State IPM Report

Beyond Toxics Public Comments

Submitted 8/14/2018

Comparison of Statutory Requirements and the State IPM Coordinating Committee's Report

Beyond Toxics has a particular interest in commenting on the State IPM Coordinating Committee 2018 Report. Our organization worked closely with Representative Alissa Keny Guyer and OSU to develop the statutory language of HB 3364 and champion its passage in 2013. We are intimately familiar with HB 3364 and the discussion about the purpose and intent of the legislation during its journey through the Oregon House and Senate. The bill passed with overwhelming bipartisan approval in both chambers.

Our comments offer a constructive critique of the 2018 State IPM Coordinating Committee Report and the five years of agency implementation since the passage of the IPM statute. We acknowledge that agencies are tasked with finding solutions to a complex world of pest pressures, from quagga mussels to roadside weeds. At the same time, our state government is responsible for public health and environmental protection. HB 3364 is an important effort by state government to protect the public from pesticides, which are regulated chemicals because they have the potential to cause harm. Pesticides pose risks to the health of people and wildlife and environmental damage in the form of water, soil and air pollution. That is why HB 3364 emphasizes that state agencies must reduce the "risks from pests" and **simultaneously reduce the risk "from strategies relating to pest management."** *The focus must not solely be on pest elimination. State agencies must reduce risks resulting from strategies related to pest management, including the risk of pesticide exposure.*

HB 3364 set a precedent by amending ORS 634.650, the definition of Integrated Pest Management, to clearly prioritize the protection of health and environment, and adopt the most current and up-to-date science for pest solutions and toxicology. Without a doubt, the intent of HB 3364 was to investigate and curtail routine pesticide applications, measure efficacy of pesticide strategies and implement practices that reduce risk to vulnerable people and protect natural resources. The statute sets forth these *requirements* (as well as a number of agency coordination directives):

- "Science" is paramount and has been added to first line of the definition of IPM;
- Participating agencies responsible for participating in the Integrated Pest Management Coordinating Committee (IPMCC) are expanded to include the DEQ, OHA and Oregon University System (including the integrated pest management coordinator for each public university listed in ORS 352.002);
- Sharing information concerning the latest methods and approaches to integrated pest management, particularly around risk reduction and evolving innovative approaches;
- Reporting on and developing a set of performance metrics to adequately describe state agency and public university progress in implementing IPM;

- Developing performance metrics to measure progress toward the goal of protecting the economy, ecosystems and water quality of this state and protecting the health and welfare of children, the elderly and other members of the public;
- Adopting pest management practices in a manner that minimizes risks to human health, non-target organisms, native fish and wildlife habitat, watersheds and the environment.
- Meeting on a regular basis and no less than three times per year for all state agencies and the Oregon University System.

A thorough review of the IPMCC Report shows that the IPMCC failed to address and adhere to many of the requirements spelled out in statutory language. The statute repeatedly emphasizes reducing risks, promoting and adopting innovation and contemporary science, and evolving and improving IPM within a framework of protecting the health of vulnerable people, wildlife, water and ecology. There is not clear evidence that the IPMCC and it's member agencies promoted these intended outcomes.

Table 1 provides an overview of the statutory requirements and compliance by the State IPMCC.

Table 1. ***Comparison of Statutory Requirements and the State IPM Coordinating Committee's 2018 Report***

