

## **Pesticides in Connecticut**

The Connecticut Council of Environmental Quality (Council) has completed an internal review of the regulatory, monitoring, and management programs for pesticides in Connecticut. This review has been prepared to identify what information is known, what information is needed, and what approaches should be taken, to better understand what pesticides are being applied in the state and where they are being applied. Accordingly, this review will address:

- the distinctions between unclassified and restricted-use pesticides;
- the role and responsibilities of Connecticut Department of Energy and Environmental Protection (DEEP) and the Environmental Protection Agency (EPA) for the regulation of restricted-use pesticides including, but not limited to, their sale and use;
- the reporting requirements and processes for Private Applicators, Commercial Supervisors/Commercial Operators, and Licensed Arborists;
- the availability of and access to pesticide reporting data in Connecticut;
- estimates of pesticides used in agricultural areas in the state; and
- the extent of sampling and testing for pesticides in the state.

### **What is the definition of a pesticide?**

Pesticides are defined by the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) as any substance or a mixture of substances that are intended for:

- preventing, destroying, repelling or mitigating any pest;
- use as a plant regulator, defoliant, or desiccant; or
- use as a nitrogen stabilizer.<sup>1</sup>

Before a pesticide can be sold or distributed in the United States, it must be registered by EPA. Pursuant to this registration process, the applicant must demonstrate that applying the pesticide “will not generally cause unreasonable adverse effects on the environment”.<sup>2</sup> The EPA can also

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<sup>1</sup> United States Code (USC) Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Section [136. Definitions \(u\) Pesticide](#)

<sup>2</sup> EPA, Summary of the Federal Insecticide, Fungicide, and Rodenticide Act; <https://www.epa.gov/laws-regulations/summary-federal-insecticide-fungicide-and-rodenticide-act>

classify the pesticide as restricted-use, limiting its use to certified applicators. Pesticides that are not restricted-use, are referred to as unclassified pesticides.

### What are restricted-use pesticides?

Restricted-use pesticides are listed under Title 40 of the Code of Federal Regulations (CFR).<sup>3</sup> The EPA will classify a product as “restricted-use” based on the following criteria:

*“(a) **General criteria.** An end-use product will be restricted to use by certified applicators (or persons under their direct supervision) if the Agency determines that:*

*(1) Its toxicity exceeds one or more of the specific hazard criteria in [paragraph \(b\)](#) or [\(c\)](#) of this section, or evidence described in [paragraph \(d\)](#) of this section substantiates that the product or use poses a serious hazard that may be mitigated by restricting its use;*

*(2) Its labeling, when considered according to the factors in [paragraph \(e\)\(2\)](#) of this section, is not adequate to mitigate these hazard(s);*

*(3) Restriction of the product would decrease the risk of adverse effects; and*

*(4) The decrease in risks of the pesticide as a result of restriction would exceed the decrease in benefits.”*

**The above-mentioned specific hazard criteria are based on toxicity exceedances for humans and non-target species.**

Restricted-use pesticides can only be applied by certified personnel and people under their supervision.<sup>4</sup> In Connecticut, restricted-use pesticides can only be sold to people with the commercial supervisor, private applicator, or arborist certifications.<sup>5</sup> These certifications are administered by the states and require the completion of course work and training to achieve. The EPA registers these pesticides for use according to specific pests and conditions. For example, if Pesticide X is registered for use on apples and outdoor use, then it could not be used on oranges that are grown inside a building.

<sup>3</sup> Code of Federal Regulations (CFR) [40 CFR 152.175](#)- Pesticides Classified for Restricted-Use

<sup>4</sup> CFR [40 CFR 152.170\(a\)](#) - Criteria for restriction to use by certified applicators

<sup>5</sup> CT DEEP [Pesticide Certification Licensing](#) accessed 12-8-2025

## **Who uses unclassified pesticides?**

Unclassified pesticides are available “over the counter”. There is no requirement to present a license to obtain these pesticides, and these pesticides can be applied by residents or landowners on their own property. These individuals do not need to report or track their pesticide usage. In Connecticut, a Commercial Operator or Commercial Supervisor certification is required to apply unclassified pesticides on premises that are not owned or rented by the applicator.<sup>6</sup> Unclassified pesticides applied by Commercial Operators and/or Commercial Supervisors, which are submitted to DEEP’s Pesticide Management Program (PMP), are enumerated in annual summary reports and records; the same reporting as restricted use pesticides.

