

HOUSE BILL 3364

Context and supporting data
May 13th, 2013

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With reference to a survey of state agencies and a presentation to the
Environment and Water Committee, December 4th 2010 by Lisa
DeBruyckere and Paul Jepson

Summary

- How is IPM coordinated between federal agencies at the national scale, and does it work?
- Are there good, local examples of legislative actions that enabled greater cooperation and progress in IPM?
- What does the IPM Bill set out to do?
- What kind of educational and IPM resources might be mobilized by OSU – just one of the partners?
- Does OSU support this, and might it invest resources in success?

National IPM coordination

- National IPM Committee purpose - status of IPM at national and state levels, review programs, respond to IPM issues
- Representatives of IPM coordinators, Regional IPM Programs, federal agencies, government departments, funding agencies
- Improvements in impacts, efficiency, effectiveness, resources – agriculture & natural resources, built environment, sensitive sub-populations, regulatory affairs etc....
- Goals and metrics set by National Roadmap for IPM – very wide stakeholder input, listening sessions, transparency, reporting
- Now – 1 meeting a year, but also a continuously functioning network

HB 3364 establishes an analogous forum and process in Oregon

A good local example of IPM partnerships

Oregon School IPM law

Need became far more apparent after Bill passed than before

Success depends upon effective partnerships across many agencies and associations

All timelines met or exceeded, metrics developed

School IPM becoming a reality now, rather than just a theory, or a box that is ticked with no verification

Shows that the legislature was correct to expect more than:
“We are already doing IPM, and the Bill is not needed”



IPM in Schools

Asthma: 4.8 million kids - U.S., estimated \$8 billion cost, #1 cause of absenteeism

(mice - common asthma trigger, cause other unrecognized illnesses)

2010 OSU Online Survey Results: 93% response rate (184 out of 197 districts)

-Most frequently reported indoor pest: Mice 53%

-Top reported cause of problem: Don't know

-Districts having/using IPM plan: 7 (4%)

Comprehensive Assistance to School Districts:

-IPM Coordinator training **2012: 182 out of 197 school districts' trained (1,270 of Oregon's 1,295 public schools)**

-Model IPM Plans, educational materials

2013 survey in process: 75% use OSU plan; 94% now use non-chemical methods, 69% have a monitoring schedule, 80% have a low impact pesticide list

Collaboration with multiple entities:

-OSFMA, OSBA, PACE, OESDA, OPCA, ODA, NCAP, OSSOA, OSNA, OHA, OEC, DOE, COSA, OASBO, OEA, OEHA



HB 3364

Responds to specific needs within agencies

Coordinates response as a collaborative inter-agency activity

Develops comparable metrics and integrates results across a number of agencies and statutes

Establishes mechanism for capacity building, resourcing

Enables exchanges of ideas and professional expertise, and accesses other relevant networks, working groups and resources

Enables recognition of excellence where it exists

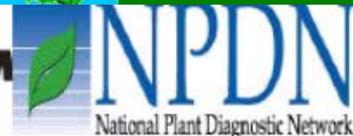
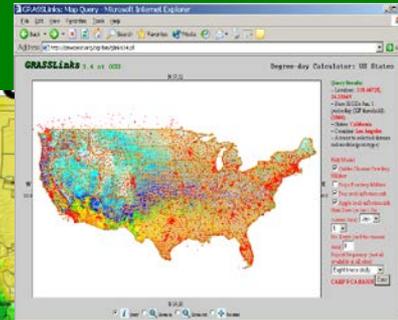
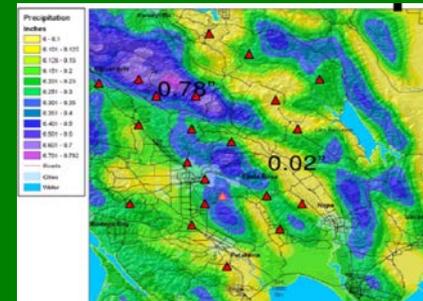
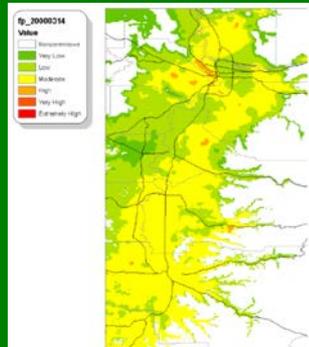
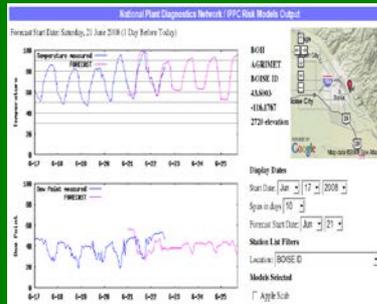
Acknowledges that pest management technologies, capacities and approaches are constantly evolving and that we all need regular re-treads

