12.0	12.5	11.6	11.6	5.3	5.2	4.3	4.0
			W	21.5	24.6	18.6	14.4	5.9	6.4	5.0	3.9
			NW	14.4	13.2	13.2	11.6	4.3	3.7	3.8	3.5
24	NW	SE	N	14.3	14.0	14.7	13.3	4.0	4.3	3.6	3.4
			NE	11.1	10.5	13.0	12.4	4.4	5.3	4.4	4.0
			E	9.9	8.5	11.7	13.4	3.9	4.4	3.2	3.8
			SE	7.9	7.2	8.1	12.0	4.2	4.4	4.1	5.3
			S	8.9	9.6	9.0	11.3	4.8	4.9	4.5	5.3
			SW	12.0	12.5	11.6	11.6	5.1	4.9	4.1	4.6
			W	21.5	24.6	18.6	14.4	7.1	8.0	6.0	4.6
			NW	14.4	13.2	13.2	11.6	5.6	5.0	5.0	5.1

Participant	Predominate Direction		Direction	IDW - Wind Direction (%)				IDW - Wind Velocity (mph)			
	SP, SU, FA	WI		SP	SU	FA	WI	SP	SU	FA	WI
25	NW	SE	N	14.3	14.0	14.7	13.3	5.3	5.2	3.9	3.2
			NE	11.1	10.5	13.0	12.4	3.0	4.7	3.0	2.7
			E	9.9	8.5	11.7	13.4	3.4	3.1	3.6	3.9
			SE	7.9	7.2	8.1	12.0	3.4	3.3	3.4	3.7
			S	8.9	9.6	9.0	11.3	4.5	4.1	4.2	5.1
			SW	12.0	12.5	11.6	11.6	4.4	4.3	3.7	3.7
			W	21.5	24.6	18.6	14.4	12.0	11.7	8.9	7.9
			NW	14.4	13.2	13.2	11.6	6.6	6.9	5.6	4.7
26	NW	SE	N	14.3	14.0	14.7	13.3	4.1	4.3	3.9	3.8
			NE	11.1	10.5	13.0	12.4	4.7	5.3	4.7	4.6
			E	9.9	8.5	11.7	13.4	4.2	4.4	3.6	4.2
			SE	7.9	7.2	8.1	12.0	4.4	4.6	4.1	5.1
			S	8.9	9.6	9.0	11.3	5.0	5.0	4.7	5.7
			SW	12.0	12.5	11.6	11.6	5.5	4.9	4.4	5.3
			W	21.5	24.6	18.6	14.4	7.9	9.0	7.0	5.5
			NW	14.4	13.2	13.2	11.6	6.1	5.3	5.7	5.6
27	NW	SE	N	14.3	14.0	14.7	13.3	5.1	5.0	3.7	3.2
			NE	11.1	10.5	13.0	12.4	3.1	4.6	3.0	2.7
			E	9.9	8.5	11.7	13.4	3.7	3.3	4.0	4.3
			SE	7.9	7.2	8.1	12.0	3.6	3.7	3.6	3.8
			S	8.9	9.6	9.0	11.3	4.5	4.2	4.2	5.1
			SW	12.0	12.5	11.6	11.6	4.4	4.4	3.7	3.7
			W	21.5	24.6	18.6	14.4	13.9	13.4	10.3	9.4
			NW	14.4	13.2	13.2	11.6	6.9	7.5	6.0	4.9
28	NW	SE	N	14.3	14.0	14.7	13.3	8.9	8.1	6.5	5.7
			NE	11.1	10.5	13.0	12.4	4.8	6.9	4.2	3.7
			E	9.9	8.5	11.7	13.4	4.0	4.2	3.8	4.0
			SE	7.9	7.2	8.1	12.0	4.9	4.1	4.9	6.0
			S	8.9	9.6	9.0	11.3	6.1	4.7	5.5	8.0
			SW	12.0	12.5	11.6	11.6	6.3	4.6	4.8	6.3
			W	21.5	24.6	18.6	14.4	7.9	7.7	6.2	5.9
			NW	14.4	13.2	13.2	11.6	8.6	8.4	7.2	6.7

Participant	Predominate Direction		Direction	IDW - Wind Direction (%)				IDW - Wind Velocity (mph)			
