SENATE COMMITTEE ON ENVIRONMENTAL QUALITY
Senator Allen, Chair
2021 - 2022 Regular

Bill No:	AB 2146		
Author:	Bauer-Kahan		
Version:	3/29/2022	**Hearing Date:**	6/8/2022
Urgency:	No	**Fiscal:**	Yes
Consultant:	Evan Goldberg		

SUBJECT: Neonicotinoid pesticides: prohibited nonagricultural use

DIGEST: Beginning January 1, 2024, this bill would prohibit a person from selling, possessing, or using a neonicotinoid pesticide. Exemptions are provided for use on an agricultural commodity, pets, and other specified uses.

ANALYSIS:

Existing law:

1) Provides, under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), for federal regulation of pesticide distribution, sale, and use. Requires that all pesticides distributed or sold in the United States be registered (licensed) by the United States Environmental Protection Agency (US EPA). (7 United States Code (U.S.C.) §136 et seq)

2) Authorizes the state's pesticide regulatory program and mandates California's Department of Pesticide Regulation (DPR) to, among other things, provide for the proper, safe, and efficient use of pesticides. (Food and Agriculture Code (FAC) § 11401 et seq.)

3) Regulates the use of pesticides and authorizes the director of DPR (director) to adopt regulations to govern the registration, sale, transportation, or use of pesticides, as prescribed. (FAC §11501, et. seq)

4) Authorizes, the director after a hearing, to cancel the registration of, or refuse to register, any pesticide that meets a certain criteria. (FAC § 12825)

5) Requires, if during or after the registration of a pesticide the registrant has factual or scientific evidence of any adverse effect or risk of the pesticide has not been previously submitted to DPR, the registrant to submit the evidence to DPR. Authorizes the director of DPR to adopt regulations to carry out the reevaluation process. (FAC § 12825.5)

6) Requires DPR to issue a determination with respect to its reevaluation of neonicotinoids by July 1, 2018, and to adopt control measures necessary to protect pollinator health within two years after making the determination. (FAC § 12838)

7) Defines "agricultural commodity," as an unprocessed product of farms, ranches, nurseries and forests (except livestock, poultry, and fish). Defines agricultural commodities as including fruits and vegetables; grains, such as wheat, barley, oats, rye, triticale, rice, corn, and sorghum; legumes, such as field beans and peas; animal feed and forage crops; rangeland and pasture; seed crops; fiber crops such as cotton; oil crops, such as safflower, sunflower, corn, and cottonseed; trees grown for lumber and wood products; nursery stock grown commercially; Christmas trees; ornamentals and cut flowers; and turf grown commercially for sod. (Title 3, California Code of Regulations (CCR) § 6000)

This bill:

1) Defines "agricultural commodity" as having the same meaning as in Section 6000 of Title 3 of the California Code of Regulations.

2) Defines "neonicotinoid pesticide" as acetamiprid, clothianidin, dinotefuran, imidacloprid, and thiamethoxam, or any other chemical designated by DPR as belonging to the neonicotinoid class of chemicals.

3) Prohibits, beginning January 1, 2024, a person from selling, possessing, or using a neonicotinoid pesticide. The following uses are exempt from this prohibition:

    a) An agricultural commodity as defined by Section 6000 of Title 3 of the California Code of Regulations;
    b) A pet care, veterinary, personal care, or indoor pest control pesticide product;
    c) An application for the commercial production of a preserved wood product;
    d) The application within one foot of a building foundation perimeter to manage structural pests, provided that the pesticide is not applied on a plant;
    e) The application an additional four feet beyond the one foot mentioned above if the additional area is necessary to treat the source of the infestation and the application is limited to a spot targeted treatment of the source of the infestation;

f) A direct action taken by DPR or the California Department of Food & Agriculture (CDFA) against an invasive plant or pest; and,
g) An application to protect agricultural seeds.

4) Authorizes the director, in consultation with CDFA, to authorize, by written order, the sale, possession, or use of a neonicotinoid pesticide that is prohibited by the provisions of this bill if he or she finds:

   a) A valid environmental emergency exists;
   b) The pesticide would be effective in addressing the environmental emergency; and,
   c) There are no other, less harmful pesticides or pest management practices that would be effective in addressing the environmental emergency.