## **Who regulates pesticides in Connecticut?**

On the federal level, the EPA has the authority to regulate pesticides based on two major laws, FIFRA and the Federal Food, Drug and Cosmetic Act (FFDCA). Under FIFRA, the EPA registers pesticides based on scientific data and risk assessments, labels directions for pesticides use, authorizes the use of unregistered pesticides or the use of pesticides, and can suspend or cancel pesticide registrations.<sup>7</sup> The EPA establishes the certification standards for pesticide applicators, but any state with a State Certification Plan approved by the EPA, like Connecticut, can establish its own standards. Under FIFRA, states can undertake primary enforcement responsibilities, if their laws and regulations are deemed adequate by the EPA.<sup>8</sup> Accordingly, DEEP’s PMP has been given authority by the EPA to regulate the certification, pesticide product registration, tracking, and inspection duties related to the management of pesticides in the state.<sup>9</sup>

## **What categories of pesticides applicators and business are regulated in the state?**

There are several categories of certified pesticide applicators: Commercial Supervisors, Commercial Operators, Private Applicators, and Licensed Arborists. Summaries of their roles and certification requirements are as follows:

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<sup>6</sup> Connecticut General Statutes (CGS) [Section 22a-47\(f\)](#) - Definitions

<sup>7</sup> [7 United States Code \(U.S.C.\) Section 136 et seq.](#) (1996)

<sup>8</sup> [7 U.S.C. FIFRA Section 136 v\(b\)](#)

<sup>9</sup> [Pesticide Management Program \(ct.gov\)](#) accessed 9/17/2024

- A certified **Commercial Supervisor** can purchase restricted-use pesticides from registered dealers, and direct and plan pesticide applications. More specifically, Commercial Supervisors decide whether pesticides should be applied; which pesticides should be used; and the dosage and timing of application.<sup>10</sup> There are over 2,650 certified Commercial Supervisors in the state.<sup>11</sup>
- A certified **Commercial Operator** can apply any pesticide while under the supervision of Commercial Supervisor<sup>12</sup> who must be present during pesticide application(s), if required by the pesticide's labeling. If the pesticide's labeling does not require the presence of the Commercial Supervisor during application, then written instructions must be provided to the Commercial Operator.<sup>13</sup> There are over 7,000 Commercial Operators certified to apply restricted-use pesticides in the state.<sup>14</sup>
- A certified **Private Applicator** can supervise and/or make pesticide applications on properties that are owned or directly managed by the Private Applicator for the purpose of producing an agricultural commodity.<sup>15</sup> An example of a Private Applicator would be a farmer who applies pesticides on agricultural land that they own or manage. There are currently 440 certified Private Applicators in the state.<sup>16</sup>
- A **Licensed Arborist** is considered a category of Commercial Supervisor, under CGS Section 22a-54 and can perform "any work done for hire to improve the condition of fruit, shade, or ornamental trees by... protecting trees from damage from insects or diseases or curing these conditions by spraying or any other method." In addition to the above stated certifications, any business out for hire to apply pesticides must have a certificate of registration from DEEP's PMP.<sup>17</sup> There are 981 Licensed Arborists in the state.<sup>18</sup>

## What information about pesticides needs to be reported to DEEP and by whom?

Commercial Supervisors, including Arborists, must submit an *Annual Pesticide Summary Report*

<sup>10</sup> CGS Chapter 441-Section [22a-54-5\(b\)](#) Pesticide applicators, certification,

<sup>11</sup> CT eLicense- <https://www.elicense.ct.gov/Lookup/GenerateRoster.aspx> Excel spreadsheet of Active Commercial Supervisors 9-17-2024

<sup>12</sup> CGS Section [22a-47\(f\)](#) Definitions

<sup>13</sup> Regulations of Connecticut State Agencies (RCSA) - Section [22a-66-5\(h\)](#)- Certification of applicators

<sup>14</sup> CT eLicense- <https://www.elicense.ct.gov/Lookup/GenerateRoster.aspx> Excel spreadsheet of Active Commercial Operators 9-17-2024

<sup>15</sup> CGS Chapter 441 Section [22a-47\(e\)](#)-definitions-Private Applicator

<sup>16</sup> CT eLicense- <https://www.elicense.ct.gov/Lookup/GenerateRoster.aspx> Excel spreadsheet of Active Private Applicators 9-17-2024

<sup>17</sup> CGS Chapter 451 Section [23-61b](#) Licensing for arboriculture; examination; fees; renewal; suspension; revocation. Nonresidents. Records. Pesticides

<sup>18</sup> CT eLicense- <http://www.elicense.ct.gov> Excel spreadsheet of Active Commercial Supervisors- Filtered for Arborist

(Figure A), which details product names, EPA Product Registration Numbers, and the total amount of pesticides used, including both unclassified and restricted use (measured before dilution). In addition to the information that must be submitted annually, Commercial Supervisors must maintain records of pesticide applications for five years that include, but are not be limited to:

1. name and certification number of the Commercial Supervisor and the Commercial Operator;
2. kind(s) and amount of pesticide used;
3. date(s) and place(s) of application;
4. pest(s) treated for; and
5. crop(s) or site(s) treated.