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Automated mesoscale pest risk forecast maps for potential plant biosecurity threats: the new world of IPM

Having IPPC partner with state agencies engages other, important and relevant networks



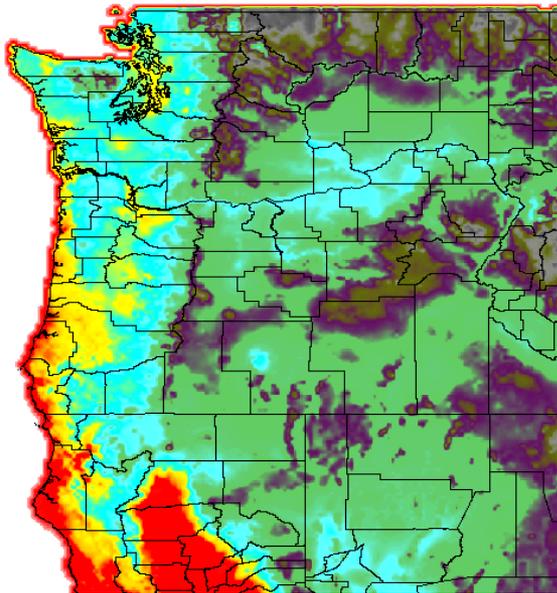
Spotted Wing Drosophila – Model of Overwintering Mortality

The hotter the color, the greater the survival

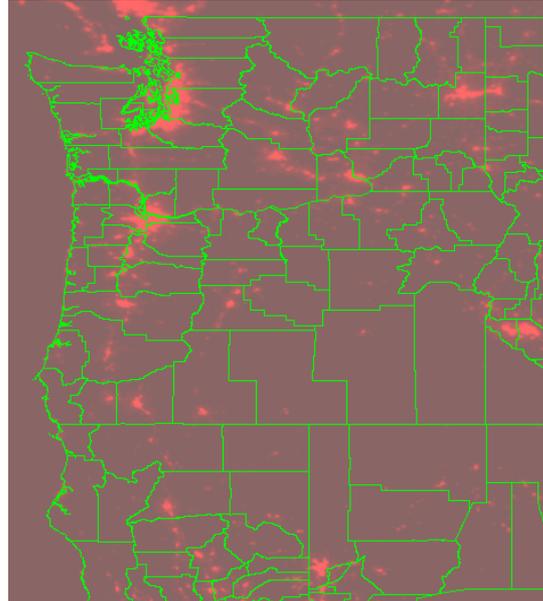
Chilling DDs (<53F)