   Should such an order be issued, it would be limited to one year and would only allow a neonicotinoid pesticide banned by this bill to be used by or under the supervision of a certified commercial or private applicator under a permit issued by the county agricultural commissioner.

5) Requires a valid environmental emergency order issued by the director to include the basis for the determination, the approved time period, geographic scope, and purpose of the permitted sale, possession, or use of the pesticide.

6) Defines "environmental emergency" as an occurrence of a pest that presents a significant risk of harm or injury to the environment or human health, or significant harm, injury, or loss to agricultural crops, including, but not limited to, an exotic or foreign pest that may need preventative quarantine measures to avert or prevent that risk, as determined by the DPR, in consultation with the CDFA and the University of California Center for Pest Research.

7) States the bill shall not be construed to impose liability on news media that accept or publish advertising for a product or activity that would otherwise be subject to this article.

Background

What are neonicotinoid pesticides, who uses them, and how long have they been around? Neonicotinoids are synthetic compounds similar in structure to nicotine. They have a common mode of action that affects the central nervous system of insects (binding to nicotinic acetylcholine receptors), making them active against a broad spectrum of insects.

Neonicotinoids are also systemic insecticides, which means they can be taken up through the roots of plants and translocate to their leaves, flowers, and pollen. Due to their systemic activity, neonicotinoids are ideal candidates for seed coatings. Seed coatings are used for a variety of crops including maize (corn), soybeans, sunflowers, oilseed rape (canola), and cotton. Neonicotinoids are applied in agricultural areas as foliar sprays, in-furrow treatments (e.g., soil drenches), and granules. In urban or forested areas, neonicotinoids are applied as tree soil drenches or injections. Plants grown in garden centers and nurseries are often treated with neonicotinoid foliar sprays, drenches, and/or granular applications.

Neonicotinoids have a variety of other home uses including lawn and garden applications, topical flea medicines for pets such as dogs and cats, and in bait formulations for use against cockroaches and ants.

According to the article, "Environmental Risks and Challenges Associated with Neonicotinoid Insecticides" in Environmental Science and Technology, neonicotinoid insecticides have been in use for over two decades. The first neonicotinoid, imidacloprid, was registered for use in 1991. In the mid-2000s, neonicotinoid use increased rapidly due to the increased use of coated seeds, increased insect resistance, and in response to concern over the high mammalian toxicity of other insecticides previously used. Currently, neonicotinoids are the most widely used class of insecticides in the world, representing 25% of the global insecticide market.

How neonicotinoids affect the environment. As described in the Environmental Science and Technology article, neonicotinoids are not volatile, somewhat persistent in water and soils, and highly soluble in water, meaning they can easily be transported away from the area of initial application. Neonicotinoids have been frequently detected in waterways around the world, including surface water runoff (rivers, streams), groundwater, and wetlands. Imidacloprid is detected in 89–100% of water samples collected during monitoring studies of global surface waters. DPR's report, "Urban Monitoring in Southern California Watersheds Fiscal Year 2017-2018," shows neonicotinoid contamination in over 90% urban surface water samples taken in Los Angeles, Orange, and San Diego counties, which may indicate extensive outdoor, non-agricultural use. The source of neonicotinoids in water can vary from overspray to particulates (such as dust from treated seeds) to runoff from seed coatings or soil applications. Neonicotinoids have been detected in wildflowers adjacent to agricultural areas, indicating their potential to move away from the point of application and be taken up by other non-target plants.

How neonicotinoids impact pollinators, such as bees. The Food and Agriculture Organization (FAO) is a specialized agency of the United Nations that leads international efforts to defeat hunger. According to its May 2018 report "Why Bees Matter," close to 75% of the world's crops producing fruits and seeds for human consumption depend, at least in part, on pollinators for sustained production, yield and quality.

The report found pollination is the highest agricultural contributor to yields worldwide, contributing far beyond any other agricultural management practice. Pollinators affect 35% percent of global agricultural land, supporting the production of 87 of the leading food crops worldwide. Plus, pollination-dependent crops are five times more valuable than those that do not need pollination. The price tag of global crops directly relying on pollinators is estimated to be as much as $577 billion a year and rising – the volume of agricultural production dependent on pollinators has increased by 300% percent in the last 50 years.