Only a summary of the items maintained under subdivisions (1) and (2) are required to be submitted to DEEP annually.<sup>19</sup> While the information listed in subdivisions (3), (4), and (5) are not required to be submitted to DEEP and therefore is not available through Connecticut's eLicense website, the information must be made available to DEEP upon request.

Data Gap: No locational information is required to be submitted to DEEP for restricted-use pesticides applied or directed by Commercial Supervisors.

*Figure A- Annual Pesticide Summary Report-Commercial Pesticide Usage*

Part III: Commercial Pesticide Usage		
Pesticide Product Name	EPA Product Registration No.	Total Amount of Pesticide Used Before Diluting (check gals or lbs)
		<input type="checkbox"/> gal or <input type="checkbox"/> lbs
		<input type="checkbox"/> gal or <input type="checkbox"/> lbs
		<input type="checkbox"/> gal or <input type="checkbox"/> lbs
		<input type="checkbox"/> gal or <input type="checkbox"/> lbs
		<input type="checkbox"/> gal or <input type="checkbox"/> lbs
		<input type="checkbox"/> gal or <input type="checkbox"/> lbs
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		<input type="checkbox"/> gal or <input type="checkbox"/> lbs
		<input type="checkbox"/> gal or <input type="checkbox"/> lbs
		<input type="checkbox"/> gal or <input type="checkbox"/> lbs
		<input type="checkbox"/> gal or <input type="checkbox"/> lbs

<sup>19</sup> CGS Chapter 441 [22a-58\(d\)](#) Records to be kept by distributors and applicators.

Private Applicators must also submit an annual *Private Applicator Restricted-Use Pesticide Report* (Figure B), which includes:

1. name of the applicator;
2. kind and amount of pesticide used;
3. date(s) the pesticides were applied;
4. location(s) of application;
5. crop(s) or site(s) treated; and
6. amount of acreage treated.<sup>20</sup>

**Figure B- Private Applicator Restricted-Use Pesticide Report (Annual)**

Part III: Restricted Use Pesticide Record							
Name of Applicator: _____							
Certification No.: _____		Year of Restricted Use Pesticide Applications: _____					
Date of Application (mo/day/yr)	Common Name of Pesticide	EPA Product Registration No.	Amount of Pesticide Used Before Diluting (Check gal or lbs)	Type of Crop	Site of Application (Field ID)	Total Amount Acreage or Sq. footage Treated	Place of Application (Street Address and Town)
			<input type="checkbox"/> gal <input type="checkbox"/> lbs				
			<input type="checkbox"/> gal <input type="checkbox"/> lbs				
			<input type="checkbox"/> gal <input type="checkbox"/> lbs				
			<input type="checkbox"/> gal <input type="checkbox"/> lbs				

Pesticide Application Businesses and Arborist Businesses must also retain the following records:

1. name and certification number of the Commercial Supervisor and the Commercial Operator;
2. kind and amount of pesticide used;
3. amount of acreage treated;
4. date(s) and place(s) of application;
5. pest(s) treated;
6. the crop(s) or site(s) treated; and
7. a list of the names and corresponding EPA registration numbers of any pesticide applied.

These records must be maintained for five years.<sup>21</sup>

<sup>20</sup> CGS Chapter 441 Section [22a-58\(c\)](#) - Records to be kept by distributors and applicators.

<sup>21</sup> CGS Chapter 451 [Section 23-61k](#). Retention of records by arborist business. Information required. Inspection by commissioner. Customer record and [Section 22a-66g](#). Records. Availability

## How can information on the application of restricted-use pesticides be accessed?

Lists of Commercial Supervisors, Commercial Operators, Private Applicators, and registered pesticide businesses and dealers; certification information; pesticide registration information; annual summary reports and other filings are available through the Connecticut's eLicense website as Rosters, License Lookups, and Public Reports.<sup>22</sup>

- **PMP Rosters:** Lists of “active” certifications and registrations related to the application, use and sale of restricted-use pesticides, can be accessed through the eLicense system and are displayed in Figure C. (Information regarding Licensed Arborists can be seen in the Commercial Supervisor rosters)

*Figure C - PMP Rosters available through eLicense.*



- **License Lookup-** Users can verify the license(s) or registration(s) for Pesticide Commercial Supervisors, Commercial Operators, Businesses, Private Applicators, Pesticide Products, and Pesticide Restricted-Use Dealers.

<sup>22</sup> CT eLicense <https://www.elicense.ct.gov/Lookup/OnlineReports.aspx?ID=340->

*Figure D- eLicense Lookup.*

STATE OF CONNECTICUT

HOME MY ACCOUNT ONLINE SERVICES

LICENSE LOOKUP: Search for License, Permit, Certification, or Registration

Search Criteria

All data within License Lookup is maintained by the State of Connecticut, updated instantly, and considered a primary source of verification.