Statutory Requirement HB 3364	Statutory Language	Compliance: Did the OSU and State Agencies follow HB 3364 in deed or intent?
634.657 Section 1(c)	A representative of the Oregon University System, appointed by the State Board of Higher Education;	No The State Board of Higher Education did not appoint, or the representative did not attend, meetings of the IPMCC.
Section 1(d)	The integrated pest management coordinator for each public university listed in ORS 352.002 (Public universities).	No Representatives from public universities did not attend meetings of the IPMCC.
Section 4	The committee shall meet three times per year at the call of the chair …	No The IPMCC met a total of 3 times in the 5 years since the passage of HB 3364 (2013 until 2018). By statute the IPMCC should have met 12-15 times.
Section 4 (c)	Developing an adaptive management approach to the improvement of integrated pest management by state agencies and public universities.	No There is no evidence or documentation that IPMCC, functioning as a coordinating committee, developed an "adaptive management approach to the improvement of IPM."
Section 4 (e)	Reporting on, and developing a set of performance metrics to adequately describe, state agency and public university progress in implementing integrated pest management;	Neither the IPMCC nor any agency reported a set of performance metrics to implement State IPM (with possible exception of ODOT who is using a metric that uses 2010 baseline)
Section 4 (g)	Achieving reductions in risks from pests and from strategies relating to pest management;	No The IPMCC Report did not discuss achieving risk reductions from strategies related to

		pest management.
Section 4 (h)	Evaluating the need for notification of pesticide use and the policies for notification as part of state agency and public university integrated pest management programs.	No The IPMCC Report evaluate or improve pesticide notification policies for agencies or public universities.
Section 4 1(I)	[adopt] Control practices selected and applied to achieve desired pest management objectives in a manner that minimizes risks to human health, non-target organisms, native fish and wildlife habitat, watersheds and the environment.	No The report did not select and apply practices that minimize health, native fish and wildlife, watersheds and the environment.
Section 7	The committee shall prepare a biennial report to an interim committee of the Legislative Assembly relating to pest management matters.	No The first report was put together in 2018, only after a public records request and inquiry were filed with by Beyond Toxics.
Section 7 (c)	A description of advances, innovations and training activities in methodologies for reducing risks from pests.	Partial Some agencies listed training activities for their staff, although it was not clear if overall trainings were also devoted to advances and innovations rather than just pesticide applications and licensing.
Section 7 (e)	Performance metric results for the implementation of integrated pest management, including but not limited to state agency and public university progress toward the goal of protecting the economy, ecosystems and water quality of this state and protecting the health and welfare of children, the elderly and other members of the public;	No This section is central to the purpose of HB3364, but there is an absence of discussion on protecting human health, the welfare of children, elderly and members of the public; No mention of protecting ecosystems and water quality. There are no performance metrics, benchmarks, discussions of model programs from other states or cities, or progress reports.
Section 1 (b)	Coordinates the use of pest biology, environmental information and comprehensive technology to prevent unacceptable levels of pest damage by economical means and poses the least possible risk to people, property, resources and the environment; and	Partial Compliance ODA gathered the most data on biological and technical information, however the report did not include any examples of how state agencies chose methods that pose the least possible risk to people, property, resources and the environment.
Section 1 (c) I	Control practices selected and applied to achieve desired pest management objectives in a manner that minimizes risks to human health, non-target organisms, native fish and wildlife habitat, watersheds and the environment.	No The report is vague or fails to address risks to human health, non-target organisms, native fish and wildlife habitat, watersheds and the environment.

Beyond Toxics offers the following detailed comments to call out issues we've identified in the IPMCC Report.

Children's health and other vulnerable populations: Most notably is the absence of efforts to protect the health of children, the elderly and other vulnerable populations. Being very purposeful in efforts to reduce pesticide exposure in children is necessary, given the vulnerability of their still-developing neurological systems. American children exposed to pesticides at home, at school, in parks, from roadways and through ingestion have a chemical body burden that is believed to be a major factor in the growing cancer epidemic among children. Cancer now kills 4% of American children and ranks as one of the leading causes of death (see https://www.ncbi.nlm.nih.gov/books/NBK220806/) According to the National Cancer Institute, cancer is the leading cause of death by disease past infancy among children in the United States. *(see https://www.cancer.gov/types/childhood-cancers/child-adolescent-cancers-fact-sheet)*

Strikingly, there is not a single reference to children's health, elder health or vulnerable communities in the IPMCC Report. References to human "health" in the IPMCC Report are generalized to the extreme.