Since neonicotinoids affect the central nervous system of insects, they do not discriminate between target (e.g., corn rootworm, flea beetle) and non-target insects (e.g., bees).

The impact of neonicotinoid use on bees, and other pollinators (moths, flies, wasps, beetles, butterflies and others), has been of particular concern. The three most commonly detected neonicotinoids (clothianidin, imidacloprid, and thiamethoxam) are classified as being highly toxic to bees. As neonicotinoids are systemic within the crop, pollinators can be exposed when they consume the nectar or pollen of a treated crop that flowers and through the dust from seed coatings. Additionally, neonicotinoids frequently contaminate the pollen and nectar of wildflowers growing in the vicinity of treated crops, increasing the likely duration and extent of pollinator exposure to neonicotinoids. In laboratory and semi-field studies, exposure to field realistic doses has been shown to impair learning and the accuracy of navigation, decrease foraging success, suppress immune response, reduce the viability of sperm stores in queens, reduce queen longevity, reduce growth of bumblebee colonies, and reduce the number of new queens they produce.

How neonicotinoids impact other animals. An important mechanism of neurotoxicity for neonicotinoids is the almost irreversible binding to nicotinic acetylcholine receptors in insects, making low-level continual exposures to neonicotinoids likely to lead to cumulative effects. Non-target organisms expected to be exposed to neonicotinoids at levels of concern include pollinators, aquatic insects, and birds.

Can neonicotinoid exposure impact humans? An article published in Environmental Health Perspectives in 2017, "Effects of Neonicotinoid Pesticide Exposure on Human Health: A Systematic Review," cites four general population studies that reported associations between chronic neonicotinoid exposure and adverse developmental or neurological outcomes, including neural tube defects and autism spectrum disorder. The findings of animal studies support the biological plausibility for such associations. The European Food Safety Authority concluded that acetamiprid and imidacloprid adversely affect the development of neurons and brain structures associated with functions such as learning and memory. The Environmental Health Perspectives article concludes, "Given the widespread use of neonicotinoid pesticides in agricultural and household products, and its increasing detection in United States food and water, more studies on the human health effects of neonicotinoid exposure are needed."

Revisiting pesticides that DPR has approved for use. DPR is required to investigate reports of possible adverse effects to people or the environment resulting from the use of pesticides. If a significant adverse impact occurred or is likely to occur, DPR must reevaluate the registration of the pesticide. As a part of that process, DPR may require registrants to provide additional data to determine the nature or the extent of the potential hazard or identify appropriate mitigation measures. DPR can choose to place additional restrictions on a pesticide's use or can cancel or suspend the registration of a pesticide.

DPR's reevaluation of neonicotinoids. In 2008, DPR received an adverse effects disclosure that showed potentially harmful effects of the neonicotinoid imidacloprid to pollinators. According to DPR, studies of imidacloprid revealed high levels of the insecticide in leaves and blossoms of treated ornamental plants, as well as increasing residue levels over time. The residues were present at levels acutely toxic to honey bees, potentially threatening pollinator health.

After investigating the disclosures, DPR placed certain pesticide products containing imidacloprid, and the related neonicotinoid active ingredients, thiamethoxam, clothianidin, and dinotefuran, into reevaluation on February 27, 2009, so it could assess the magnitude of the risk to honey bee colonies. Products containing clothianidin, dinotefuran, and/or thiamethoxam – part of a group of active ingredients is known as the nitroguanidine-substituted neonicotinoids – were included in the reevaluation because they are in the same chemical family as imidacloprid and have similar properties and characteristics (e.g., soil mobility, half-lives, and toxicity to honey bees).

In 2014, AB 1789 (Williams, Chapter 578, Statutes of 2014) required DPR to issue a determination with respect to its reevaluation of neonicotinoids by July 1, 2018,

and to adopt control measures necessary to protect pollinator health within two years after making the determination (FAC § 12838).