License Type: Paramedic, Perfusionist, PESTICIDE COMMERCIAL SUPERVISOR, PESTICIDE COMMERCIAL OPERATOR, PESTICIDE BUSINESS

License Number: [Field]

License Status: [Field]

Business Name / DBA / Nickname: [Field]

First Name: [Field]

Last Name: [Field]

Address: [Field]

State: - select one -

City: [Field]

Zip: [Field]

Country: UNITED STATES

Submit Clear Form

- **Public Reports** – The annual summary reports, identified in Figures A and B above, submitted by Private Applicators and Commercial Supervisors, and various “online documents”, such as renewal forms and proof of continuing education, etc., are available through the eLicense system. (Figure E)

*Figure E- eLicense Public Report Lookup*

STATE OF CONNECTICUT

HOME MY ACCOUNT ONLINE SERVICES

Reports

Back to Report List

DEEP: Private Applicator Restricted Use Reports

\*\*Start Date: 01/01/2023 (MM/DD/YYYY)

\*\*End Date: 12/31/2023 (MM/DD/YYYY)

Search

Data Gaps: The information is not summarized, and it would be very difficult to assess the quantity of restricted-use pesticides applied in the state.



### Who is allowed to sell restricted-use pesticides in the state?

Any person who wishes to sell or distribute restricted-use or permit use pesticides in the state must register annually with DEEP.<sup>23</sup> State law restricts the sale and/or distribution of any restricted-use pesticide to certified Commercial Supervisors and Private Applicators. According to DEEP's website, registered sellers of restricted-use or permit-use pesticides must pass an exam offered by DEEP, check the potential buyer's pesticide certification, including which categories the individual is certified in, and verify their identity based on their driver's license or other government issued identification.<sup>24</sup> Additionally, restricted-use pesticide dealers must submit an end of the year report detailing: the licensing information, identification data, certification category codes, product names, formulations, and quantities sold as depicted in Figure F.

*Figure F- Restricted-Use Pesticide Distributor Annual Sales Report*

			Signed authorization only needed if an uncertified individual is picking up the products *Keep copy on file*	Only Fill Out If Applicable (Cells directly below)									
EXPIRATION DATE	CATEGORY CODES	CERTIFYING STATE	SIGNED AUTHORIZATION FROM CERTIFIED APPLICATOR PROVIDED? Y/N	NAME OF UNCERTIFIED PERSON TO WHOM THE PESTICIDE IS PROVIDED	ADDRESS CITY	STATE	ZIPCODE	DRIVER'S LICENSE/GOVERNMENT ID OF INDIVIDUAL TO WHOM THE PESTICIDE IS PROVIDED VERIFIED? Y/N	PRODUCT NAME	EPA REGISTRATION NUMBER	PACKAGE SIZE	NUMBER SOLD	

Data Gap: The annual records of restricted-use pesticides sold in Connecticut are not available through the E-license system.

**Does DEEP and/or the Department of Public Health (DPH) test or require testing for pesticides?**

According to DEEP, the expense of laboratory analysis, along with complex sampling procedures, precludes the widespread monitoring of pesticides in the state, and therefore DEEP does not routinely monitor for pesticides.<sup>25</sup>

<sup>23</sup> CGS Chapter 441 [Section 22a-56](#). Registration of pesticide distributors. Regulations. Fee

<sup>24</sup> CT DEEP PMP [Restricted-Use Dealer Registration](#)

<sup>25</sup> Electronic communication from the Bureau of Water Protection & Land Reuse, DEEP, May 10, 2024.

The EPA and DPH mandate that Public Water Systems (PWS) annually sample raw surface water sources for six “Synthetic Organic Compounds (SOCs)”, consisting of pesticides and herbicides. In addition, PWS must sample surface and groundwater sources every three years for 42 additional SOC. Data regarding reporting and maximum contaminant level violations can be found on the EPA’s Safe Drinking Water Information System (SDWIS) database.<sup>26</sup>

In addition to sampling and testing raw surface and groundwater sources, PWS must sample and test treated water. Information about drinking water quality is available through Consumer Confidence Reports, which contain sampling data regarding primary and secondary contaminants in potable water supplies, including the detection of the aforementioned SOC (see Figure G).<sup>27</sup>

**Figure G- An Example of a Consumer Confidence Report. Synthetic Organic Compounds (SOCs) refer to Herbicides and Pesticides**

(1/26/2022)						runoff containing road salt.
Total Cyanide (1/26/2022)	N	<0.005	mg/L		0.2	Erosion of natural deposits; discharge from industrial effluents.
<b>Contaminants including Pesticides &amp; Herbicides</b>						
Synthetic Organic Compounds (SOCs) (1/26/2022)	N	ND	ug/L			Herbicides, pesticides, and other chemicals that come from agriculture, urban storm water runoff, or industrial,

