

Pollinator Health Task Force SB 5253 Implementation Plan



Report to the Legislature

As Required by RCW SSSB5253

November 2021



Washington
State Department of
Agriculture

Derek I. Sandison, Director

Pollinator Health TaskForce SB 5253 Implementation Plan

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Status Summary

Short Term Project		Long Term Program	
All needs met	Awaiting personnel, funding, etc.	All needs met	Awaiting personnel, funding, etc.
Sec. 3 (2) c Part 1	Sec. 3 (2) a	Sec. 3 (2) b	Sec. 2 (6)
Sec. 3 (2) e	Sec. 3 (2) k	Sec. 3 (2) d	Sec. 3 (2) c Part 2
Sec. 3 (2) f		Sec. 3 (2) h	Sec. 6
Sec. 3 (2) g		Sec. 3 (2) i	Sec. 9
Sec. 3 (2) j		Sec. 4 (2) a	Sec. 10
Sec. 4 (2) d		Sec. 4 (2) b	
Sec. 4 (3)		Sec. 4 (2) c	
Sec. 8 (2) Part 1		Sec. 4 (2) e	
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Introduction

After the passage of Senate Bill 5253, the Pollinator Health Task Force (PHTF) was tasked with creating a plan to implement the recommendations enacted through the bill. The implementation plans were organized by the language of SB 5253. At a minimum, each plan covers responsible entities, implementation/status, and evaluation. These correspond to:

- Who is responsible for the project.
- What they are doing.
- How that work will be evaluated for completion or success.

The PHTF plans to meet at least once a year in January or February to go over the annual pollinator report. The Research Subcommittee and Habitat Subcommittee plan to meet monthly as research and case study seminars for pollinators and pollinator habitat. The Education Subcommittee plans to serve as an advisory committee for people needing help with outreach, education, and extension documents or plans. The Managed Pollinator Subcommittee and Pesticide Subcommittee will meet as needed as issues arise.

Sec. 2 (6) Increase communication between beekeepers, growers, and pesticide applicators (PHTF Recommendation 2.7)

Recommendation summary: SSB 5253 - Sec. 2 (6) reads:

“The implementation plan must include the task force's evaluation and development of protocols that would increase communications between beekeepers, farmers and

growers, and pesticide applicators including, but not limited to, education and outreach to beekeepers, farmers and growers, and pesticide applicators.”

In 2020 the Pesticides Subcommittee came up with two different ideas to increase communication between beekeepers, growers, and pesticide applicators. One or both of these would help, but needs to be combined with education and outreach for growers, beekeepers, and pesticide applicators on what their rights and responsibilities are.

The current plan is to include the Bee Protection Protocols as originally proposed by the PHTF on the WSDA pollinator website, along with other beekeeping and pesticide applicator BMPs. Implementation of FieldWatch within the state will depend on the results of the survey of registered beekeepers, which should be completed in March 2022. Further education and outreach plans will be made for beekeepers, pesticide applicators, and growers following the hiring of the new WSU pollinator extension specialist in 2022.

2.7a Adoption of an Online Mapping and Communication Platform

Responsible entities: 2021 Legislature and WSDA.

Implementation: FieldWatch is a nonprofit, multi-stakeholder agricultural collaborative that operates a crop and apiary registry with the purpose of helping pesticide applicators make the best possible and most informed spraying decisions. FieldWatch is currently operating in 22 states and the Canadian province of Saskatchewan and is the only registry of its kind with a national footprint. Their DriftWatch® Specialty Crop Registry allows growers to identify the location of their fields, what crop they are growing and how they are growing it (i.e. conventional, organic, etc.), as well as provide their contact information should the applicator have questions. The BeeCheck® Apiary Registry has a few additional features for beekeepers, but operates on the same principle of communicating critical information to applicators who need to know what is around them. Both registries are completely voluntary in nature – for growers and beekeepers – and it is completely voluntary for applicators to check the registry. For convenience, FieldWatch recently launched two mobile applications. FieldCheck® allows applicators to see what’s around them in an easy-to-read application they can use anywhere. The BeeCheck app allows beekeepers to add and move hives by GPS out in the field. This allows for instant updates to the system, allowing applicators to operate with real-time data.

FieldWatch always seeks to meet the needs of individual states and can modify our platform as needed. In Washington it will likely be required that applicators “register” with FieldWatch to access any crop or apiary data (registering is a free, three-minute process) and crop and hive locations will not be available on a public map. The details can be worked out with state stakeholders moving forward. Other mapping and communication platforms would likely have similar capabilities.