Refuge Factor (Rf) 15% to 60%
Reduction in chilling DDs

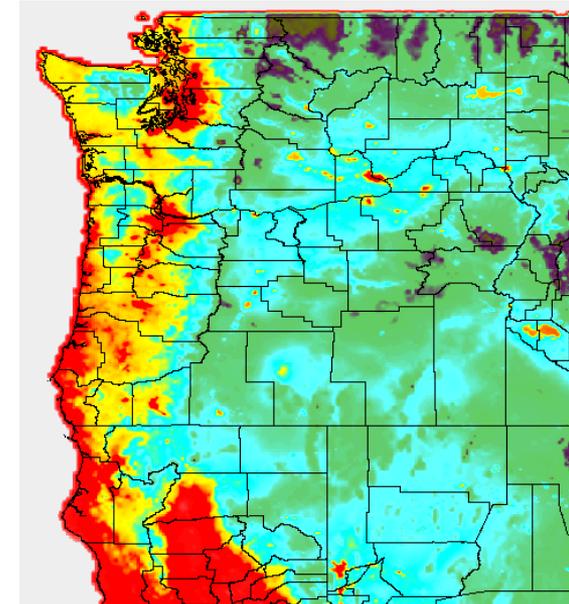
Combined Model



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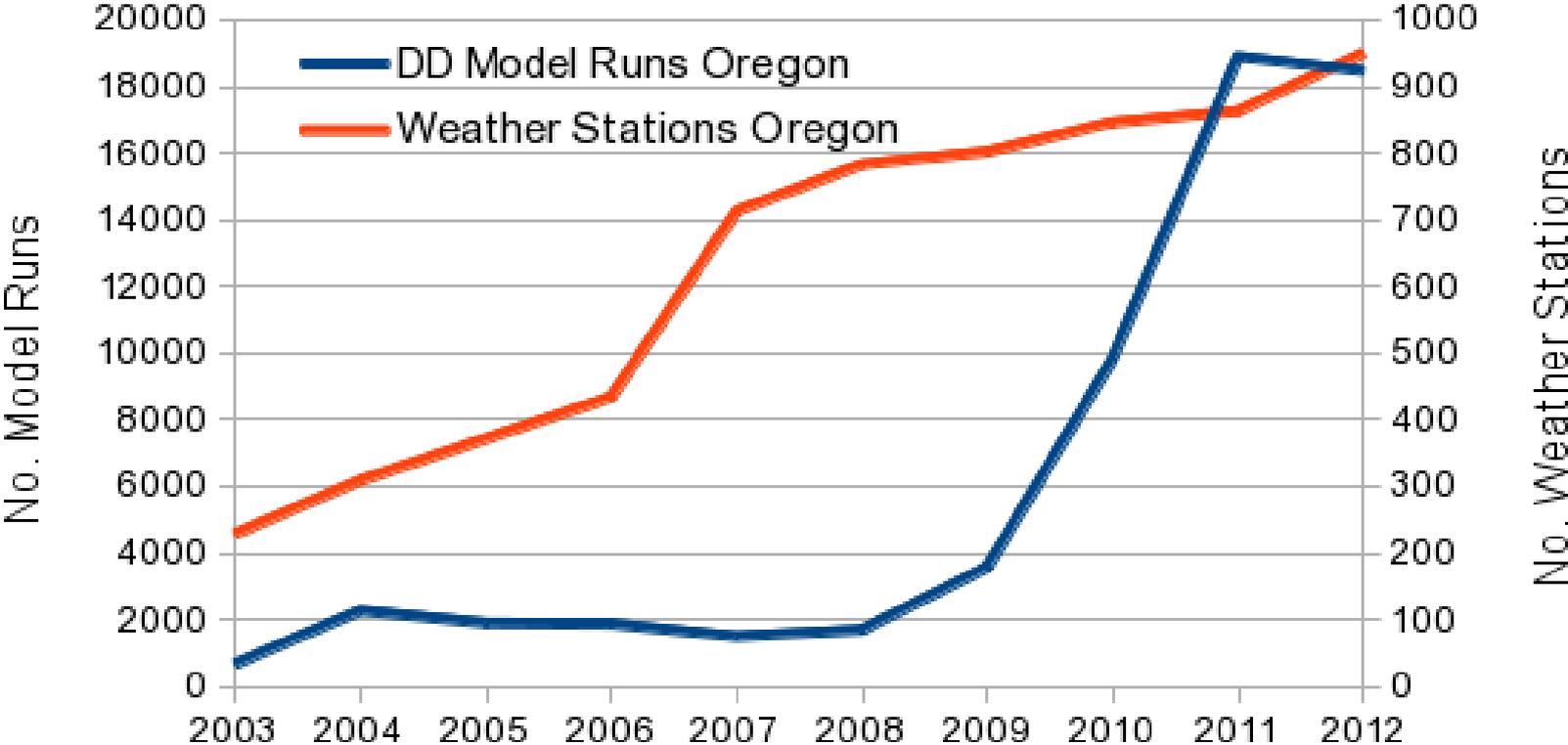
E.g. Warmer patches in the Valley enable greater over-wintering survival of noxious pests – this affects timing and placement of traps, interpretation of monitoring data, prediction of future problems, management tactics.