	SP, SU, FA	WI		SP	SU	FA	WI	SP	SU	FA	WI
29	NW	SE	N	14.3	14.0	14.7	13.3	3.1	3.0	2.4	2.2
			NE	11.1	10.5	13.0	12.4	3.5	4.0	3.6	3.4
			E	9.9	8.5	11.7	13.4	3.8	3.5	3.3	4.0
			SE	7.9	7.2	8.1	12.0	4.2	4.3	4.4	5.0
			S	8.9	9.6	9.0	11.3	4.4	4.5	4.2	4.7
			SW	12.0	12.5	11.6	11.6	4.3	4.5	3.8	3.8
			W	21.5	24.6	18.6	14.4	6.6	7.0	5.5	4.5
			NW	14.4	13.2	13.2	11.6	5.6	5.3	4.9	4.6
30	NW	SE	N	14.3	14.0	14.7	13.3	2.3	2.1	1.8	1.7
			NE	11.1	10.5	13.0	12.4	2.9	2.8	2.8	2.9
			E	9.9	8.5	11.7	13.4	3.1	2.2	2.7	3.5
			SE	7.9	7.2	8.1	12.0	3.4	2.8	3.3	3.7
			S	8.9	9.6	9.0	11.3	3.8	4.2	3.7	3.4
			SW	12.0	12.5	11.6	11.6	3.7	4.4	3.5	3.0
			W	21.5	24.6	18.6	14.4	4.9	5.6	4.2	3.2
			NW	14.4	13.2	13.2	11.6	4.0	3.8	3.4	2.9
31	NW	SE	N	14.3	14.0	14.7	13.3	2.2	2.0	1.7	1.6
			NE	11.1	10.5	13.0	12.4	2.9	2.8	2.8	2.9
			E	9.9	8.5	11.7	13.4	3.1	2.1	2.7	3.4
			SE	7.9	7.2	8.1	12.0	3.4	2.7	3.3	3.7
			S	8.9	9.6	9.0	11.3	3.8	4.2	3.7	3.3
			SW	12.0	12.5	11.6	11.6	3.7	4.4	3.5	2.9
			W	21.5	24.6	18.6	14.4	4.8	5.5	4.0	3.1
			NW	14.4	13.2	13.2	11.6	3.8	3.6	3.3	2.7
32	NW	SE	N	14.3	14.0	14.7	13.3	5.0	5.4	4.4	3.5
			NE	11.1	10.5	13.0	12.4	3.7	4.6	3.5	3.2
			E	9.9	8.5	11.7	13.4	3.8	3.9	3.3	4.0
			SE	7.9	7.2	8.1	12.0	5.9	4.3	4.5	6.4
			S	8.9	9.6	9.0	11.3	4.4	4.6	3.6	4.5
			SW	12.0	12.5	11.6	11.6	5.2	5.1	3.9	4.1
			W	21.5	24.6	18.6	14.4	6.8	6.7	5.5	4.5
			NW	14.4	13.2	13.2	11.6	6.3	5.8	5.4	4.9

Participant	Predominate Direction		Direction	IDW - Wind Direction (%)				IDW - Wind Velocity (mph)			
	SP, SU, FA	WI		SP	SU	FA	WI	SP	SU	FA	WI
33	NW	SE	N	14.3	14.0	14.7	13.3	5.1	4.8	3.7	3.3
			NE	11.1	10.5	13.0	12.4	3.6	4.9	3.5	3.7
			E	9.9	8.5	11.7	13.4	3.8	4.2	3.8	4.1
			SE	7.9	7.2	8.1	12.0	4.4	4.5	4.8	5.6
			S	8.9	9.6	9.0	11.3	5.2	5.0	5.3	6.9
			SW	12.0	12.5	11.6	11.6	4.7	4.5	4.3	5.1
			W	21.5	24.6	18.6	14.4	7.1	7.1	6.0	5.6
34	SE	NW	NW	14.4	13.2	13.2	11.6	7.1	6.6	6.1	6.2
			N	14.3	14.0	14.7	13.3	5.1	5.1	4.8	4.9
			NE	11.1	10.5	13.0	12.4	4.9	4.4	4.6	4.3
			E	9.9	8.5	11.7	13.4	4.7	5.0	4.2	4.2
			SE	7.9	7.2	8.1	12.0	4.0	4.5	3.8	3.7
			S	8.9	9.6	9.0	11.3	2.6	2.8	2.9	2.9