DPR's reevaluation of neonicotinoids only examined use in certain agricultural settings. DPR states its reevaluation of neonicotinoids included pesticide products labeled for outdoor uses that would result in substantial exposure to honey bees. Within the outdoor uses, DPR focused on gathering data on neonicotinoid pesticides used in the production of agricultural food and feed commodities, including fruits, vegetables, grains, legumes, and fiber and oilseed crops such as cotton, because the pesticides are commonly used at relatively high application rate, and are detrimental to pollinators. Production agricultural products are those used for the production for sale of an agricultural commodity, which is defined in 3 CCR section 6000.

Trees grown for lumber and wood products, Christmas trees, ornamentals and cut flowers, and turf grown commercially for sod are also considered agricultural commodities under 3 CCR section 6000. However, DPR states it did not evaluate risks due to neonicotinoid use on these particular commodities, "due to sufficient label mitigation or the lack of pollinator exposure (i.e., not attractive to bees, grown indoors, lower use rates) and widespread use."

DPR's rulemaking on neonicotinoids. In July 2018, DPR submitted its Risk Determination on the impacts of neonicotinoid pesticides on pollinator health, finding that certain agricultural applications of neonicotinoids presented a hazard to honey bees.

On February 25, 2022, following the Risk Determination and an extensive evaluation of existing and relevant new data, DPR proposed regulations aimed at protecting pollinator health. The proposed regulations would add restrictions to existing uses of neonicotinoids in the production of an agricultural food or feed commodity, including restrictions on application methods and rates, application timing, and seasonal application rate caps, all of which are specified by crop group.

Public comment on the proposal closed in April 2022 and adoption of any regulatory changes could be as long as a year away.

According to DPR, about 80-85% of neonicotinoid use and sales in California is for agricultural purposes and 15-20% is for non-agricultural purposes. AB 2146 would address a portion of that 15-20% usage.

Comments

1) *Purpose of Bill.* According to the author, "Our pollinators are threatened. California beekeepers lost 41.9% of their colonies last year, one of the worst years on record. These pollinators are critical to California's agriculture, worth $50 billion annually. A huge body of research links adverse health impacts and the decline in pollinator populations to the use of pesticides, particularly neonicotinoids. Though we have seen steps to regulate these pesticides in our commercial fields, there has been little movement on non-agricultural uses. The European Union, Maine, New Jersey, and many other states have already banned many of these pesticides for many uses. It's time to catch up to the rest of the world in protecting bee and human health. AB 2146 will curb harmful neonic contamination without limiting farmers, and will secure our food system for generations to come."

2) *Boiling It Down.* AB 2146 allows neonicotinoid pesticides to only be used:

   a) On agricultural commodities.
   b) In pet care, veterinary, personal care, or indoor pest control pesticide products;
   c) In the commercial production of a preserved wood product;
   d) Within one foot of a building foundation perimeter to manage structural pests, provided that the pesticide is not applied on a plant – or four additional feet if needed to treat an infestation;
   e) Cases where DPR or CDFA need to act against an invasive plant or pest; and,
   f) To protect agricultural seeds.

   All other uses – such as use by a homeowner on backyard citrus trees or grass, or by a commercial landscaper using a licensed pesticide applicator hired by homeowners or businesses – are banned unless the DPR director declares an emergency and issues a written order. Should such an order be issued, the products banned by this measure could only be used by or under the supervision of a certified commercial or private applicator under a permit issued by DPR or the county agricultural commissioner.

3) *What Do Other States Do?* Bans or limitations on the use of neonicotinoid pesticides have been proposed in a number of states, but it appears action has only been taken in Maine, New Jersey, and New York.

   Maine's Governor signed a measure in June 2021 that directed a state agency similar to DPR to ban the use of neonicotinoids "for application in outdoor residential landscapes such as on lawn, turf or ornamental vegetation." Products used for preserving wood, controlling or treating indoor pests,

controlling or treating insects outside around structural foundations and other parts of structures and treating pets are expressly permitted. Certified applicators are permitted to use the pesticides on ornamental vegetation to manage emerging invasive insect pests.