Funding: FieldWatch requires an upfront fee of \$24,500 to cover technology development costs and training of all stakeholders in new states. This cost includes

both the DriftWatch Specialty Crop platform and the BeeCheck Apiary Registry. However, if a state would only like to adopt the BeeCheck registry, the fee is reduced to \$13,000. The ongoing maintenance fee for each state is \$6,500 annually for one or both registries. This helps FieldWatch cover costs like continued innovation of the tool (i.e. mobile apps), server maintenance, communication tools, training, etc. It is currently unknown what other companies or nonprofits might charge to produce a similar platform.

Evaluation: Success will be determined if FieldWatch or another platform is implemented and utilized by beekeepers and pesticide applicators.

Status: Will go on beekeeper survey later this summer. Adoption to be determined.

2.7b Bee Protection Protocols

Rationale: Ground and aerial applicators of pesticides, as well as growers, apply chemicals which harm pollinators. Lack of communication is one reason why managed pollinators can sometimes be harmed by such applications. Better communication will improve managed pollinator protection.

Responsible entities: WSU Extension, agricultural industry groups, aerial and ground applicator groups, WSDA, WASBA.

Implementation: Pollinator Protection Standards should be published and disseminated among the affected groups. Further refinements can be made by those groups as conditions evolve. WSU Extension should convene a committee of stakeholders to review and approve changes/additions to the standards. These standards should be adopted by all groups whose actions affect managed pollinators: landowners/lessees, pesticide users, and pollinator managers.

Funding: No additional funding.

Evaluation: Successful implementation of standards will decrease the instances of pesticide applicator difficulty in doing their work and decrease pollinator incident reports to WSDA's Pesticide Management Division.

Status: Katie Buckley will put on WSDA pollinator website with invitation to stakeholders to provide feedback.

Sec. 3 (2) a Pollinator education needs (PHTF Recommendation 3.2)

Responsible entities: WSDA, WSU, OSPI, E3Washington; input and curricular resources provided by members of the PHTF and others.

Implementation: The WSDA Pollinator Program and WSU pollinator specialist will work together to assess needs in summer and fall of 2022. These may include lesson plans

for K-12, pollinator short courses for industry professionals or Master Gardeners, outreach materials, and handouts for conferences or other events. Education and outreach plans will be made for beekeepers and pesticide applicators, and growers will also be included.

Funding: Funding may be necessary to develop, validate, and train teachers on new curriculum, or develop other materials or programs.

Status: On hold until hiring of WSU pollinator extension specialist.

Sec. 3 (2) b Critical impacts, needed BMPs, and research priorities

Responsible entities: WSDA Pollinator Program, PHTF.

Implementation: The annual pollinator report will include the critical impacts that the WSDA Pollinator Program and the PHTF believe most impact pollinators in the state of Washington, as well as needed BMPs and research priorities. The annual report will also include progress of ongoing programs, statistics and summaries of pollinator-related pesticide investigations, case studies of community or industry pollinator projects, and any additional recommendations made by the PHTF.

Evaluation/Dissemination: Annual report will be sent to the Legislature and other appropriate entities, and made available on the WSDA website.

Contact: Katie Buckley, WSDA

Sec. 3 (2) c Part 1 Document the bee species of Washington State and map their distributions. Develop an annotated checklist of bees and upload to a publicly accessible database. (PHTF Recommendation 5.1)

Responsible entities: WSDA, WSU.

Implementation: Digitized specimen data will be uploaded into one or several searchable specimen database(s) (such as SCAN or GBIF). There will be ongoing searching of other databases and collections to add other Washington specimen data. Resulting product would include bee localities, county records, flowers visited, sources of the information, and notes for each species (such as: Introduced, Conservation concern, Specialist pollinator). A completed list may eventually be uploaded to the WSDA pollinator website.

Funding: WSU: Funds will support the following for an existing WSU entomology professor and one graduate research assistant (0.25 FTE, \$40,000 salary, benefit rate 12.5%) at \$50,000 over two years for travel to conduct the survey for both the professor and graduate assistant, and supplies for the insect survey (insect boxes, pins, collecting).

WSDA: Funds will support for two years one primary biologist funded part-time to coordinate databasing initiatives and manage data entry, literature and record review, and bee identifications, and one technician part-time to enter data and check veracity of all data. Funding also includes costs for travel to regional collections (OSU, other) to record curated material, and to identify unknown specimens.

Evaluation/Dissemination: Data will be uploaded into one or several searchable specimen database(s) (such as SCAN or GBIF). Additionally, researchers will produce scientific papers on new bee species or distributions.

Status: Elizabeth Murray (WSU) and Chris Looney (WSDA) have lead on this, and will have quarterly meetings with Katie Buckley (WSDA) on project status. Project should be completed by July 2023.