Opportunities for state-of-the-science tools, developed first with our farmer partners, to be deployed by state agencies??

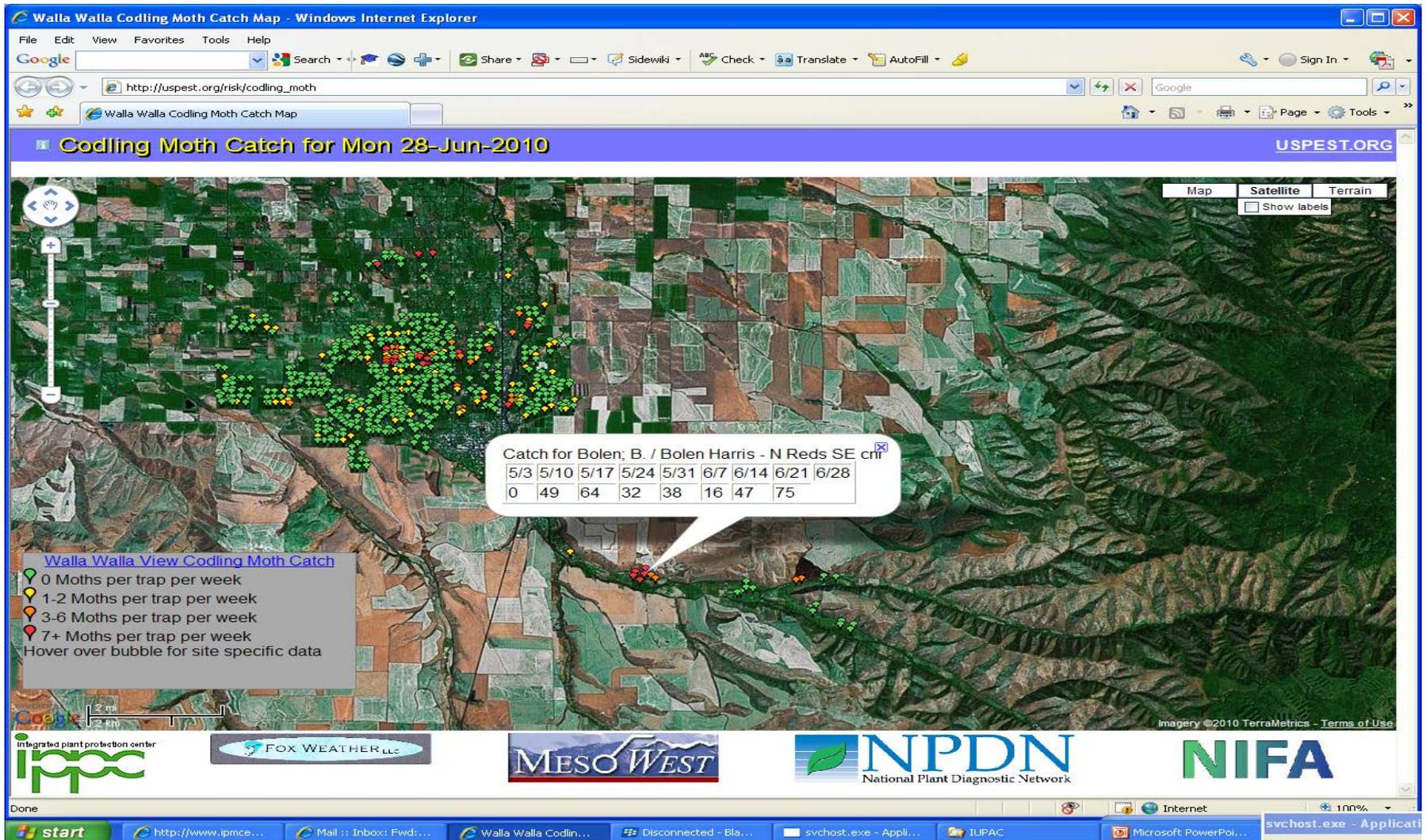
Use of state-of-the-science climate and weather-based epidemiological tools is exploding among farming audiences, transforming IPM