## Who are served by PWS?

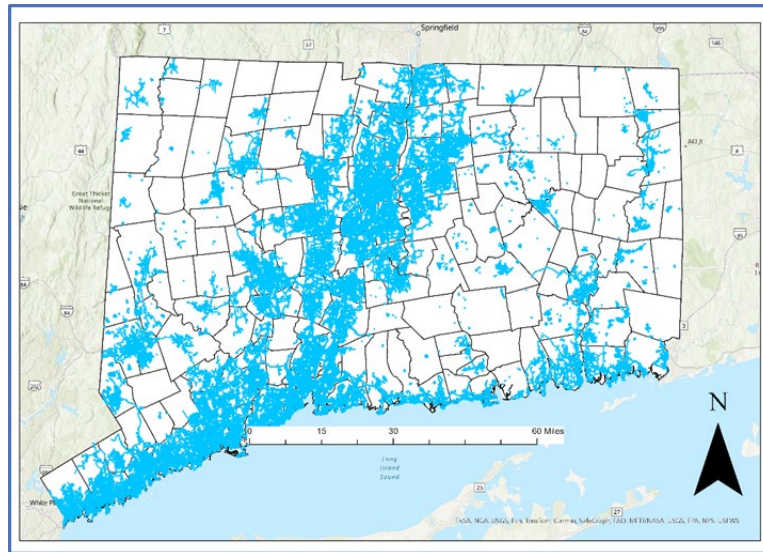
As seen in Figure H, the more urbanized areas along the I-95 and I-91 corridors along with other outlying urbanized areas, are primarily served by public water systems, which are required to test for SOC, including pesticides in drinking water. Since approximately 80 percent of Connecticut’s population receives their potable water from these PWS, there is some assurance that much of the state’s population is adequately screened for pesticides in drinking water.<sup>28</sup> However, this leaves a significant data gap for drinking water data for areas not served by a PWS whose residents rely on private wells.

<sup>26</sup> EPA SDWIS; [https://sdwis.epa.gov/ords/sfdw\\_pub/r/sfdw/sdwis\\_fed\\_reports\\_public/200](https://sdwis.epa.gov/ords/sfdw_pub/r/sfdw/sdwis_fed_reports_public/200)

<sup>27</sup> EPA’s National Primary Drinking Water Standards [40 CFR Parts 141 and 142](#)

<sup>28</sup> Connecticut Council on Environmental Quality, *Environmental Quality in Connecticut (2024)* [Drinking Water](#)

*Figure H- Areas in Connecticut served by Public Water Systems*



Data Gap: There is no widespread monitoring for pesticides in drinking water for areas not served by PWS.

### **Is there a requirement to test private wells for pesticides?**

For newly constructed private water supply wells or existing private water supply wells that are sampled within six (6) months of the sale of a property, the local director of health can require that a water sample from a private well be analyzed for organic chemicals when “reasonable grounds exist to suspect that organic chemicals may be present in the private water supply system.” In the event nitrate is detected at or greater than 10 milligrams per liter (mg/L) and the local director of health has reasonable grounds to suspect such pesticides or herbicides are present, the water sample must also be tested for alachlor, atrazine, dicamba, ethylene dibromide (EDB), metolachlor, simazine, and 2,4-Dichlorophenoxyacetic acid (2,4-D).<sup>29</sup>

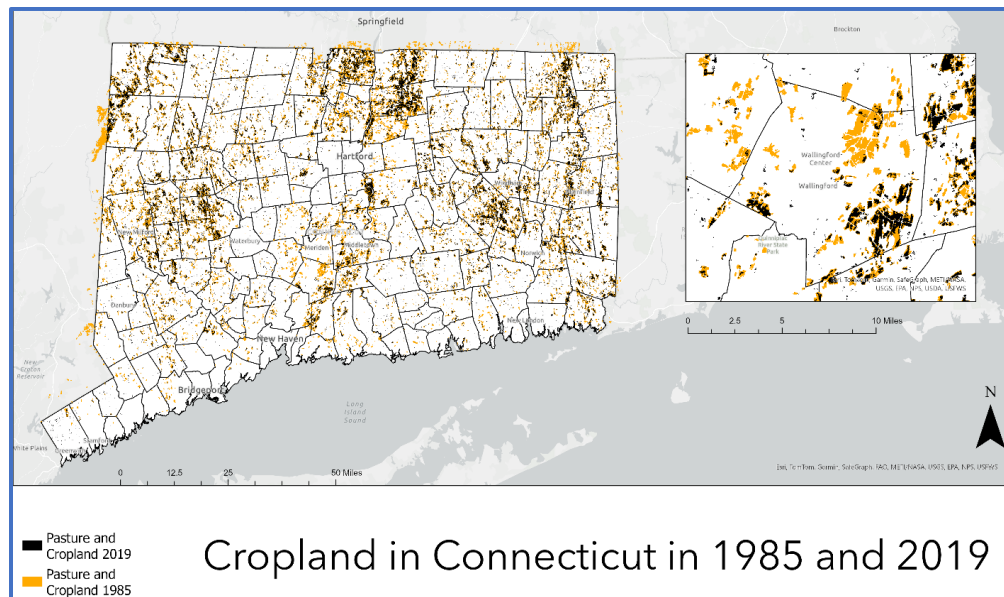
Restricted-use pesticides and herbicides might have been applied to agricultural land to control a variety of pests and weeds. Since pesticides can remain in the soil and the environment, private wells in these areas could be prioritized for monitoring based on the requirements of the public