Personnel: WSDA lead: Chris Looney
WSDA Technician: Chanda Henne
WSU Lead: Elizabeth Murray
Assistant Research Professor: Silas Bossert

[Sec. 3 \(2\) c Part 2 Continue and create native pollinator and habitat community science tracking programs \(PHTF Recommendation 5.2\)](#)

Responsible entities: The DNR Natural Heritage and Natural Areas Programs, WSU, WSDA, WDFW, and community science organizations (such as Xerces Society and the Washington Native Bee Society) are already involved in these types of activities.

Implementation: WDFW and the Xerces Society are already running the successful Pacific Northwest Bumble Bee Atlas (also includes Oregon and Idaho partners.) WSDA will take lead on a new Washington Bee Atlas (WABA), with support from WSU, WDFW, and the Washington Native Bee Society.

Evaluation/Dissemination: Reports on changes in pollinator species and habitat on an annual or biennial basis. Annual data sharing between different groups.

Status: Katie has submitted the supplementary fiscal note for plan below, will find out in January 2022 funding status.

[Washington Bee Atlas](#)

Responsible entities: WSDA will be the lead agency. Partners in the WABA project include the Washington Native Bee Society (WaNBS), WSU, WDFW, the Oregon Bee Atlas, and potentially UW Bothell.

Implementation: SB 5552 was passed in 2019, creating the Pollinator Health Task Force and WSDA Pollinator Program. The task force completed a recommendation report to the Legislature in 2020, which was turned into SB 5253 to implement the recommendations. Section 3, 2c of SB 5253 requires the WSDA Pollinator Program to

“Document, in consultation with Washington State University, the bee species within the state and map their distributions as practicable.” The task force determined there should be two parts to this:

- Go through historic data to determine what species have been found in the state in the past.
- Start a community science project to find the current bee species and distribution in the state, as well as track any changes.

Part 1 was fully funded and will be a two-year joint effort between WSDA and WSU scientists. Part 2 was not funded, mostly due to not knowing at the time who would run the project, nor what it would cost. The Washington Native Bee Society reached out to the PHTF encouraging Washington to start a Native Bee Atlas similar to Oregon's Bee Atlas program. We have reached out to the Oregon Bee Project and they have provided guidance on what it takes them to run their program, and volunteered to help us start our own program. Their assistance will help significantly with beginning our own program, and allow a much quicker start than we otherwise would be able to when some critical positions (WSU pollinator extension specialist and WSDA taxonomist) have yet to be filled.

What is your proposed solution?

The task force proposed a Washington Bee Atlas, run similarly to the Oregon Bee Atlas. This would allow us to document the current bee species found within the state, their distribution and floral associations, and track any changes to their population over time. This is critical to identifying problems affecting the pollinators within our state. A significant component to the Oregon Bee Atlas and our proposed Washington Bee Atlas are the volunteers. Citizen science projects are not only a good way to collect quality scientific data, but they also serve to educate and involve citizens in the scientific process.

The first field season will only include about a dozen “volunteer supervisors.” The Oregon Bee Atlas has volunteered to help train this initial group through their own training program. These volunteer supervisors will eventually help in training our own volunteers in later years, and serve as regional contacts for these future volunteers. We plan to slowly grow the program, and hope to eventually have hundreds of people cycle through our volunteer program. We plan to encourage these volunteers to perform outreach and education about pollinators, which could easily reach thousands of people. UW Bothell has offered to help coordinate our volunteers, but not until 2023. WSDA will continue to provide all taxonomic support, WDFW will be involved in permitting for the program, and WSU (specifically the new pollinator extension specialist) will eventually help run the training program for our volunteers.

What are you purchasing and how does it solve the problem?

The Oregon Bee Project recommended at minimum a full-time taxonomist and a part-time technician, as well as someone to be an overall administrator (existing position), along with at least \$50,000 to run genetic tests for a reference collection, collecting and

pinning supplies for volunteers, and storage for pinned specimens for the WSDA reference collection. Additional pinned specimens will eventually be stored at the WSU Entomology Museum for additional research and educational purposes. The technician will be responsible for sorting and maintaining the collection, and the taxonomist will be responsible for identification work, as well as feedback to volunteers.