New Jersey's Governor signed a measure in January 2022 that is similar to the approach taken in AB 2146. First, it requires a New Jersey state agency similar to DPR to classify a neonicotinoid pesticide as "restricted use" if the agency determines the pesticide will cause harm to populations of pollinating bees, birds, other pollinating wildlife, or aquatic invertebrates. The law does not apply to any pet care, veterinary, personal care, or indoor pest control pesticide product; an application for the commercial production of a preserved wood product; the use by a licensed pesticide applicator within 1 foot of a building foundation (or 4 additional feet if needed to battle an infestation); or any application to protect agricultural seeds.

The second step is, by October 31, 2023, a complete ban on the outdoor use of neonicotinoid pesticides unless they are applied by a licensed pesticide applicator to an agricultural plant. There is a provision for an emergency exemption, but only licensed pesticide applicators would be allowed to apply the pesticide should an exemption be granted. The other exemptions noted above – pet care, veterinary, personal care, indoor pest control products, commercial production of preserved wood products, use by a licensed pesticide applicator within 1-5 feet of a building foundation, and agricultural seeds – will remain in place.

New York State's Department of Environmental Conservation (DEC) in January 2022 imposed a number of restrictions on the use of outdoor neonicotinoids. Taking effect January 1, 2023, these restrictions will eliminate retail sales of certain neonicotinoid insecticides. The DEC classifies imidacloprid, thiamethoxam, and acetamiprid as "restricted use" pesticides that can only be sold to and used by trained pesticide applicators in specific situations. Products labeled for "limited directed application" to tree trunks and the ground at the base of trees, shrubs, and plants are not included in the reclassification, meaning retailers can sell them over the counter to anyone.

4) *The DPR Hearing Process.* Earlier this year, DPR opened a regulatory proceeding to look at whether, and if so, how, the use of neonicotinoids should be restricted in the production of an agricultural food or feed commodity. The proposed restrictions include limits on application methods and rates, application timing, and seasonal application rate caps, all of which are specified by crop group. Public comment on the proposal closed in April 2022

and adoption of any regulatory changes could be as long as a year away. However, what DPR is looking at in its regulations (agricultural uses) and what AB 2146 addresses (non-agricultural uses) are separate.

5) *Enforcing AB 2146.* AB 2146 bans the possession, sale, and use of neonicotinoid pesticides for lawn, turf, ornamental vegetation, citrus, and other non-agricultural outdoor uses (other than around a building foundation to treat structural pests). As such, these products would not be available for sale to a consumer in a retail setting.

   All businesses that are hired to apply pesticides must be licensed or certified in some capacity, either by DPR or the county agricultural commissioner and these businesses typically buy their pesticides in large quantities for use in specialized application equipment. Licensed applicators are required by law to report all pesticide applications, including the product they use, to DPR, making it possible for DPR to identify anyone who – provided they comply with the reporting provisions of existing law – violates the provisions of AB 2146.

   It is also not permitted by law, for example, for a person to purchase and use an over-the-counter pesticide for a something that is not permitted on or contemplated by the product label. Therefore, should AB 2146 become law, it would be a violation of law to, for example, purchase an over-the-counter neonicotinoid pesticide certified only for "indoor use" and use it outdoors.

6) *Letting The Public Know About An Emergency Order.* The bill allows the DPR director, in consultation with CDFA, to issue an order permitting neonicotinoids to be used contrary to the prohibitions in the bill if the director finds (a) A valid environmental emergency exists, (b) The pesticide would be effective in addressing the environmental emergency, and (c) There are no other, less harmful pesticides or pest management practices that would be effective in addressing the environmental emergency.

   There is no mechanism in the bill to let the public know such a decision is under consideration or is being implemented.

   Should an emergency exist, it clearly isn't beneficial to delay implementation of an emergency order while a public hearing or comment process takes place. As an alternative, *the author and committee may wish to consider* providing a public notice so people in affected communities would know an emergency order has been issued.

This could be accomplished by adding language on Page 4, Line 3 of the bill to read:

"(3) The director shall make reasonable efforts to inform the public of any emergency declared pursuant to paragraph (1). These efforts may include, but not be limited to, posting the information that must be provided pursuant to paragraph (2) on the department's website, releasing it using the department's social media tools, and providing it to news media in the affected area(s)."