			SW	12.0	12.5	11.6	11.6	3.6	4.0	3.6	4.1
35	NW	SE	W	21.5	24.6	18.6	14.4	3.4	4.2	3.2	3.7
			NW	14.4	13.2	13.2	11.6	2.9	2.3	2.7	3.8
			N	14.3	14.0	14.7	13.3	6.2	5.6	4.2	3.7
			NE	11.1	10.5	13.0	12.4	3.7	5.4	3.5	3.3
			E	9.9	8.5	11.7	13.4	3.5	3.5	3.4	3.8
			SE	7.9	7.2	8.1	12.0	4.1	3.8	4.2	4.9
			S	8.9	9.6	9.0	11.3	5.0	4.5	4.8	6.4
36	SE	NW	SW	12.0	12.5	11.6	11.6	4.8	4.4	4.0	4.7
			W	21.5	24.6	18.6	14.4	7.2	7.3	5.8	5.2
			NW	14.4	13.2	13.2	11.6	7.1	7.0	6.1	5.5
			N	14.3	14.0	14.7	13.3	3.6	2.9	3.1	2.9
			NE	11.1	10.5	13.0	12.4	3.0	2.6	2.8	2.7
			E	9.9	8.5	11.7	13.4	3.0	2.6	2.7	2.9
			SE	7.9	7.2	8.1	12.0	3.3	2.9	3.1	3.8
36	SE	NW	S	8.9	9.6	9.0	11.3	3.8	3.8	3.3	3.5
			SW	12.0	12.5	11.6	11.6	5.1	5.0	4.0	3.6
			W	21.5	24.6	18.6	14.4	4.9	5.3	4.1	3.3
			NW	14.4	13.2	13.2	11.6	4.6	3.8	4.1	3.6

Participant	Predominate Direction		Direction	IDW - Wind Direction (%)				IDW - Wind Velocity (mph)			
	SP, SU, FA	WI		SP	SU	FA	WI	SP	SU	FA	WI
37	NW	SE	N	14.3	14.0	14.7	13.3	5.0	5.3	4.4	3.6
			NE	11.1	10.5	13.0	12.4	4.8	6.1	4.7	3.7
			E	9.9	8.5	11.7	13.4	4.1	4.6	3.6	4.0
			SE	7.9	7.2	8.1	12.0	5.2	5.4	4.4	5.7
			S	8.9	9.6	9.0	11.3	5.0	5.4	4.4	5.2
			SW	12.0	12.5	11.6	11.6	5.2	5.0	4.2	4.7
			W	21.5	24.6	18.6	14.4	7.2	7.8	6.0	4.7
			NW	14.4	13.2	13.2	11.6	6.3	5.9	5.5	5.0
38	NW	SE	N	14.3	14.0	14.7	13.3	2.9	3.0	2.7	2.6
			NE	11.1	10.5	13.0	12.4	2.7	2.9	2.7	2.4
			E	9.9	8.5	11.7	13.4	3.2	2.9	2.8	3.8
			SE	7.9	7.2	8.1	12.0	3.5	2.9	2.8	4.0
			S	8.9	9.6	9.0	11.3	4.2	3.4	3.6	5.1
			SW	12.0	12.5	11.6	11.6	3.8	3.3	3.1	3.3
			W	21.5	24.6	18.6	14.4	6.4	6.6	5.1	4.2
			NW	14.4	13.2	13.2	11.6	4.3	3.5	3.5	3.4
39	NW	SE	N	14.3	14.0	14.7	13.3	4.2	3.8	2.9	2.5
			NE	11.1	10.5	13.0	12.4	3.2	4.2	3.1	3.1
			E	9.9	8.5	11.7	13.4	3.3	3.1	3.1	3.6
			SE	7.9	7.2	8.1	12.0	3.8	3.5	3.9	4.4
			S	8.9	9.6	9.0	11.3	4.4	4.3	4.2	5.0
			SW	12.0	12.5	11.6	11.6	4.2	4.4	3.7	3.8
			W	21.5	24.6	18.6	14.4	6.4	6.7	5.3	4.5
			NW	14.4	13.2	13.2	11.6	5.9	5.7	5.1	4.5
40	NW	SE	N	14.3	14.0	14.7	13.3	3.7	3.7	3.0	2.6
			NE	11.1	10.5	13.0	12.4	3.9	4.4	4.0	3.7