Our timeline is:

2021	Project planning
January 2022	Assemble collecting permits
March 2022	Begin training volunteer supervisors through Oregon Bee Atlas
April 2022-September 2022	First field season (collect bees)
July 2022	Taxonomist hired, begins assembling reference collection
October 2022	Volunteer supervisor collections submitted to WSDA, taxonomist and technician begin sorting and identifying
January 2023	Assemble collecting permits
March 2023	Volunteer supervisors and WSU begin training volunteers
April 2023-September 2023	Second field season (collect bees)
October 2023	Volunteer collections submitted to WSDA, taxonomist and technician begin sorting and identifying
December 2023	Annual report by taxonomist from 2022 sent to participants
January 2024	Assemble collecting permits

We expect it will take approximately 10 years before we have a good idea on what species are found in the state and where. The atlas will at that point transition from species discovery to monitoring populations, filling in gaps in their life histories, and tracking changes in plant-pollinator relationships. Rare species or species with limited geographical ranges may still be discovered during this phase. Genetic testing will likely be an ongoing part of the project, both to clarify identifications, as well as discover cryptic species (some groups of bees are known for similar morphologies, but divergent behavior and/or host preferences.)

What alternatives did you explore and why was this option chosen?

If this program is not funded, then any future bee conservation in the state will be based on spotty historical data. There is also increasing interest in such a program, as seen by the recent establishment of the Washington Native Bee Society, and Washington residents participating in the Oregon Bee Atlas. This project would provide both necessary scientific data, as well as engage the public in scientific research, advocacy, and conservation.

A similar option would be to have a state agency such as WSDA or WDFW hire surveyors to collect the bees. This would not only be more expensive, but also discourage interested citizens from being involved. It would also not facilitate connecting citizens to science or pollinator-related educational opportunities.

Evaluation/Dissemination: An annual report will be sent to all volunteers of what bee species they collected. This report will be sent out a year after their collections have been turned in. A summary of the findings will be included in the annual pollinator report produced by the Pollinator Health Coordinator.

Sec. 3 (2) d Addition of WSDA Pollinator Health Coordinator to WSNWCB Pollinator Committee (PHTF Recommendation 2.4)

Responsible entities: WSDA (Katie Buckley), WSNWCB

Implementation: The WSDA Pollinator Health Coordinator (Katie Buckley) is now scheduled to annually attend the Noxious Weed Board meetings and sit in on Pollinator Subcommittee meetings. An annual pollinator report will also be submitted by Katie to the Noxious Weed Board, which will likely contain a summary of the status of pollinators in Washington as relating to noxious weeds, a summary of areas for improvements, any recommendations put forth by PHTF members, and an economic analysis of the impact of at least one noxious weed species on pollinators.

Funding: None needed.

Evaluation: Annual pollinator report submitted to Noxious Weed Board. Attendance by Katie at WSNWCB meetings.

Status: Accomplished! Ongoing annual tasks.

Sec. 3 (2) e Increase awareness of third party certification of sustainable agriculture that promotes good pollinator practices (PHTF Recommendation 2.5)

Responsible entities: WSDA & WSU Extension.

Implementation: WSDA and WSU Extension to produce lists of third-party certifications to be made available without recommendation to growers. Include short descriptions, crops, certification logos, and contact information to clarify how the programs are different from each other. Explicitly state there are no endorsements.

Evaluation: Track participation in various certification programs. Third-party certification assures that sustainability best-practices are implemented at the farm level.

Status: Katie will put on the WSDA website. Updates will be ongoing.

Sec. 3 (2) f Educate the public through plant nurseries about the necessity for blooming nectar plants to be available to pollinators throughout their respective active seasons (PHTF Recommendation 3.7)

Responsible entities: WSDA, WSNLA, plant nurseries.

Funding: Received \$40,000 for development and printing of outreach materials, to be used by July 1, 2022.

Evaluation: Number of participating nurseries.

Status: Katie has had a meeting with Breanna Chavez and a few nurseries about what they need regarding outreach materials. We came up with a list, including simple signage and information about making use of organic pesticides even safer, videos on pesticide safety (and possibly other pollinator related things like creating habitat), and eventually will discuss a short course for their staff about pollinators through WSU. Pesticide signage and brochure should be finished by spring 2022, videos by June 2022. The pollinator short course will have to wait until the WSU pollinator specialist is hired. More meetings between WSDA, WSNLA and nurseries are planned to determine if other materials are needed and encourage participation.

WSNLA is also interested in hosting pollinator resources on their websites. The content may be aimed at both the general public (GardenWashington.com) and their members (wsnla.org).

Sec. 3 (2) g Survey registered beekeepers on creation of registered yard locations and establishment of WSDA Apiculture inspector position (PHTF Recommendation 4.4)

Responsible entities: WSDA and State Legislature.

Funding: Survey can be completed with current funding. Implementation of apiary inspector position and registered apiary locations would require at least one FTE position and supportive funding.

Evaluation: Abide by results of beekeeper referendum.

Status: Survey in process of editing. Distribution planned for December/January, with results expected by March 2022.

