FIFRA Endangered Species Task Force's (FESTF's) Interim Report on the State Department of Agriculture Pesticide Use and Usage Survey

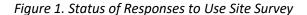
This July 25, 2018 report was provided by FESTF to the U.S. Fish and Wildlife Service. It is labeled "interim" as FESTF intends to follow up with state contacts at a later time.

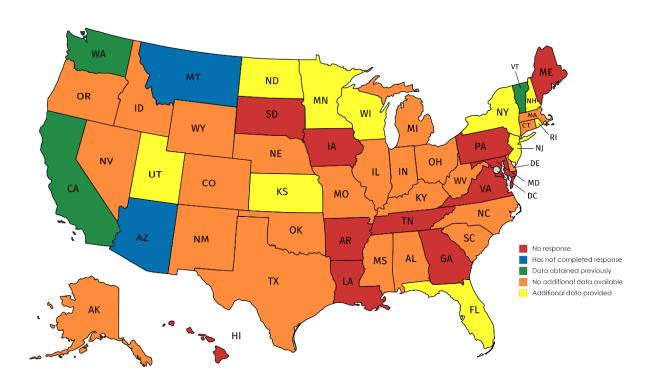
## Interim Report on the State Department of Agriculture Pesticide Use and Usage Survey: Email Template, Tracking Sheet, and Results Compiled by FESTF

July 25, 2018

On behalf of FESTF, Compliance Services International (CSI) conducted a survey of State Department of Agriculture offices in all 50 States to determine if they collect pesticide use information (agricultural, mosquito control, aquatic uses, homeowner use, etc.) in addition to the data collected by United States Department of Agriculture, National Agricultural Statistic Service (USDA-NASS). CSI also inquired about the availability of landcover or land use data that may have been collected at the State level. CSI compiled a list of contacts for each state's Department of Agriculture and sent the email template found in Attachment 1 to each contact and follow-up phone calls were made if initial attempts to contact via email were unsuccessful.

The results of the survey, as of July 23, 2018 are summarized as follows and detailed in the tracking sheet included as Attachment 2 entitled "State Department of Agriculture\_2018 Use Survey.xlsx". A total of 10 states supplied additional data and/or links to on-line sources where the data are available and three states were previously contacted or mined for data. The information provided by these states are detailed in this document. For the remainder of states, 24 replied that no additional data are available, two states responded to the initial request but additional follow-ups have not provided additional data, and 11 states have not responded despite numerous efforts and different contact attempts. Status by State is shown in Figure 1. FESTF continues to pursue data and follow-ups with sources suggested by initial contacts and intends to update FESTF's copy of Attachment 2 with newly obtained information.



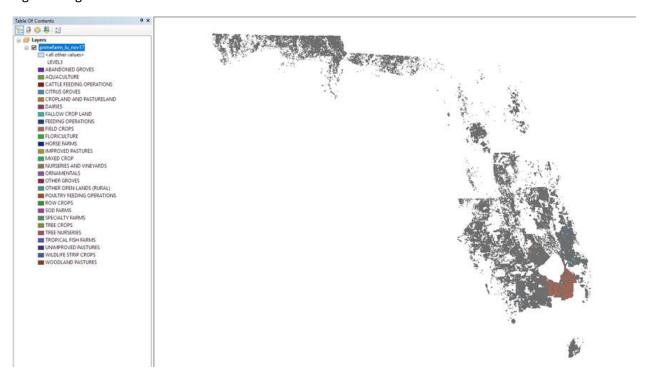


Of the ten states that responded to the survey questions with information (or provided links to additional information) six responded with pesticide use information (Kansas, Minnesota, New Hampshire, New Jersey, New York and North Dakota), three responded with links to land use data (Rhode Island, Utah and Wisconsin) and one (Florida) sent both pesticide use data and a link to land use information. The responses from states that supplied pesticide information varied from pesticide use at the state level (New Jersey) to detailed information regarding specific pesticide use on a given crop (North Dakota). The land use information available from the responding states can be found on-line but requires ArcGIS programs to access the data. Available land use data varies from state to state but generally contains data for residential, forest, cropland and other land use classifications. Details for each state are provided below.