			E	9.9	8.5	11.7	13.4	4.0	3.9	3.5	4.3
			SE	7.9	7.2	8.1	12.0	4.6	4.8	4.7	5.6
			S	8.9	9.6	9.0	11.3	4.6	4.7	4.4	5.1
			SW	12.0	12.5	11.6	11.6	4.6	4.7	4.0	4.2
			W	21.5	24.6	18.6	14.4	7.1	7.4	5.9	4.9
			NW	14.4	13.2	13.2	11.6	6.0	5.6	5.2	5.0

Participant	Predominate Direction		Direction	IDW - Wind Direction (%)				IDW - Wind Velocity (mph)			
	SP, SU, FA	WI		SP	SU	FA	WI	SP	SU	FA	WI
41	NW	SE	N	14.3	14.0	14.7	13.3	6.0	5.5	4.2	3.6
			NE	11.1	10.5	13.0	12.4	3.5	5.3	3.4	3.1
			E	9.9	8.5	11.7	13.4	3.3	3.2	3.3	3.6
			SE	7.9	7.2	8.1	12.0	3.8	3.5	3.8	4.3
			S	8.9	9.6	9.0	11.3	4.9	4.4	4.6	6.0
			SW	12.0	12.5	11.6	11.6	4.7	4.4	4.0	4.4
			W	21.5	24.6	18.6	14.4	7.6	7.7	6.0	5.2
			NW	14.4	13.2	13.2	11.6	6.8	6.8	5.9	5.2
42	NW	SE	N	14.3	14.0	14.7	13.3	8.8	7.9	6.4	5.6
			NE	11.1	10.5	13.0	12.4	4.7	6.8	4.1	3.6
			E	9.9	8.5	11.7	13.4	3.9	4.0	3.7	3.9
			SE	7.9	7.2	8.1	12.0	4.8	4.0	4.8	5.8
			S	8.9	9.6	9.0	11.3	6.0	4.6	5.4	7.8
			SW	12.0	12.5	11.6	11.6	6.1	4.6	4.7	6.2
			W	21.5	24.6	18.6	14.4	7.9	7.7	6.2	5.8
			NW	14.4	13.2	13.2	11.6	8.5	8.3	7.1	6.5
43	NW	SE	N	14.3	14.0	14.7	13.3	2.8	2.5	2.0	1.9
			NE	11.1	10.5	13.0	12.4	3.0	3.2	2.9	2.9
			E	9.9	8.5	11.7	13.4	3.2	2.5	2.9	3.5
			SE	7.9	7.2	8.1	12.0	3.5	3.0	3.5	3.9
			S	8.9	9.6	9.0	11.3	4.0	4.2	3.8	3.8
			SW	12.0	12.5	11.6	11.6	3.8	4.4	3.6	3.2
			W	21.5	24.6	18.6	14.4	5.4	6.0	4.5	3.6
			NW	14.4	13.2	13.2	11.6	4.5	4.4	4.0	3.4
44	NW	SE	N	14.3	14.0	14.7	13.3	2.9	2.6	2.1	1.9
			NE	11.1	10.5	13.0	12.4	3.0	3.2	2.9	2.9
			E	9.9	8.5	11.7	13.4	3.2	2.5	2.9	3.5
			SE	7.9	7.2	8.1	12.0	3.5	3.0	3.5	3.9
			S	8.9	9.6	9.0	11.3	4.0	4.2	3.8	3.9
			SW	12.0	12.5	11.6	11.6	3.8	4.4	3.6	3.2
			W	21.5	24.6	18.6	14.4	5.5	6.0	4.6	3.6
			NW	14.4	13.2	13.2	11.6	4.6	4.5	4.1	3.5

Participant	Predominate Direction		Direction	IDW - Wind Direction (%)				IDW - Wind Velocity (mph)			
	SP, SU, FA	WI		SP	SU	FA	WI	SP	SU	FA	WI
45	NW	SE	N	14.3	14.0	14.7	13.3	3.1	2.8	2.2	2.0
			NE	11.1	10.5	13.0	12.4	3.0	3.4	2.9	3.0
			E	9.9	8.5	11.7	13.4	3.2	2.7	2.9	3.5
			SE	7.9	7.2	8.1	12.0	3.6	3.1	3.6	4.0
			S	8.9	9.6	9.0	11.3	4.1	4.2	3.9	4.2