Sec. 3 (2) h Continue partnership in the national strategy to improve pollinator health (PHTF Recommendation 3.4)

Responsible entities: The Governor's Office and all pertinent state agencies. WSDA will be the point agency.

Implementation: The various agencies of the state of Washington should maintain partnerships with federal agencies and neighboring states to promote and enhance the implementation of the National Strategy to Promote the Health of Honey Bees and Other Pollinators (Pollinator Health Task Force, 2015) within Washington and neighboring states with a focus on measurable outcomes, and should report new and continuing initiatives and achievements to the governor of the state of Washington on an annual basis.

Evaluation: Goals that achieve measurable outcomes should be set and reviewed and updated as needed on an annual basis.

Status: WSDA Pesticide Management Division (PMD) regularly reports to the EPA on pesticide investigations. WDFW regularly provides feedback to U.S. Fish and Wildlife on federally endangered and state priority species. The WSDA Pollinator Program is a partner with the Oregon Bee Project and the MP3 Working Group, with plans to partner with Idaho once they have a pollinator position hired.

Sec. 3 (2) i Increase the availability of pollinator-related resources on the WSDA and other state agencies' websites (PHTF Recommendation 3.8 & 3.9)

Responsible entities: WSDA, WSU, other Washington State agencies.

Implementation: Produce web-enabled catalog of current resources on best management practices and other educational resources available to growers and the general public on the WSDA website. WSDA Pollinator Program will review on an annual basis to ensure links remain good and if anything new should be added.

State agencies and university partners should work to ensure that resources related to pollinators, pollinator habitat, pollinator health and management, and pollinator research are freely accessible online. Other states with similar programs may also participate (Oregon Bee Project.)

Funding: Utilize existing resource sharing and distribution channels.

Timeline: Initiated, spring 2021.

Status: Work in progress.

Contacts: Katie Buckley, WSDA
Janet Anthony, WDFW
Carrie Foss, WSU Hort Sense
Wendy Sue Wheeler, WSU Pesticide Applicator Education, Gardening in Washington State

Sec. 3 (2) j Review policies on state lands to protect native pollinators and improve transparency for state land areas which may permit managed honey bees (PHTF Recommendation 4.2)

Responsible entities: WDFW, DNR, Legislature, WSDA, and other state land managing agencies.

Implementation: All land-managing state agencies shall review their guidelines and policies for allowing beekeeping permits so that beekeepers understand which lands are available for forage, and that impacts to wild pollinators from honey bees can be minimized. Agencies shall clearly indicate where beekeepers can and cannot apply for permits and, where applicable, shall have a process for beekeepers to easily apply for permits. WSDA will host a web page for beekeepers with links to all available state agency permit processes for managed honey bees on state lands. State agencies managing sensitive conservation areas (DNR Natural Area Preserves, DNR Natural Resource Conservation Areas, WDFW Wildlife Areas and Washington State Parks) shall implement policies accounting for the risks and potential risks that honey bees pose to wild, native bees. Such policies may include restricting honey bees from an agency's managed lands, or allowing new permits for honey bees only if an agency pollinator specialist determines the potential risk to native pollinators and their associated habitats is low.

Funding: Current funding is sufficient.

Evaluation: Updated permitting guidance resources and land management approaches.

Status: Planned for 2022.

Sec. 3 (2) k Revise the state Open Space Farm and Agriculture Tax Classification Program to include private lands managed for pollinators and wildlife (PHTF Recommendation 1.7)

Responsible entities: Washington Department of Revenue (DOR), WSDA.

Implementation: Private lands managed for pollinators and wildlife should be granted an Open Space property tax designation by showing that they have a formal NRCS or conservation district conservation plan that includes one or more pollinator or wildlife practice on the taxable land unit, AND that the practice has been implemented. Qualifying land may be agricultural or not.

Funding: This recommendation requires no additional funding to implement. It is anticipated to result in long-term savings to the state through:

- A reduced need for state agency investments in wildlife habitat restoration, because more of that work will be performed by private landowners.
- Potential increases in hunting and fishing licensing revenue resulting from increased wildlife populations.

Moreover, this recommendation would result in a tax reduction for conservation-minded landowners, incentivizing widespread adoption of habitat restoration that benefits all species of pollinators and wildlife.

Evaluation: Verification that landowners have carried out the habitat management practices described in their conservation plan is made possible through either final NRCS approval paperwork (verifying that their client has fulfilled their contract requirements, or onsite inspection and approval by local conservation district staff that the conservation practice meets an NRCS specification.

Status: Katie Buckley will pursue this with DOR. Waiting for DOR response.