<sup>29</sup> For purposes of the testing requirement, reasonable grounds include, but is not limited to, any information known by the director of health at the time of sampling that indicates the private water supply is located on or in proximity to land where any of these pesticides are or were applied, stored, used, or disposed of. (Regulations of Connecticut State Agencies (RCSA) [Section 19-13-B101](#))

health code. (Areas that have been utilized for agriculture in 1985 and 2019 are displayed in Figure I.) However, the results of these private water tests are confidential.<sup>30 31</sup>

Data Gap: There is no centralized database that contains water sampling data for private wells.

*Figure I- Cropland in Connecticut in 1985 and 2019*<sup>32</sup>



### **Are there any other entities testing for pesticides in the environment?**

The United States Geological Survey (USGS) has performed studies of pesticides in rivers and streams, including two sites in Connecticut: 1) Norwalk River in Norwalk, and 2) Connecticut River in Windsor. These two sites have been subject to monthly monitoring events that includes the testing of pesticide concentrations between 1997 and 2019. Further studies tracked atrazine and simazine concentrations between 2002 and 2012 at the Connecticut River in Windsor. Data related to these sampling events can be found through the USGS's National Water Quality Network.<sup>33</sup>

<sup>30</sup> CGS [Section 19a-37\(c\)\(1\)](#) Regulation of water supply wells and springs.

<sup>31</sup> CGS [Section 19a-25](#) Confidentiality of records procured by the Department of Public Health or directors of health of towns, cities or boroughs

<sup>32</sup> Land use characterization may have changed over time

<sup>33</sup> USGS National Water Quality Network- [NWQN \(usgs.gov\)](#)- Data Related specifically to [Norwalk River](#) and [Connecticut River](#) Pesticide Concentrations.

The USGS also sampled and tested surface waters and groundwaters for imidacloprid, a specific pesticide that is in the group of compounds referred to as neonicotinoids, between 2001 and 2024, as follows:

- 600 surface water samples were obtained between 2001 and 2024, with over 200 samples collected from a single location on the Connecticut River, while the majority of the remaining samples were from Fairfield County; and
- 62 groundwater samples were obtained from 46 wells throughout the state from 2002 and 2004, and in 2017.

Additionally, the Clean Rivers Project collected and tested 56 water samples for six neonicotinoids in 2024 from ten rivers and streams in lower Fairfield County.<sup>34</sup> These sampling activities related to neonicotinoids are discussed later in this paper.

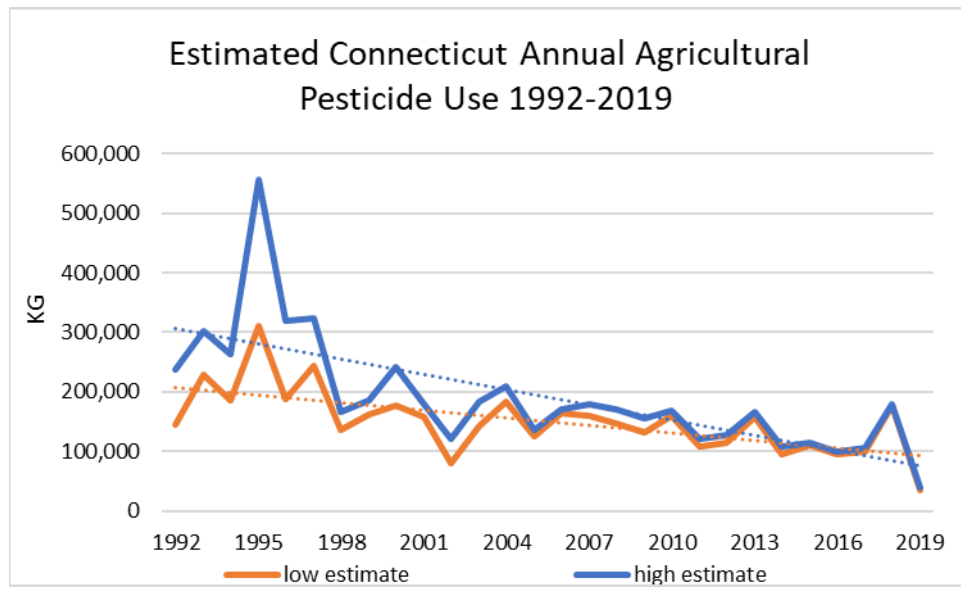
Data Gap: There is currently limited information on the presence of pesticides in other waterbodies, including estuaries.