California: California has a lot of detailed information available on-line via the California Department of Pesticide Regulation website. Through the California Pesticide Information Portal (CALPIP) <a href="https://calpip.cdpr.ca.gov/year.cfm">https://calpip.cdpr.ca.gov/year.cfm</a> one can query specific crop/pesticide use information at the county level for a specific year from 1990 through 2016. California's comprehensive pesticide use reporting system and on-line queries make finding specific use information relatively easy and the information is quite detailed.

**Florida**: Florida sent an e-mail with pesticide use data from their mosquito control districts that FESTF already obtained from <a href="https://www.freshfromflorida.com/Business-Services/Mosquito-Control-Reports">https://www.freshfromflorida.com/Business-Services/Mosquito-Control-Reports</a>. In addition, Florida provided a link to the 'FSAID Agricultural Lands Geodatabase – 2015' which is available for public download <a href="https://www.fgdl.org/metadataexplorer/explorer.jsp">https://www.fgdl.org/metadataexplorer/explorer.jsp</a>. This database contains information that is applicable to FESTF's task, such as the land uses depicted in Figure 2, including 'Abandoned Groves'.

Figure 2. Agricultural Lands from FSAID



**Kansas**: The response from the Kansas Department of Agriculture noted that they do not collect pesticide use or land use data. However, they did attach a pdf with a description of a Pesticide Management Area in the Delaware River Basin (Atchison, Brown, Jackson, Jefferson and Nemaha Counties) that describes buffers for Atrazine use that may be of interest (copy of attachment available upon request).

**Minnesota**: The Minnesota Department of Agriculture sent a link to their 'Agricultural Pesticide Sales and Use Reports – Statewide'

http://www.mda.state.mn.us/chemicals/pesticides/pesticideuse/agpestsalesstatewide.aspx. The links on this page include the '2013 Pesticide Usage Reports on Four Major Crops' http://www.mda.state.mn.us/chemicals/pesticides/pesticideuse/~/media/Files/chemicals/pesticides/20 13pesticiderpt.pdf. The four crops in question are corn, soybeans, wheat and hay and pesticide use data is available to the county level in this report.

**New Hampshire**: The New Hampshire Department of Agriculture sent a pdf of their 2012 'Pesticide Usage Report' (see Attachment 3). This report includes the amount (in lbs) of individual pesticides used in the State during 2012 as reported by commercial and private pesticide license holders, which may be useful additional information. For example, 57.03 lbs of Thiram and 8.27 lbs of Abamectin were reported used throughout the State in 2012 by pesticide license holders.

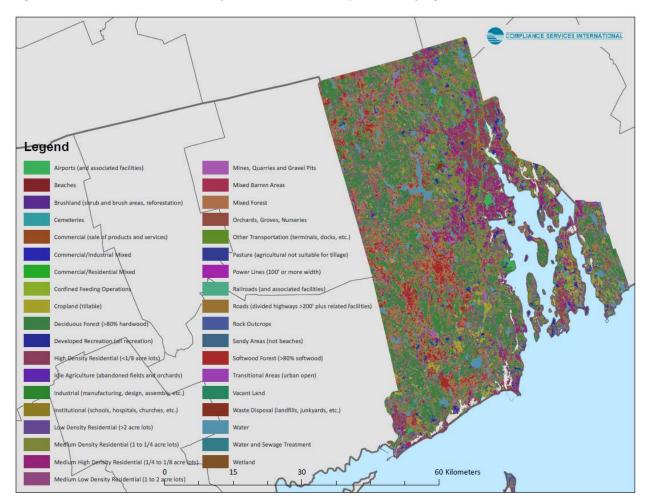
New Jersey: The response from the New Jersey Department of Agriculture included a link to all of the reports they have publicly available <a href="http://www.nj.gov/dep/enforcement/pcp/pcp-pubs.htm">http://www.nj.gov/dep/enforcement/pcp/pcp-pubs.htm</a> which included annual reports on agricultural pesticide use through 2012. These reports include Pounds active ingredient reported used in the State (at the State level). For example, the 2012 report lists 2839 lbs/ai of Malathion and 131941 lbs/ai of Glyphosate being used in the State during that year based on the Pesticide Use Survey. In addition to the information forwarded by the State of New Jersey, Cornell University has information (2003 through 2005) on pesticide use (lbs a.i.) at the county level <a href="http://ai.psur.cornell.edu/totals\_search.aspx?datatype=use&search=totals">http://ai.psur.cornell.edu/totals\_search.aspx?datatype=use&search=totals</a>. Reports are also available for golf course, lawn care, mosquito control, right-of-way and structural uses but at the same level of specificity (pounds a.i. used in the entire state).