Sec. 4 (2) a Evaluate and adapt pesticide training and drift reduction technical assistance programs to include up-to-date protection measures for pollinators (PHTF Recommendation 2.1)

Responsible entity: WSDA, WSU Extension, and producer groups.

Implementation: WSU and WSDA are already working with equipment manufacturers, grower groups, crop consultants, and pesticide applicators to evaluate equipment and practices to identify drift-reduction technologies and methods. There is already a plan to incorporate more pollinator protection into current training programs.

In 2020, WSDA Pesticide Compliance staff began conducting “Drift Observation Inspections” with the primary focus in, but not limited to, air blast application areas. The Drift Observation Inspections have a quicker turnaround time from initial observation to issuing an action of seven days or less. If violations are found, an action can range from a Verbal Warning, Advisory Letter, Notice of Correction, or if more severe, to a penalty assessment called a Notice of Intent. A normal Ag Use Inspection, which covers a number of application questions, may have a turnaround time of up to 45 days. The Drift Observation Inspection focuses only on the drift scenario, which allows for a faster turnaround timeframe.

WSDA Pesticide Compliance currently operates with 15 field staff positions. Three additional field staff positions are planned for the spring of 2022 in the Central Washington area where air blast sprayer numbers are concentrated.

WSDA Technical Service and Education Program (TSEP) is working on possible training modules that could effectively include pollinator protection.

Evaluation: Number of drift observations. Were pollinators involved or present?

Contact: Tim Schultz, WSDA Program Manager - Pesticide Compliance
Ofelio Borges, WSDA Program Manager – TSEP

Sec. 4 (2) b Support WSU pesticide education

Responsible entity: WSDA, WSU

Status: Part of the new pesticide license fee increase is going to support the work of the WSU pesticide education program. WSDA and WSU have increased collaboration and information sharing above what they have previously done. The WSDA Pollinator Program and OSU have also been involved in this collaboration.

The fee increase will go into effect on Nov. 1, 2021.

Contacts: Robin Schoen-Nessa, WSDA PMD
Wendy Sue Wheeler, WSU

Sec. 4 (2) c Pollinator/pesticide investigations

Responsible entity: WSDA, WSU

Status: Staff at WSU and WSDA have begun discussions on the best way to collaborate during pesticide-related investigations. WSU Bee Lab personnel and WSDA Pollinator Program personnel will assist, as needed or if available, in investigations conducted by Pesticide Compliance either in person or by video/email depending on the situation.

WSDA PMD will send WSDA Pollinator Program their annual legislative report as well as any pollinator related investigative case files annually for inclusion in the annual pollinator report. Similar report already provided to EPA for annual review. Case file information will also be shared with WSU Pesticide Training staff for inclusion in pollinator protection training.

Contacts: Tim Schultz, WSDA Program Manager
Katie Buckley, WSDA Pollinator Program
Brandon Hopkins, WSU Bee Lab

Sec. 4 (2) d Update the pesticide civil penalty matrix related to pollinator death or damage (PHTF Recommendation 2.2)

Implementation: Sept. 1, 2021 WSDA issued the CR-101 announcing they are considering modifying pesticide violation penalty matrix. Existing rules have not been substantially updated since first adopted in 1999. Penalties for various levels of violation are too low and do not serve as effective deterrent. The current four levels of violation are not needed since the department rarely uses the highest level (4th level) due to time constraints of the investigative and adjudicative process. The current penalty rules for a monetary penalty and license suspension are a “one size fits all” and are not equitable between certain license types or when no licensed applicator is involved. Current rules for calculating penalties do not accurately reflect differences in severity of violations.

Rules for adjusting (aggravating and mitigating) a penalty assignment schedule are not clear.

Stakeholder meetings were held Sept. 16 and 23, 2021. Work on draft matrix will continue through the end of 2021 with stakeholder input at additional meetings TBA. Final plan to be available spring 2022. Visit WSDA's rule-making website at agr.wa.gov/services/rulemaking (WAC Chapter 16-228, Penalty Calculation).

The intent is to include adverse effects to pollinators as an aggravating circumstance in the proposed penalty matrix pending stakeholder input.

Evaluation: Annual report to the Pollinator Program on number and type of pollinator related investigations. WSDA will track changes over time.

Contact: Scott Nielsen, Compliance Case Review Officer

Sec. 4 (2) e Pesticide credits (PHTF Recommendation 3.10)

Responsible entity: WSDA, WSU

Status: "Pollinator Health" is already a qualifying topic for pesticide applicator licensing credit. One credit is equal to 50 minutes of instruction. More information can be found on the WSDA website (agr.wa.gov) – search for Sponsoring a Recertification Course.

