Western IPM Center

Project Report Form

How to submit: Please submit your completed report electronically, as an attached Microsoft Word file, to Jane Thomas at jmthomas@tricity.wsu.edu. If you have questions, contact Linda Herbst, (530) 752-7010. **Content:** Reports should follow the outline below and include responses to as many of the questions listed in Attachment A as are relevant to your project. *These are guidelines.* Provide your readers with enough detail that someone who is not familiar with your project can understand what you were trying to achieve, how you went about it, and what you accomplished, but please keep it concise.

A. Report Data

Date: 3/10/2010
Reporting Period: 1/1/2008-12/31/2009
Report Type (please check one):
☐ Progress Report ☒ Final Report

B. Grant Data

- Grant Agreement #: 07-001492-WA2(WASH9)
- Title: 2008-9 PNW Work Group on Agricultural IPM Issues
- Grant Type: work group
- Lead investigator:
  - Name: Catherine H. Daniels
  - Title: Pesticide Coordinator
  - Institution: Washington State University
  - Address: 2606 W. Pioneer, Puyallup, WA 98371
  - Phone: 253-445-4611
  - Fax: 253-445-4569
  - Email: cdaniels@wsu.edu
- Team members (name, title, institution): Tom Jahns, Extension Specialist, University of Alaska-Fairbanks; Ronda Hirnyck, Pesticide Coordinator, University of Idaho; Ed Bechinski, IPM Coordinator, University of Idaho; Barry Jacobsen, IPM Coordinator, Montana State University; Erin Hodgson, Extension Entomologist, Utah State University; Jeff Jenkins, Toxicologist, Oregon State University; Paul Jepson, IPM Coordinator, Oregon State University; Earl Creech, Weed Specialist, University of Nevada-Reno; and Jane Thomas, Regulatory Information Coordinator, Washington State University
- State(s) involved: AK, WA, OR, UT, MT, ID

C. Nontechnical Summary. An overview of the project, briefly outlining the problem(s), how your project addresses them, and your results, *written to a lay audience.* (500 words)

The Pacific Northwest (PNW) and its neighboring states Montana and Utah cover approximately 1.04 million square miles. Together, these states produce a large portion of our nation's diverse food and feed products, including more than 250 different minor crops that, in 2006, contributed to a total annual value of agriculture approximating $12.6 billion. Production issues such as agriculture's impact on human health, water quality, air quality, food safety, and endangered species affect growers in similar ways throughout this region. Representatives from each of these six states have formed a functional and highly productive work group, the function of which is to focus on regional collaborations that enhance adoption, measurement, and/or creation of methods that promote integrated pest management (IPM) in agricultural settings. Formation of this regional Work Group has allowed member states to maximize expertise and leverage resources over a wide geographic area as well as across project types. Based on the premise that networks successfully function when they are actively engaged, the overall goal of this proposal was to maintain a flexible and functional Work Group through structured meetings and joint activities.

Funded activities, over a two-year period, included multi-state participation in: four new (Hops, Organic Potato, Christmas Trees, and Bivalves) and one revised (Caneberry) regional Pest Management Strategic Planning (PMSP) Workshops; five planning meetings (via teleconference or in person); submission of eight regional Comment Coordinator packets; submission of one regional grant proposal focusing on IPM and water quality ($70,000); planning and participation in three International IPM Symposium sessions; and, publication of one poster, one abstract, and one scholarly paper. A second paper has been submitted to the Journal of Extension. In addition, a cooperative partnership with the regional Water Quality (WQ) team was formalized by placing a liaison from the PNW work group on the WQ team.

The result of funding these activities is that: growers in five commodities now have an officially recognized stakeholder document which lists their priority needs; EPA has eight information packets that provide actual data on specific pesticide use and/or usage in our area which they will use to better refine their pesticide review process; USDA, through the Western IPM Center, is able to be more supportive (via grant or regulatory assistance) of minor crop issues; and, personnel at participating universities are better positioned to systematically address stakeholder-identified problems.

D. Objectives and Progress. List your objectives and describe your progress for each objective.

Objective 1. Continue a regularly scheduled meeting format which allows for timely prioritization of regional issues and PMSPs, group discussion on joint projects of interest, and methods through which we can further the IPM Roadmap among PNW member states.

Objective 2. Continue to interact with other states engaged in IPM programming. The purpose of this meeting format is to identify areas of common interest with other states or regions so as to increase synergy. The quickest and most proven method to accomplish this is attendance at IPM symposia or meetings for the purpose of professional development, organized discussion of projects with other IPM professionals, and active group planning of IPM projects we propose to submit to funding agencies.

Objective 3. Continue to establish linkages between PNW Work Group members and other groups that can influence IPM adoption.

Progress: Funding was used to hold three quarterly teleconferences and one face-to-face meeting each year. Teleconference timing was chosen to allow maximum responsiveness for prioritization and project planning. Representatives from each state were invited, as were IPM Coordinators that were not officially part of this group. The WIPMC Assistant Director was invited to provide an update at each meeting and to obtain group feedback, if she chose, on any topic related to IPM. Topics of discussion included: possible formation of a pesticide resistance action committee for Region 10; incorporating FRAC/IRAC codes into the PICOL database; development of a pilot project to build regional IPM guides; reports on collaborations with the 406 Water Quality regional team; development of posters for the 6th International IPM Symposium; development of a presentation (and abstract) during the same symposium highlighting the PNW collaborative efforts; and, prioritization of regional PMSPs. Meeting minutes were taken and distributed for the benefit of those who had schedule conflicts. One face-to-face meeting included presentations from the UC Davis IPM program, after who our work group was considering modeling regional IPM guides. The second face-to-face meeting was held in conjunction with the 6th International IPM Symposium, allowing members to both demonstrate (e.g. poster and speaking slot) our geographic work group model to other IPM practitioners, and to learn about other successful models from other IPM-practicing groups. In addition, PNW work group members also attended WERA-069 meetings, and reported back to members about the concerns and pursuits of that IPM group. Lastly, a cooperative partnership with the regional Water Quality (WQ) team was formalized by placing a liaison from the PNW work group on the WQ team.