**New York**: New York Department of Agriculture sent a link to a report on the top 10 pesticides in sales on a yearly basis (through 2013), but the reports do not contain any actual use data but do include an overall pesticide application by weight table for each county, unfortunately this data is not split into individual pesticide use data <a href="https://www.dec.ny.gov/chemical/97535.html">https://www.dec.ny.gov/chemical/97535.html</a>.

**North Dakota**: North Dakota sent a link to a 2012 report titled 'Pesticide Use and Pesticide Management Practices in North Dakota, 2012' <a href="https://www.ag.ndsu.edu/pubs/plantsci/pests/w1711.pdf">https://www.ag.ndsu.edu/pubs/plantsci/pests/w1711.pdf</a> which gives detailed information on the acreage of different crops treated with a specific pesticide. For example, 2,300 acres (or 0.3% of the total acreage) of sunflowers were treated with Carbaryl and 15,300 acres (or 6.9% of the total acreage) of sugarbeets were treated with bifenthrin.

**Rhode Island**: The Rhode Island Department of Agriculture responded with a link to their 2011 landcover data sets <a href="http://www.rigis.org/datasets?q=land%20use%20and%20land%20cover%20(2011)">http://www.rigis.org/datasets?q=land%20use%20and%20land%20cover%20(2011)</a>. This data includes tillable cropland, idle agriculture, different residential categories, rock out crops and other 'land use' categories that may be of interest as illustrated in Figure 3.

Figure 3. Landcover Data available from Rhode Island Department of Agriculture



**Utah**: The Utah Department of Agriculture provided a link to publicly available data on land use <a href="https://gis.utah.gov/data/planning/water-related-land/">https://gis.utah.gov/data/planning/water-related-land/</a>. The Utah land use data includes alfafa, beans, grain, sorghum and many other crops as well as urban areas as shown in Figure 4.

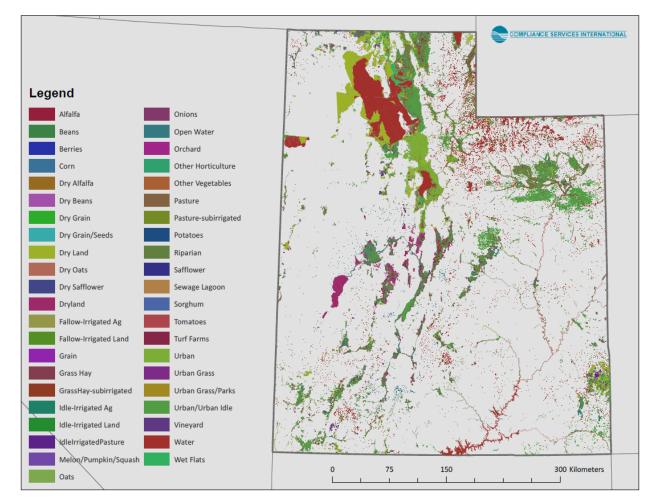


Figure 4. Land Use Data Available from Utah Department of Agriculture

Wisconsin: The Wisconsin Department of Agriculture sent a link to their landcover data <a href="https://dnr.wi.gov/maps/gis/datalandcover.html">https://dnr.wi.gov/maps/gis/datalandcover.html</a>. This data splits land use into several useful categories including 'cash grain', continuous corn', 'pasture', and specific tree species/groups including pine, fir spruce, hemlock hardwoods, and red maple.

**Washington**: The State of Washington provided an Access Database containing NRAS (Natural Resource Assessment Section) data that includes pesticide use information on specific crops. Directions for projecting pesticide use data in GIS (lbs per acre per year) are provided in Attachment 4.

**Vermont**: The Vermont Agency of Agriculture Foods & Markets website has Pesticide usage reports through 2013 available on their website

http://agriculture.vermont.gov/pesticide\_regulation/pesticide\_usage\_reported. These reports are from commercial applicators and contain information regarding pounds ai of specific pesticides used by

commercial applicators on corn, golf courses, forestry, road sides and other use sites. For example, the 2013 reports notes that commercial applicators reported 949.88 lbs/ai of dicamba was applied to corn and 94.85 lbs/ai of triclopyr was applied as 'lawncare'.