7) *Technically Speaking.* The bill requires, when considering declaring an environmental emergency, the director to consult with CDFA and the University of California Center for Pest Research. Such a center does not exist, so *the author and committee may wish to consider, on Page 3, Lines 7-8, striking from the bill:*

"and the University of California Center for Pest Research"

Related/Prior Legislation

AB 567 (Bauer-Kahan, 2021) would have prohibited, on and after January 1, 2024, the use of a neonicotinoid on a seed. The bill was held in the Assembly Environmental Safety and Toxic Materials Committee without a hearing.

AB 1788 (Bloom, Chapter 250, Statutes of 2020) prohibits the use of second generation anticoagulant rodenticides (SGARs) until the director certifies a completed reevaluation of SGARs.

SB 602 (Allen, 2017) sought to require the labeling of commercially available seeds and plants sold at retail establishments that were treated with a neonicotinoid pesticide. It also would have banned the use of noncommercial outdoor neonicotinoids in California as of January 1, 2019. This bill was held on the Senate floor.

SB 1282 (Leno, 2016) sought to prohibit the noncommercial use of neonicotinoids and would have required labeling of all commercially available seeds and plants treated with neonicotinoid pesticide. This bill failed passage on the Senate floor.

AB 1789 (Williams, Chapter 578, Statutes of 2014) required DPR to issue a determination with respect to its reevaluation of neonicotinoids by July 1, 2018, and to adopt control measures necessary to protect pollinator health within two years after making the determination.

SOURCE: Author

SUPPORT:

350 Contra Costa
A Voice for Choice Advocacy
Active San Gabriel Valley
American Beekeeping Federation
American Bird Conservancy
American College of Obstetricians and Gynecologists District Ix
Breast Cancer Prevention Partners
California Environmental Voters (formerly Clcv)
California Health Coalition Advocacy
California Institute for Biodiversity
California Native Plant Society
California State Parent Teacher Association
California State Parks Foundation
Californians for Pesticide Reform
Calpirg, California Public Interest Research Group
Center for Biological Diversity
Center for Environmental Health
Center for Food Safety; the
Center on Race, Poverty & the Environment
Defenders of Wildlife
Earthjustice
Environment California
Environmental Working Group
Facts: Families Advocating for Chemical & Toxins Safety
Friends Committee on Legislation of California
Friends of Harbors, Beaches and Parks
Friends of The Earth
Heal the Bay
Leadership Counsel for Justice & Accountability
Midpeninsula Regional Open Space District
National Resources Defense Council
Natural Resources Defense Council (NRDC)
Pesticide Action Network North America
Pollinator Stewardship Council, INC.
Sierra Club California
The Democrats of Rossmoor
The Xerces Society for Invertebrate Conservation

OPPOSITION:

African American Farmers of California
Agricultural Council of California
Almond Alliance of California
American Chemistry Council
Calchamber
California Agricultural Commissioners & Sealers Association
California Apple Commission
California Association of Wheat Growers
California Association of Winegrape Growers
California Blueberry Association
California Blueberry Commission
California Chamber of Commerce
California Cherry Growers and Industry Association
California Citrus Mutual
California Cotton Ginners and Growers Association
California Farm Bureau Federation
California Fresh Fruit Association
California Golf Course Superintendents Association
California Manufacturers & Technology Association
California Manufacturers and Technology Association
California Olive Oil Council
California Pear Growers
California Pear Growers Association
California Seed Association
California Strawberry Commission
California Walnut Commission
Household and Commercial Products Association
Nisei Farmers League
Olive Growers Council of California
Pest Control Operators of California
Plant California Alliance
Western Agricultural Processors Association
Western Growers Association
Western Plant Health Association

ARGUMENTS IN SUPPORT: According to a coalition letter signed by Environment California, the Natural Resources Defense Council, and the California Native Plant Society, "Scientists first became concerned about neonics roughly fifteen years ago, when beekeepers across the country saw losses of honey bee colonies suddenly spike from an average of 10-15% to 30-40% per year. In California, beekeepers have lost between 35% and 45% of their hives annually for

most of the last decade, as populations of native bees and other pollinators also experience dramatic declines. These losses threaten California's ecosystems and more than $15 billion in state agricultural production that depends on bees and other pollinators. A lack of pollinators is already responsible for lower yields of many crops nationwide.