> Conclusion: The IPMCC has skirted the requirement to protect the health and welfare of children and other vulnerable populations because it omits specific goals, benchmarks and metrics, the most up-to-date science and strategies to follow the requirements of the law in ORS 634.657 Sec. 3 (7)(e).
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> Recommendation: The IPMCC should assess pesticide active ingredients and formulations, as well as pesticide products used in tank mixtures, for their known and suspected impacts to human health, water and the ecosystems, particularly any uses that may increase the risk of harm to children and other vulnerable members of the public. Assessment should be based on the most current data sources, not simply rely on the US EPA pesticide label or safety data sheets due to the likelihood that labels and safety data sheets do not necessarily reflect the most current health and environmental impact studies. There are more than 6,000 certified pesticide products on the market with over 500 registered active ingredients. Of these 500 ingredients, 90 percent were certified 25 to 45 years ago and many have not undergone human health assessments by organizations independent of the manufacturer. This means that there are hundreds of pesticides containing ingredients that were assessed based on standards much less rigorous than those that are deemed acceptable today. Regarding children's health and the development of IPM protocols, the IPMCC must take into account contemporary understandings of critical windows of vulnerability, endocrine disruption, synergistic exposures, inverse dose-response curves and systemic bio-persistence.

Environmental Justice: There is quite a bit of overlap with the agencies statutorily obligated to follow HB 3364 and also required to report to the Oregon Environmental Justice Task Force. Most state agencies are required to advance their adherence to state requirements to evaluate and adopt principles and policies upholding environmental health protections impacting the lives of vulnerable Oregonians. This IPMCC Report fails to recognize and assess the responsibilities of agencies to protect

vulnerable Oregon individuals and communities under Oregon's environmental justice statute. Those who bear the greatest burden of exposure to toxic chemicals are the communities and individuals identified in Oregon's Environmental Justice policies. Has the IPMCC consulted with the Oregon Bureau of Labor and Industries to assess how many state workers engaged in jobs using pesticides are from communities of color? For example, according to the 2010 BOLI *Oregon Survey of Occupational Injury and Illness* reports that while less than 10% of Oregon's state agency workforce is identified as Hispanic, 33% of state workers identified as Hispanic had suffered a non-fatal chemical injury requiring time away from work. Has the IPMCC looked into incidences of pesticide injury for state workers based on race, culture, gender minority status? Just as important, has the IPMCC responded to questions from the Department of Corrections (see IPMCC Report) regarding pesticide applications and the risk to their population of inmates, many of whom are from vulnerable communities and/or are now at greater risk due to increased exposures from living in institutional settings or being assigned work involving pesticide applications? Including such an analysis is an opportunity to measure and account for environmental justice implications of state agency pesticide use.

> Conclusion: The IPMCC report does not reference the statutory responsibilities of state agencies to consider environmental justice in their policies and practices.
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> Recommendation: Invite participation and recommendations from a member of the Environmental Justice Task Force and/or a representative from vulnerable communities approved by the Task Force. Include both principles and recommended practices of environmental justice in state agency IPM plans and practices.

Goals, benchmarks and metrics: Within the five years since the passage of HB 3364 and the convening of the IPMCC, state agencies and the State IPM Coordinator have not yet articulated the goals of their coordinated work, implemented meaningful benchmarks nor developed a set of performance metrics. How then is the Legislature to measure the progress of the IPMCC? How is the public able to provide meaningful comment on the work of the IPMCC? In the IPMCC meeting notes, agency representatives discussed using their resources to report on the threats of pests and invasive species in an effort to make the public case for IPM. The report specifically describes a desire to use state resources to report on what is referred to as "The Cost of Doing Nothing." This seems wasteful and unnecessary. Why? Implementing IPM as required by HB 3364 is the exact opposite of "doing nothing." Hardly an all-or-nothing approach, "Integrated pest management" is defined in ORS 634.650 as a "science-based decision-making process that: (a) Identifies and reduces risks from pests and from pest management-related strategies; (b) Coordinates the use of pest biology, environmental information and comprehensive technology to prevent unacceptable levels of pest damage by economical means and poses the least possible risk to people, property, resources and the environment; and (c) Uses a pest management approach that focuses on the prevention of pests through a combination of techniques…"

Thus, in addition to measuring the presence or absence of pests and the potential damage they may cause, IPM metrics should include ecological balance, reductions in the use of toxic chemicals, adoption of non-toxic and least-toxic practices and mechanisms to inform and engage the public in innovations to protect ecosystems and public health.