Implementation: Regarding pesticide credits, WSU's role is to coordinate and host recertification courses while WSDA's role is to ensure that courses being offered for pesticide credit meet minimum recertification requirements. Highlights of the improved pollinator protection courses will include reading labels for pollinator safety (For example, not spraying when flowers are blooming or spraying at night. This is part of current training.), as well as pollinator biology and habitat. This would include education and outreach regarding the risk of systemic applications to woody pollinator attractive plants and to provide best management practices to limit exposure concerns. Growers and pesticide applicators may think of pollinators as transitory (commercial honey bees, migratory butterflies), but many are local and do not move that much (native bees, hobbyist honey bees). Hence pollinator safety is something to keep in mind year round.

Contact: Wendy Sue Wheeler, WSU
Kaile Adney, WSDA Licensing Recertification

Sec. 4 (3) Neonicotinoid report

Responsible entity: WSDA

Status: WSDA personnel are currently writing the report. The report is on schedule to be finished by Dec. 31, 2021.

Contact: Robin Schoen-Nessa, Asst. Director Pesticide Management Division.

Sec. 5 Restrict non-native bumble bee commercial use (PHTF Recommendation 4.1)

Responsible entities: WSDA

Implementation: WSDA Pest Program is aware of new state law, and is involved in a project monitoring invasive *Bombus impatiens* populations and spread. WSDA Nursery Inspection will have their online notification person contact bumble bee producers to make them aware of the new state law.

Status: Katie is coordinating with WSDA Pest Program and Nursery Inspection, and will send bumble bee producer information to Nursery Inspection. There are only two commercial bumble bee producers nationally, so regulating and educating those companies is the best use of time and resources.

Sec. 6 WSU pollinator extension education and outreach program and statewide, science-based, pollinator education plan (PHTF Recommendation 3.1)

Responsible entity: WSU Extension (lead), WSDA, other state agencies.

Implementation: The one FTE pollinator extension specialist position that was fully funded will begin with a review of the statewide education needs related to pollinator education, followed by the development of a plan that outlines the goals related to pollinator education in Washington and the necessary partners, personnel, and other resources.

Evaluation: As part of the WSU Extension program, documentation of educational activities and their impacts, and how success of this project will be defined and a method to measure this.

Status: A hiring committee for the position has been formed. The position is in the process of being filled.

Contact for hiring committee: Dr. Brandon Hopkins, WSU

Sec. 7 Require all public works projects which include landscaping to include at least 25 percent of planted area be pollinator habitat to the extent practicable (PHTF Recommendation 1.2)

Responsible entities: All state and local agencies whose responsibilities include state funded construction with measures for soil stabilization or landscaping including necessary revegetation. WSDA pollinator ecologist to establish pollinator protection guidelines within mandated landscape standards guidelines, including how pollinator plants and habitat should be designed and maintained after installation, as well as guidelines for practical mitigation when landscapes must be altered whether for plant species attrition, emergencies, or other unforeseen design or maintenance issues.

Implementation: Created and passed legislation requiring at least 25% of landscaping be pollinator forage and/or pollinator habitat for public works projects as practicable. Guidelines on compliance will be available on the WSDA pollinator forage website and WSDA pollinator ecologist will be involved in the creation of pollinator protection guidelines within mandated landscape standards for various departments throughout the state, including public works, parks and recreation, universities, Capitol Campus, etc. (also another recommendation). WSDA pollinator ecologist will serve as a technical advisor as needed for state projects. Participation in design advisory committees throughout the state, as well as through outreach to companies on various small works rosters, can serve as an opportunity to influence and educate landscape architects and the contracting community who bid on, design, install and maintain state projects and properties. The Washington State Conservation Commission (WSCC) received a modest amount of funding for guideline development.

WSDA, in consultation with WSCC and WDFW, will develop a list of native forage plants that are pollen-rich or nectar-rich and beneficial for all pollinators, including honeybees. A working list is expected to be completed by the end of February 2022, though future modifications may be required.

Evaluation: Guidelines will be determined by the WSDA pollinator ecologist and assisted by WSCC, working with the state's project liaison with the construction project manager/architect.

Contacts: Katie Buckley, WSDA
Taylor Cotten and Julie Combs, WDFW
Alison Halpern, WSCC

Sec. 8 (2) Part 1 Evaluate various restoration techniques with the goal of improving habitat for native pollinators (PHTF Recommendation 5.5)

Responsible entities: WDFW.

Implementation: In 2011 WDFW published the [Shrub-Steppe and Grassland Restoration Manual for the Columbia River Basin](#). It and related documents serve as resources describing best management practices for planning and implementation of restoration projects. While the manual focuses on restoration work that is beneficial to pollinators, it does not provide guidance specific to restoring pollinator habitat. For instance, it does not identify where different pollinators live, what their resource needs are or what precautions are needed to avoid harming them in the restoration process. WDFW will update the manual to include and/or reference available information on pollinators so that it can be more effective in restoring pollinator habitats and promoting pollinator recovery.