### **Are there estimates of how much and where pesticides have been applied?**

The USGS has developed an estimate for annual agricultural pesticide use, as part of their Pesticide National Synthesis Project, to better understanding pesticide impacts on nationwide water resources.<sup>35</sup> These estimates represent agricultural pesticide use for over 400 compounds allocated to the agricultural land within each county, extrapolated from United States Department of Agriculture (USDA) Census of Agriculture data, which indicated the total acreage of treated cropland in the State. Overall, these estimates have decreased from 600,000 kilograms (kg), as a high estimate, in 1992 to under 100,000 kg in 2019 (Figure J). The USDA data shows a decrease of approximately 2,000 acres being treated for pests and weeds between 2017 and 2022.

<sup>34</sup> Presley et al. [Neonicotinoids in Connecticut Waters](#), Center for Environmental Sciences and Engineering, University of Connecticut. 2025.

<sup>35</sup> [USGS annual pesticide use estimates](#) are based on USDA Census of Agriculture data that are released every five years.

*Figure J- Estimated Connecticut Annual Agricultural Pesticide Use 1992-2019*

Data Gap: The estimates provided by USGS are not current and are not site specific.

### What are Neonicotinoids? Who regulates or monitors them?

Neonicotinoids, which include a group of pesticides that act selectively on the nicotinic acetylcholine receptors of organisms, are used on a wide variety of crops, turf, ornamentals, and other residential and commercial indoor and outdoor uses.<sup>36</sup> Neonicotinoids are a restricted use pesticide and therefore, regulated by DEEP's PMP. However, the widespread application of neonicotinoids as a seed coating presents challenges related to tracking of their usage because of an EPA decision to exempt seeds coated in neonicotinoids from FIFRA's registration requirements through the statute's Treated Article Exemption.<sup>37</sup>

The water-soluble nature of neonicotinoids has led to investigations of their presence in waterbodies. As mentioned previously, testing by the USGS between 2001 and 2024 showed levels of imidacloprid, one of the earliest and most widely used neonicotinoids, in 45 percent of surface water samples. In addition, imidacloprid was detected in 11 percent of 62 groundwater samples tested by the USGS between 2002-2004 and in 2017.<sup>38</sup> In 2025, Connecticut passed Public Act No.

<sup>36</sup> Environmental Protection Agency, [EPA Actions to Protect Pollinators](#) and [CGS Section 22-61K](#)

<sup>37</sup> Environmental Protection Agency [Consumer Products Treated with Pesticides | US EPA](#) May 14, 2025

<sup>38</sup> Presley et al. Neonicotinoids in Connecticut Waters, Center for Environmental Sciences and Engineering, University of Connecticut. 2025.

25-33 that contains provisions to prohibit the use any pesticide that contains any neonicotinoid, in certain applications, unless DEEP, after consultation with the Connecticut Agricultural Experiment Station, determines that no other effective control option is available. This law still allows for neonicotinoid applications on trees, ornamental shrubs, and in agriculture, and neonicotinoids labeled for use in personal care products, pet care, veterinary use or indoor or structural pest control.<sup>39</sup>

Data Gap: There is limited data regarding the extent of neonicotinoids in Connecticut's surface water and groundwater.

### **How do state agencies and public utilities manage their own pesticide use?**

State agencies and public utilities might use pesticides pursuant to their operational needs. For example, electric utilities and the Department of Transportation (DOT) might apply herbicides to control vegetation as part of maintenance plans for rights of ways and highways. Any state agency considering the use of pesticides must also consider integrated pest management (IPM) methods and techniques. Each state agency that applies or contracts for the application of pesticides needs to adopt a pest control management plan that includes, but is not limited to, the following:

- types and amounts of pesticides to be used;
- locations to be treated, and the timing and frequency of pesticide application at each location;
- name and business registration of any commercial pesticide application business that the agency plans to use; and
- names and certification number of state employees that will perform pesticide applications for the department.<sup>40</sup>

Each electric utility must submit a pesticide management plan to DEEP for approval, with concurrence of the Public Utilities Regulatory Authority, not less than once every five years. Electric utilities must also notify owners and residents of areas that are in or abutting their rights-of-

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<sup>39</sup> State of Connecticut [Public Act 25-33](#) accessed 12/8/2025