Conclusion: Much of the IPMCC Report seems to focus on "making the case for IPM" as if IPM was synonymous with "doing nothing" or only using pesticides, rather than being a science-based decision making process. This approach is subversion of the meaning and goals of IPM.

Recommendation: The IPMCC report would serve the Legislature and the people of Oregon best by providing methods and metrics, including ranking, inventory, mapping, monitoring and evaluation to determining pest management priorities. It is common to use maps and inventories to depict infestations in terms of pest species, size, location and threats to resources (see Lane County Public Works Integrated Vegetation Management website). Evaluating treatments over time help assess the effectiveness of various treatment strategies and their effects on target and non-target organisms.

For example, page 13 of the report states: "All agencies have strict policies that limit both use of pesticides and also restrict use of higher risk materials in favor of those chemicals that pose limited risk to human health and the environment." Where is the proof for this statement? Why not start with a comparative analysis of pesticides used by state agencies and the justification for their use? Two cases illustrate why such an analysis is important.

1. ODOT's repeated practice of using (or recommending the use of) the herbicide Perspective for vegetation management along roadsides in Central Oregon. Perspective has been definitively linked with poisoning of ponderosa pines. Despite receiving a warning about the use of Perspective by the US Forest Service, ODOT's recommended use of this herbicide on Oregon highways resulted in the deaths of thousands of ponderosa pines. Why wasn't this case included in the IPMCC report as part of an analysis and evaluation of ODOT's compliance ORS 634?
2. A second case is ODF's haphazard record keeping protocols for the use of pesticides in state forests. Beyond Toxics filed a public records request with ODF in January 2016 asking for contracts and spray records associated with pesticide applications in state forests, only to be told that such a request would be difficult, require copious amounts of staff time and cost tens of thousands of dollars. If state agencies were evaluating their pesticide use as part of their participation in the IPMCC, and setting up their management goals and outcomes within an IPM framework, public records request would be relatively easy to accommodate.

State Procurement of Pesticides: The IPMCC report briefly mentions the desire to align procurement and purchasing with an environmental protection framework. The Report mentions the following discussion: "*One area was identified as being of particular interest to all agencies, a state of-the-science approach to selection of pesticide active ingredients. Although again this would require resources to develop, and a public process to complete, all committee members are aware that science and understanding about pesticide risks and benefits is advancing, and that a mechanism is required*

that can incorporate the latest science as quickly as possible." (Meeting Notes April 12, 2016; page 14 of the 2018 IPMCC Report)

There was agreement described in the report that pesticide choices and procurement guidelines would be enhanced by following the ODEQ water quality standards and "critical" needs for better evaluation of pesticide selections requested by DOC and ODOT (see examples on pages 20-21).

> Conclusion: Within the 5 years since the adoption of HB 3364, the IPMCC has not grappled with the questions of pesticide procurement based on "*science and understanding about pesticide risks and benefits is advancing* …." Governor's Executive Order No. 12-05, known as the "green chemistry" initiative was set in place to encourage state agencies to re-evaluate their purchases of toxic chemicals in an effort to promote safer products and to measure and account for environmental health implications.
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> Recommendation: Review and align DAS procurement and purchasing guidelines, constructed in cooperation with the ODEQ, to ensure that no pesticides listed on the ODEQ Toxics List are used by state agencies. Set forth an expectation that all agencies follow strict policies that limit both use of pesticides and also restrict use of higher risk materials and ODEQ chemicals of concern in favor of those chemicals that pose little and limited risk to human health and the environment. Look beyond the US EPA and USDA for current science, including sustainable and non-toxic procurement protocols adopted by other local, state and international government entities.