			SW	12.0	12.5	11.6	11.6	3.9	4.4	3.6	3.3
			W	21.5	24.6	18.6	14.4	5.7	6.2	4.8	3.8
			NW	14.4	13.2	13.2	11.6	4.9	4.8	4.3	3.7
46	NW	SE	N	14.3	14.0	14.7	13.3	3.0	2.7	2.1	2.0
			NE	11.1	10.5	13.0	12.4	3.0	3.3	2.9	3.0
			E	9.9	8.5	11.7	13.4	3.2	2.6	2.9	3.5
			SE	7.9	7.2	8.1	12.0	3.5	3.1	3.5	4.0
			S	8.9	9.6	9.0	11.3	4.0	4.2	3.9	4.0
			SW	12.0	12.5	11.6	11.6	3.9	4.4	3.6	3.3
			W	21.5	24.6	18.6	14.4	5.6	6.1	4.7	3.7
			NW	14.4	13.2	13.2	11.6	4.8	4.6	4.2	3.6
47	NW	SE	N	14.3	14.0	14.7	13.3	3.3	3.0	2.3	2.1
			NE	11.1	10.5	13.0	12.4	3.1	3.5	3.0	3.0
			E	9.9	8.5	11.7	13.4	3.2	2.7	3.0	3.6
			SE	7.9	7.2	8.1	12.0	3.6	3.2	3.6	4.1
			S	8.9	9.6	9.0	11.3	4.1	4.2	3.9	4.3
			SW	12.0	12.5	11.6	11.6	4.0	4.4	3.6	3.4
			W	21.5	24.6	18.6	14.4	5.9	6.3	4.9	4.0
			NW	14.4	13.2	13.2	11.6	5.1	5.0	4.5	3.8
48	NW	SE	N	14.3	14.0	14.7	13.3	3.0	2.8	2.2	2.0
			NE	11.1	10.5	13.0	12.4	3.0	3.4	2.9	3.0
			E	9.9	8.5	11.7	13.4	3.2	2.6	2.9	3.5
			SE	7.9	7.2	8.1	12.0	3.5	3.1	3.6	4.0
			S	8.9	9.6	9.0	11.3	4.0	4.2	3.9	4.1
			SW	12.0	12.5	11.6	11.6	3.9	4.4	3.6	3.3
			W	21.5	24.6	18.6	14.4	5.7	6.2	4.8	3.8
			NW	14.4	13.2	13.2	11.6	4.8	4.7	4.2	3.6

Participant	Predominate Direction		Direction	IDW - Wind Direction (%)				IDW - Wind Velocity (mph)			
	SP, SU, FA	WI		SP	SU	FA	WI	SP	SU	FA	WI
49	NW	SE	N	14.3	14.0	14.7	13.3	3.2	2.9	2.3	2.1
			NE	11.1	10.5	13.0	12.4	3.1	3.6	3.0	3.0
			E	9.9	8.5	11.7	13.4	3.3	2.8	3.0	3.6
			SE	7.9	7.2	8.1	12.0	3.7	3.3	3.8	4.2
			S	8.9	9.6	9.0	11.3	4.1	4.3	4.0	4.4
			SW	12.0	12.5	11.6	11.6	4.0	4.4	3.6	3.5
			W	21.5	24.6	18.6	14.4	5.7	6.2	4.8	3.9
			NW	14.4	13.2	13.2	11.6	5.2	5.0	4.5	4.0
50	NW	SE	N	14.3	14.0	14.7	13.3	3.4	3.1	2.4	2.2
			NE	11.1	10.5	13.0	12.4	3.1	3.7	3.0	3.0
			E	9.9	8.5	11.7	13.4	3.3	2.9	3.0	3.6
			SE	7.9	7.2	8.1	12.0	3.7	3.4	3.8	4.3
			S	8.9	9.6	9.0	11.3	4.2	4.3	4.1	4.5
			SW	12.0	12.5	11.6	11.6	4.0	4.4	3.7	3.6
			W	21.5	24.6	18.6	14.4	5.9	6.3	4.9	4.1
			NW	14.4	13.2	13.2	11.6	5.4	5.2	4.7	4.1
51	NW	SE	N	14.3	14.0	14.7	13.3	2.8	2.5	2.0	1.9
			NE	11.1	10.5	13.0	12.4	3.0	3.2	2.9	2.9