"Overwhelming scientific evidence confirms that neonics are a leading cause of pollinator declines, but the connection is also intuitive. Neonics are extraordinarily insect-toxic and designed to permeate plants—turning their fruit, nectar, pollen, leaves, and other parts poisonous to insects. Neonics also persist in soil for years and spread easily in rain or irrigation water to pollute new soil, plants, and water supplies. Due to their widespread popularity, neonics now contaminate soil, water, and plant life over large areas of the country.

"This pollution is particularly evident in California. State water testing has detected neonics in the vast majority of samples statewide: 92% of samples in urban areas of Southern California and 58% in urban areas in Northern California. Nearly all detections exceeded U.S. Environmental Protection Agency (EPA) threshold levels for harm to aquatic wildlife. The neonic levels detected in California waters have been linked with the collapse of fisheries and losses of birds, raising serious concerns for the state's ecosystems and outdoor recreation industries.

"Neonics may also be directly harming Californians. On any given day, roughly half of Americans have neonics in their bodies, with the highest levels found in children. This is particularly concerning because research links neonic exposures to developmental or neurological harm in people—including malformations of the developing heart and brain.

"Animal studies also connect neonics to birth defects and higher rates of death in white-tailed deer fawns and neurological and reproductive harms in other mammals. Widespread water contamination in urban areas shows that non-agricultural uses of neonics are a major source of neonic contamination. Uses such as those on lawns and gardens present a high risk of exposure for children and pets who play in these areas. Nearly all of these preventative uses are unnecessary or easily replaceable with less harmful alternatives."

ARGUMENTS IN OPPOSITION: According to a coalition letter signed by the Agriculture Council of California, the California Chamber of Commerce, and more than 20 other groups, "In California, neonicotinoids are a critical tool used to protect specialty crops from invasive pests and plant diseases. For example, neonicotinoids are necessary to control for the spread of the Asian Citrus Psyilid

(ACP), the vector for Huanglongbing (HLB), a disease that kills citrus trees and has no known cure. Since 2009, California citrus producers have assessed themselves a per carton fee to support a program at the California Department of Food and Agriculture to monitor residential, backyard citrus trees to detect ACP. When an ACP is found, a control program begins that notifies homeowners within a specific radius and provides them information about the most effective means to prohibit the spread of ACP, which includes the use of neonicotinoids. These residential treatment actions protect neighborhood citrus trees thereby, protecting commercial citrus groves throughout the state. If these products are no longer available at the consumer level, this program will be negatively impacted and the threat to California's citrus industry will be significant. If these products are no longer available at the consumer level, this program will be negatively impacted and in turn threaten the existence of California's $2 billion citrus industry.

" … the California Department of Pesticide Regulation (DPR) has undergone proactive efforts to reevaluate "certain pesticide products containing the nitroguanidine-substituted neonicotinoid active ingredients, imidacloprid, thiamethoxam, clothianidin, and dinotefuran." After finalizing that evaluation and receiving public comments, DPR is proposing regulations to protect pollinators where appropriate. DPR estimates this new regulation will reduce the amount of neonicotinoids used in agriculture by approximately 45%. It's important to note, "DPR did not evaluate risks to indoor uses, structural uses, and non-agricultural outdoor uses such as lawns, gardens and golf courses due to lack of pollinator exposure (i.e., not attractive to bees, no food sources for bees to feed on, lower use rates) or lack of widespread use." Furthermore, after reevaluation of the agricultural uses of these products, DPR is not recommending they be considered a restricted use material.

"A comprehensive report by U.S. Department of Agriculture (USDA) and the USDA National Agricultural Statistics Service (NASS) describes a broad range of issues or "stressors" negatively affecting bees, including habitat loss, parasites and diseases, lack of genetic diversity, climate change, pesticides, reduced forage options and pathogens. The research and data collected nationally and specific to California shows the leading stressor to honeybee colonies is overwhelmingly varroa mites Any legislation seeking to protect pollinator populations that ignores the most influential stressors will not be successful."

-- END --