Comments regarding individual agency contributions to the IPMCC Report:

> **ODOT** – ODOT has made improvements in their public notification system and modernizing certain practices to minimize risk to the environment (i.e., reducing their weed-free zone to 6 ft. from 8 ft.) The agency points to their 2015 achievement to achieve a 25% reduction in the amount of pesticide applied on state highway (see page 44-45) as a prominent indication of IPM adoption. However, the agency failed to mention that the reduction in pesticide quantity was in large part, prompted by a 2004 court order requiring larger no-spray buffer zones on fish habitat streams common in Western Oregon for the herbicide diuron, ODOT's preferred herbicide. ODOT was put in a position of finding less toxic or "lighter" alternatives. In the Agency's April 2016 Herbicide Reduction Report, they state that ODOT's pesticide reductions were "*predominantly met by switching (from diuron) to a product with less active ingredient. Lesser contributing factors include: upgrading application equipment; reducing shoulder widths; and using the proper calibration*." (see pages 2-3) ODOT also fails to mention that the 25% reduction is measured against their 2010 baseline numbers and in response to the restrictions on diuron imposed in 2004 by the federal court. ODOT's self-assessment of herbicide use is inconclusive by failing to:
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> - Measure pesticide reduction separately from the court-mandated restrictions on diuron;

- Update their pesticide reduction benchmarks based on 2015 usage, not the old 2010 numbers, and continue to update benchmarks every 5 years;
- Use mapping, tracking and metrics to determine if routine herbicide applications are actually necessary;
- Prohibit the use of herbicides that are known to contaminate ground water and harm non-target species;
- Report on incidences of collateral damage when herbicides poisoned off-target species;
- Set goals and measure progress towards using natural plantings to outcompete invasive weeds.

We recommend that ODOT consult with Lane County's 2017 Integrated Vegetation Management Program to learn and possible adopt many of the County's policies and practices. Lane County is using mapping and metrics to reduce the need for herbicides and to employ a more strategic approach to invasive weed management, rather than a prophylactic spray regime.

DAS: The agency should make their purchasing criteria very clear. Procurement policies should be open for public comment. We commend DAS for adopting a policy of purchasing "low-impact" pesticides, but has the Agency defined "low-impact" in terms of characteristics that increase risk for children's health and vulnerable populations, increase the use of non-synthetic alternatives and follow the lead of contemporary purchasing policies in other city or state or international governments?

OSU/ODA: The most important action that OSU and ODA could take to achieve the mandate to protect children's health is to redefine the meaning of the term "low-impact pesticide" and reformulate the list of "Low-Impact Pesticides" recommended for use on school properties (pre-schools and K-College). Beyond Toxics members strenuously object to the products and active ingredients placed on OSU's list. We object to the use of glyphosate, 2,4D, Triclopyr, pendimethalin and dicamba on school grounds. We emphatically object to OSU's recommendation of products that mix these two, three and sometimes four toxic active ingredients together in one application. There is no reason to prioritize killing weeds on a school ground over the health of children. These are young Oregonians who spend a bulk of their developmental years on school properties. There is no law that stops OSU from recommending products meet *and exceed* the protective stipulations in Oregon's 2009 School IPM law (SB 637). OSU can consult the US EPA, IARC or the World Health Organization as well as recent peer-reviewed medical science outlining the endocrine disrupting or carcinogenic characteristics of some pesticides, characteristics that were unknown or little suspected in 2009.

ODF: The Agency points to their State Forest Management Policies as a tool for adopting IPM for state forests. These Management Policies are updated periodically. In fact, the Board of Forestry approved the current Policy in July 2018. However, the 2018 State Forest Management Policy omits goals and metrics related to pests and pesticide use, despite years of public comments requesting the adoption of a comprehensive, science-based IPM policy. This omission should be discussed at the IPMCC.