USPEST.ORG Degree-Day Models - Oregon

DD Model Runs (partial accounting) and No. Weather Stations

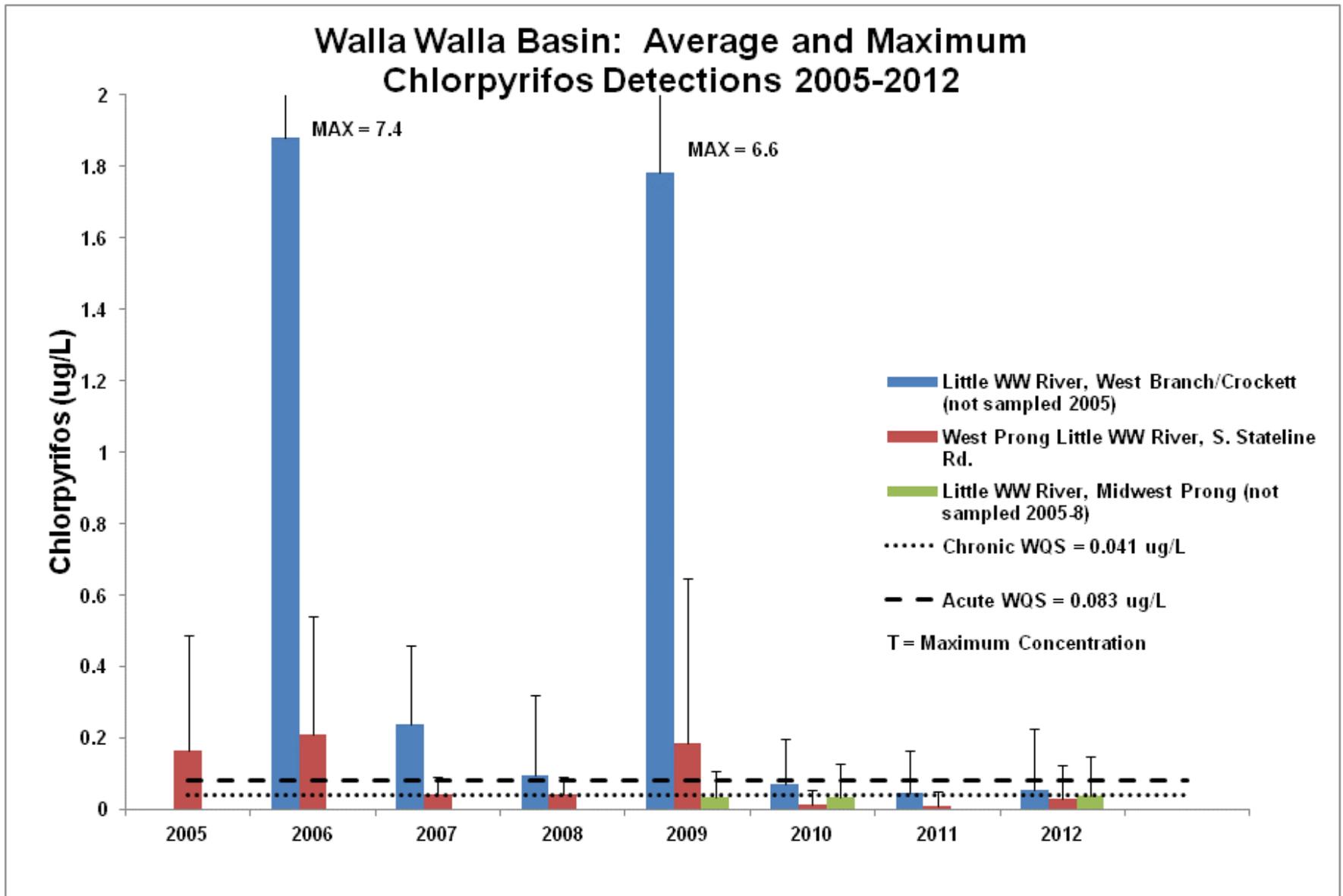


Real-time monitoring of pest epidemics focuses attention on field-by-field decision making



http://uspest.org/risk/codling_moth

Data from ODEQ Pesticide Stewardship Partnership, Walla Walla Basin
Use of decision support tools and BMPs enables risk reduction



We propose development of a map-based system of reporting IPM metrics similar to one that IPPC already makes available to six, West African republics

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GEF Map

http://bee-20noviembre.bioe.orst.edu/Gef000/Members/GefMap.aspx

ResearchGate ResearcherID jepson Presentations Mendeley Apple Fellowships News Google Calendar Popular Agrow Facebook LinkedIn Evernote PRIME

GEF FAO WEST AFRICA INFORMATION

Welcome jepson ! [Log Out]

Home GefMap Stats Overview Admin Admin Locality Admin Product Admin Overview

Prime LifeLine Survey **Monitoring**

GET LOCATION INFO

- BENIN
- GUINEA
- MALI
- MAURITANIA
- NIGER
- SENEGAL**

- AERÉ LAO
- BOUNDUM
- DAGANA
- GALOYA
- LAC DE GUIERS
- PONT GENDARME**
- Canal de drainage

RBMonitoring

Canal de drainage
LocationID: 191
CountryName: Senegal
LocalityName: Pont Gendarme
LocalityId: 18
Description: null

ChemName	CASNr
4,4'-DDT	50-29-3
alpha-Chlordane	5103-71-9
Heptachlor	76-44-8
Hexachlorobenzene	118-74-1

Map Satellite

Morocco Marrakesh Algeria Mali Niger Burkina Faso Guinea Senegal Mauritania The Gambia Guinea-Bissau Cape Verde