			E	9.9	8.5	11.7	13.4	3.2	2.6	2.9	3.5
			SE	7.9	7.2	8.1	12.0	3.6	3.1	3.6	4.0
			S	8.9	9.6	9.0	11.3	4.0	4.2	3.8	3.9
			SW	12.0	12.5	11.6	11.6	3.8	4.4	3.6	3.2
			W	21.5	24.6	18.6	14.4	5.4	5.9	4.6	3.6
			NW	14.4	13.2	13.2	11.6	4.7	4.5	4.1	3.5
52	NW	SE	N	14.3	14.0	14.7	13.3	3.2	2.9	2.3	2.1
			NE	11.1	10.5	13.0	12.4	3.1	3.6	3.0	3.0
			E	9.9	8.5	11.7	13.4	3.3	2.8	3.0	3.6
			SE	7.9	7.2	8.1	12.0	3.7	3.3	3.8	4.2
			S	8.9	9.6	9.0	11.3	4.1	4.3	4.0	4.4
			SW	12.0	12.5	11.6	11.6	4.0	4.4	3.6	3.5
			W	21.5	24.6	18.6	14.4	5.7	6.2	4.8	4.0
			NW	14.4	13.2	13.2	11.6	5.2	5.0	4.6	4.0

Participant	Predominate Direction		Direction	IDW - Wind Direction (%)				IDW - Wind Velocity (mph)			
	SP, SU, FA	WI		SP	SU	FA	WI	SP	SU	FA	WI
57	NW	SE	N	14.3	14.0	14.7	13.3	3.4	3.1	2.4	2.2
			NE	11.1	10.5	13.0	12.4	3.1	3.7	3.0	3.0
			E	9.9	8.5	11.7	13.4	3.3	2.9	3.0	3.6
			SE	7.9	7.2	8.1	12.0	3.7	3.4	3.8	4.3
			S	8.9	9.6	9.0	11.3	4.2	4.3	4.1	4.5
			SW	12.0	12.5	11.6	11.6	4.0	4.4	3.7	3.6
			W	21.5	24.6	18.6	14.4	5.9	6.3	4.9	4.1
			NW	14.4	13.2	13.2	11.6	5.3	5.2	4.7	4.1
58	NW	SE	N	14.3	14.0	14.7	13.3	3.3	3.0	2.4	2.2
			NE	11.1	10.5	13.0	12.4	3.2	3.8	3.1	3.1
			E	9.9	8.5	11.7	13.4	3.4	3.1	3.1	3.7
			SE	7.9	7.2	8.1	12.0	3.8	3.6	4.0	4.5
			S	8.9	9.6	9.0	11.3	4.3	4.4	4.1	4.7
			SW	12.0	12.5	11.6	11.6	4.1	4.4	3.7	3.7
			W	21.5	24.6	18.6	14.4	6.0	6.4	5.1	4.2
			NW	14.4	13.2	13.2	11.6	5.5	5.3	4.8	4.4
59	NW	SE	N	14.3	14.0	14.7	13.3	6.4	5.8	4.4	3.8
			NE	11.1	10.5	13.0	12.4	3.8	5.6	3.6	3.5
			E	9.9	8.5	11.7	13.4	3.7	3.8	3.6	3.9
			SE	7.9	7.2	8.1	12.0	4.3	4.0	4.5	5.3
			S	8.9	9.6	9.0	11.3	5.2	4.7	5.0	6.8
			SW	12.0	12.5	11.6	11.6	4.9	4.5	4.2	5.0
			W	21.5	24.6	18.6	14.4	7.2	7.2	5.9	5.4
			NW	14.4	13.2	13.2	11.6	7.4	7.1	6.3	5.9
60	NW	SE	N	14.3	14.0	14.7	13.3	2.0	1.8	1.6	1.5
			NE	11.1	10.5	13.0	12.4	2.8	2.8	2.7	2.7
			E	9.9	8.5	11.7	13.4	3.1	2.3	2.7	3.5
			SE	7.9	7.2	8.1	12.0	3.4	3.0	3.4	3.7
			S	8.9	9.6	9.0	11.3	3.8	4.1	3.6	3.3
			SW	12.0	12.5	11.6	11.6	3.7	4.3	3.4	2.9
			W	21.5	24.6	18.6	14.4	4.8	5.5	4.1	3.1
			NW	14.4	13.2	13.2	11.6	3.9	3.7	3.3	2.9