ODFW: The Agency's contributions to the IPMCC Report are noticeably slim. Their efforts seem to be limited to the use of Rotenone to kill undesirable fish species that may out-compete native fish for

habitat and food resources. We ask ODFW to be more proactive. For example, what is ODFW doing to protect listed Critical Salmon Spawning habitats from pesticides known to harm juvenile salmon and trout? Is ODFW partnering with the ODEQ to monitor and assess the impacts of urban, forestry or agricultural chemicals on water quality in these special places?

ODA: ODA is responsible for an array of programs aimed at controlling invasive species, from staffing the Invasive Noxious Weed Control and the Insect Pest Prevention and Management Programs to administering funds to control weeds through the Oregon State Weed Board and Lottery Funds. ODA should be commended for it ongoing programs to keep invasive species in check. Weed control projects can take a long time before achieving eradication goals. Gathering data overtime can measure improvement of IPM programs, one of the required actions in the State IPM statute. Better environmental monitoring, documentation of funding spent and a cost-benefit analysis over the course of time could provide a valuable opportunity to evaluate the efficacy of projects. Questions that could be asked include: Who does the program serve and who is not served; When is a noxious weed also someone's harvestable commodity (i.e., St John's Wort, blackberry); How often does ODA perform an environmental assessment of its preferred pesticide products; How are noxious weed ratings determined and updated; Are weed eradication programs also testing low-toxic and non-toxic practices; do grant programs administered by OWEB or OISC (and other institutions) favor chemical approaches or can there be incentives for developing non-chemical approaches to weed eradication?

ODA describes their early Gypsy Moth Eradication project in Lane County using Btk, a low-impact pesticide. Gypsy Moth treatments continue to occur, the latest one taking place in a sizable geographic area near the St. John's district in north Portland. Using Btk is a lower-risk alternative, true, and ODA should still report on their benchmarks to protect children's health, pregnant women and vulnerable populations. For example, Btk is applied through aerial sprays and the pesticide residue can settle onto playgrounds, school grounds, homeless camps and residential areas, spreading a sticky deposit of chemical on picnic tables, slides and swings, toys, etc. Beyond Toxics is aware of the laudable effort to alert homeless people who camp along the banks of the Willamette and Columbia rivers. However, what measures were taken to reduce the risk of pesticide contact for children and pregnant women? Were schools advised to hose-off their playground equipment? Were pregnant woman advised to stay indoors during and immediately after the aerial sprays? Was a survey of the impacted neighborhoods conducted after the spray to determine the level of community satisfaction or complaints?

In closing, The IPMCC Report has failed to document state agency compliance for many of the requirements outlined in Oregon statute regarding implementing modernized, science-based and protective IPM programs. The IPMCC Report leaves the impression that some state agencies have paid scant attention to their duties under HB 3364 and/or have maintained the status quo of outdated IPM definitions and practices. Some agencies are more involved, but see the requirement to report to the State Legislature as their opportunity to defend the case for pesticide use rather than make the case for improved metrics, science-based product evaluation and protection of at-risk populations. HB 3364 was passed by the State Legislature to take Oregon on a different path and establish this state as a leader in

science-based, health-focused IPM strategies. If state agencies do not take this opportunity to do something different, the people of Oregon will never see better outcomes.

We urge the IPMCC to focus on setting realistic tolerances for pests, reducing toxics in the environment, and prioritizing protecting children's health and environmental resources, particularly water quality. We suggest that the IPMCC refrain from defending status quo approaches to pest management or using any state resources to pursue the plan to report on "The Cost of Doing Nothing." Good IPM policies and practices are effective and are not associated with "doing nothing."

Beyond Toxics hopes that the IPMCC, under the coordination and leadership of the State IPM Coordinator at Oregon State University, will accept and integrate the constructive criticisms offered in our comments. We hope for more transparency and public engagement in achieving the intent and legal requirements of HB 3364. Rather than being fearful of keeping good records, setting benchmarks and sharing data, agencies have a responsibility to consult and engage with the public and concerned advocacy groups when their actions are perceived as impacting public health and environment protections.

Respectfully submitted by,

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BEYOND TOXICS

Leadership For a Clean and Just Oregon