St Louis Dakar Tivaoune Touba Kaedi Kiffa Kédougou Ziguinchor Nouamghar Benich Tidjikja Guérou Néma Ayou el Atrous Adel Ba

Sanam Tahoua Abalak Bouza Zinder Maradi Difa Maiduguri Sokoto Zaria Kaduna

Bobo-Dioulasso

Scope and importance of IPM within OR state agencies

Problems	Critical issues	Stakeholders
Non-native fish and other invasive species in streams, rivers, estuaries, agriculture, forests	Ecological function, T&E species, biodiversity legacy	All current and future state citizens; recreation; globally significant habitats
Disease vectors, parasites, vermin	Human and animal health and well-being	All citizens, particularly vulnerable populations
Rights-of-way weeds, burrowing mammals, feral swine, forest and agricultural pests	Trade and commerce, export markets, productivity and food security	Producers, consumers, business

Summary

- 2010 survey identified diverse pest problems, >50 statutory authorities; numerous models for IPM implementation; obsolete definitions; diverse language about IPM and performance metrics; variable frequencies, currencies and modes of review; significant expenditures; evidence for significant benefits; limited and variable training
- HB3364 will enable these to be addressed gradually, within a cost-effective resource plan
- OSU is providing 10% of the IPM Coordinator FTE and a match to the small proposed appropriation
- The IPM Coordinator has already sought to double this in an application to USDA, April 16th – server, maps, databases, capacity building, cooperative, participatory processes.