Funding: The work is currently funded through the 2022 fiscal year: Work on pollinator habitat restoration has been funded previously through State Wildlife Grants (U.S. Fish and Wildlife Service), state dollars, and other federal grant opportunities.

Evaluation/Dissemination: The manual has been used by WDFW land managers since 2011. It has also been posted on the WDFW website since 2011 for landowners to use. WDFW will continue to make the manual publicly available on the website, especially with their pollinator resources, and promote it with conservation partners.

Status: Inventory of information relevant to updating the document has already begun, including a literature review and assessment of recent projects. WDFW will reach out to the Pollinator Health Task Force Research Subcommittee for additional resources and brief the group on the project manual update to be finalized by June 2022.

Sec. 8 (2) Part 2 Update riparian habitat recommendations to encourage development of pollinator habitat (PHTF Recommendation 1.3)

Responsible entities: WDFW.

Implementation: Current Priority Habitat and Species riparian recommendations do not include information specific to pollinator habitat needs. WDFW will draft a supplement to the existing riparian habitat recommendation guidelines with recommendations for western bumble bee. Western bumble bee was recently listed as a candidate for State Listing in Washington, which adds it to the Priority Habitat and Species List. Given western bumble bee historically occurred from high-elevation meadows to sea level and across the state, the recommendations in the riparian supplement would also benefit other pollinator species.

Funding: WDFW has funding to complete this in fiscal year 2022

Evaluation: Successful publication of pollinator-focused supplement to existing riparian management recommendation document.

Status: WDFW received funding for this and scoping is in progress.

Contacts: Jeff Azerrad WDFW, jeff.azerrad@dfw.wa.gov, 360-787-3573

Sec. 9 Sustainable Farm and Fields grant program (SFFGP) to prioritize grant applications that concurrently create or improve pollinator habitat (PHTF Recommendation 1.8)

Responsible entities: WSCC, WSDA, WSU, WDFW, USDA NRCS

Evaluation: Success and outcomes should be measured based upon the standard SFFGP evaluation process.

Status: The SFF statute has been [amended](#) to include pollinator habitat as a prioritization metric. The WSCC is working to secure state and federal funding for the program. WDFW and PHTF will be consulted when prioritizing projects that enhance pollinator habitat.

Sec. 10 Develop an ongoing small grants program to educate landowners and community groups about the value of pollinator habitat, and to provide the necessary technical assistance and materials (e.g., seeds and plants) to create it (PHTF Recommendation 1.1)

Responsible entities: WSCC

Evaluation: Metrics for success include:

- Acres planted that successfully establish and are maintained for a minimum of 5 years.
- Monitoring planted areas for use by pollinators including trends over time.
- Number of participating landowners.

Status: Now in statute. PHTF and WSCC may submit a budget request package for the 2023-2025 biennium.

Glossary of Terms and Abbreviations

BMP - Best Management Practice

DNR - Department of Natural Resources

DOE - Department of Ecology

ELAP - Emergency Assistance for Livestock, Honey Bees, and Farm-raised Fish

EPA - Environmental Protection Agency

FSA - Farm Service Agency

FTE - Full Time Equivalent - the hours worked by one employee on a full-time basis

IPM - Integrated Pest Management - an ecosystem-based strategy that focuses on long-term prevention of pests or their damage through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, and use of resistant varieties. Pesticides are used only after monitoring indicates they are needed according to established guidelines, and treatments are made with the goal of removing only the target organism.

IPPM - Integrated Pest and Pollinator Management - nearly identical to IPM, but also takes managed and wild pollinators and often other beneficial insects into account, often through timing of pesticide applications, habitat buffers, and non-chemical control methods

LC50 - the lethal concentration level that kills 50% of the test animals during an observation period (typically 14 days), similar to an LD50

Noxious Weed - invasive, non-native plants that threaten agricultural crops, local ecosystems, or fish & wildlife habitats

Invasive - a nonnative organism that grows and disperses easily, usually to the detriment of native species and ecosystems

OSPI - Washington Office of Superintendent of Public Instruction

Pollinator - an animal that moves pollen from the male anther of a flower to the female stigma of a flower

SFFGP - Sustainable Farm and Fields Grant Program

WA-DOR - Washington Department of Revenue

WDFW - Washington Department of Fish and Wildlife

WSDA - Washington State Department of Agriculture

WSDOT - Washington State Department of Transportation