<sup>40</sup> [CGS 22a-66L](#) and [RCSA Section 22a-66l-1](#): Application of Pesticides by State Agencies



ways within 48 hours of a pesticide application. Additionally, any application of pesticides to a utility pole shall have a notice of application posted to that pole.<sup>41</sup>

## How does Connecticut's management of pesticides compare to other states?

For the most part, the neighboring states of Massachusetts, Rhode Island, New York, and New Jersey manage pesticides in a similar manner to Connecticut. The primary focus of their pesticides management programs trend towards the education, licensure, and inspections of restricted-use pesticide applicators. However, some aspects of these programs can be adapted to address data gaps discussed in this paper. These features include sampling programs funded by Supplemental Environmental Projects (SEP), which are funded by noncompliance settlements and fines; or the submittal of locational and temporal data with their pesticide use reports, making them more suitable for the analysis of sampling data. A comparison of Northeastern States Pesticide Management Programs can be seen in Figure I.

*Figure I- Comparison of Northeastern States' Pesticide Management Programs*<sup>42 43 44 45 46</sup>

State	Public Water System Monitoring	Additional Sampling	Locational Data	Data Accessibility	Certification Programs	Annual Reporting
Connecticut	YES	NO	SOME	YES	YES	YES
Massachusetts	YES	NO	NO	YES	YES	YES
Rhode Island	YES	NO	YES	NO	YES	NO
New York	YES	YES	YES	YES	YES	YES
New Jersey	YES	YES	NO	YES	YES	NO

In New York, pursuant to the Pesticide Reporting Law of 1996, Cornell University works with the New York State Department of Environmental Conservation (DEC) to develop and maintain a statewide database of pesticide sale and application data. This program is called the Pesticide Sales and Use Reporting Program (PSUR).<sup>47</sup> The availability of data began in 1997 and extends through 2022, with more data available as it is processed. However, specific locations are not available to the public, as the Pesticide Reporting Law prevents the disclosure of individual applications and sales data to the public. This database includes summaries of pesticide use by site (crop), pesticide, county and month. This database allows searches for specific information, including but not limited

<sup>41</sup> CGS Sec. 22a-66k [Utilities pesticide management plan. Notice of application](#)

<sup>42</sup> CT DEEP PMP [Pertinent Pesticide Statutes and Regulations for Certified Commercial Supervisors and Arborists](#), February 2019, accessed 12/8/2025

<sup>43</sup> Commonwealth of Massachusetts Pesticide Regulations [333 CMR](#) accessed 12/8/2025

<sup>44</sup> State of Rhode Island [Regulatory Information](#) accessed 12/8/2025

<sup>45</sup> New York State Department of Environmental Conservation [Compliance Resources - NYSDEC](#) accessed 12/8/2025

<sup>46</sup> New Jersey Department of Environmental Protection [Pesticide Control in the Division of Water Monitoring](#) accessed 12/8/2025

<sup>47</sup> [Pesticide Sales and Use Reporting Home Page \(cornell.edu\)](#) accessed 9/30/2024



to: type of crop, pesticides, the number of applications of a pesticide, and the amount of pesticide applied in individual counties.<sup>48</sup> The State of California also provides a fillable PDF form for pesticide applications, which are submitted to county agricultural commissioners within seven (7) days of application.<sup>49</sup>

### **Is it currently possible to know how much restricted-use pesticides are being applied in the state and where?**

The annual summary data provided by Commercial Supervisors to DEEP on the application of restricted-use pesticides does not include locations where pesticides were applied. The annual summary data provided by Private Applicators does include locational information, which is available from Connecticut's eLicense system, but assessing which pesticides are used and in what locations is very difficult due to the way the information is provided to DEEP's PMP and the potential limitations of the eLicense System.

### **Summary of Data Gaps**

The previously discussed data requirements and sources help demonstrate the data gaps regarding the type and application of pesticides in the state. These data gaps are summarized as follows:

- No locational data are required to be submitted to DEEP for restricted-use pesticides applied by Commercial Supervisors. Only Private Applicators are required to submit locational data.
- The annual records of restricted-use pesticides sold in Connecticut are not available through the eLicense system.
- There is no widespread testing for pesticides in drinking water for areas not served by PWS.
- There is no centralized database that contains water sampling data for private wells.
- There is limited publicly available information regarding the presence of pesticides in waterbodies, other than the areas sampled by PWS, the USGS, and DEEP.
- The pesticide use estimates provided by the USGS are not current or site specific.

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<sup>48</sup> [California Pesticide Use Summaries Database--UC IPM \(ucanr.edu\)](#) accessed 9/30/2024

<sup>49</sup> [Pesticide Use Report, PR-ENF-025 \(Rev. 10-07\) \(ca.gov\)](#) accessed 9/30/2024

- There is limited data regarding the extent of neonicotinoids in Connecticut's surface water and groundwater.