E. Outputs. List your project's outputs, which might include publications, information, data, meetings held, attendance at meetings held, etc.

- Multi-state participation in four new (Hops, Organic Potato, Christmas Trees, and Bivalves) and one revised (Caneberry) regional Pest Management Strategic Planning (PMSP) Workshops
- Five planning meetings
- Multi-state participation in eight regional Comment Coordinator packets
- Multi-state participation in submission of one regional grant proposal focusing on IPM and water quality ($70,000)
- Multi-state participation in planning and participation in three International IPM Symposium sessions
- Publication of one poster, one abstract, and one scholarly paper. Submission of a second scholarly paper.

F. Impacts and Potential Impacts. The "impacts" and "potential impacts" sections of your report will help the Western IPM Center highlight the value of IPM research and education by detailing the real-world impacts of Center-funded projects. We will use the information in news articles, reports, and informational brochures to showcase the impacts of projects that our program supports. *See Attachment A at end of form for questions to assist you in describing the impacts of your project.*

1. Impacts. Describe any impacts of your work. ***Impacts*** are specific changes in condition for those affected by your work. Impacts include adoption of technology, creation of jobs, reduced cost to the consumer, less pesticide exposure to farmers, access to more nutritious food, and a cleaner environment and healthier communities.

Collaboration among IPM workers in this six-state area has increased as a result of funding this project.

Researchers in five commodities now have access to an official and up-to-date stakeholder list of research and extension priorities.

EPA now possesses real world data on specific pesticide use and/or usage with which to make more refined chemical reviews.

2. Potential impacts. Describe your project's potential impacts. ***Potential impacts*** are the ways that your project's outputs could directly lead to changes in condition that will unfold in the future.

- PNW growers will increase their knowledge about IPM practices.
- PNW growers will increase adoption of IPM practices.
- PNW grower priorities will be clearly recognized by regulatory agencies.
- USDA will be able to be more supportive of minor crop issues.
- Multi-state university Extension and research programs will be better positioned to systematically solve stakeholder-identified problems.
- Land-grant university personnel in other regions of the country will emulated the adaptive feedback mechanism used by this geographic work group

G. Appendices

1. With your report, please attach ***at least two (2) photographs*** that illustrate your project. Please describe the photo and indicate the name and institution of the person who took the photo. (If you submit more than two photographs, please include those additional descriptions and photo credits under "H. Additional Information," below.)

Photo #1 description:

no photos

Photo #1 credit (photographer's name and institution):

Photo #2 description:

Photo #2 credit (photographer's name and institution):

2. Also attach any printed fact sheets or other publications resulting from your work that will enhance our understanding of your project and its impacts. Please provide a description of each attached publication below.

Document #1 description:

http://www.joe.org/joe/2009august/iw6.php JOE article on the PNW Work group

Document #2 description:

http://www.ipmcenters.org/ipmsymposium09/Final_Presentation_Abstracts.pdf (see #63 for mini-session about PNW Work group)

Document #3 description:

http://www.ipmcenters.org/ipmsymposium09/Final_Poster_Abstracts.pdf (see Poster 074 on the PNW Work group)

H. Additional Information

Credit: *Some of the language about impacts and potential impacts was adapted from a PowerPoint presentation by H. Michael Harrington, Executive Director, Western Association of Agricultural Experiment Station Directors, Colorado State University.*

Attachment A

Questions to Help in Reporting Impacts and Potential Impacts

Below are some questions that will guide you in assessing and then describing the impacts and potential impacts of your project. The relevance of each question may vary depending on whether yours is a research or extension project. Please answer as many as you can to the best of your ability, and feel free to describe any additional types of impacts not mentioned below. Remember to identify any potential impacts.

1. ***Innovations in IPM:***
   Are there new IPM practices that have been (impacts) or could be (potential impacts) adopted as a direct result of your project? What is the total number of acres (or homes, schools, greenhouses, nurseries) on which these practices could realistically be implemented?
2. ***Safeguarding human health and the environment:***
   a. Has the project reduced risk (or could it potentially do so) by changing the use of pesticides on farms, in homes, in schools, etc.? For example, could it result in fewer sprays per season or a switch to lower-risk pesticides? If possible, quantify the changes in condition. (Since there is no unanimous definition of *high* and *low risk,* investigators selecting this indicator are asked to categorize the pesticides they are reporting on as *high* or *low risk* according to the particular situation [e.g., lower risk to natural enemies]).
   b. Are there any other impacts or potential impacts on human health or the environment as a result of your project?
3. ***Economic benefits:***
   a. What is (or could be) the economic benefit (e.g., dollars saved) for clientele who adopt IPM strategies and systems you studied? Do you envision potential commercialization or mass production of these systems?
   b. How many clients are satisfied with IPM results (such as improved yield, improved quality of yield, reduced pest populations, more effective pest control, greater preservation of nonpest species)?
   c. Are there other financial benefits that might be realized (potential impact) as a result of your project?
4. ***Implementation of IPM:***
   a. How many IPM strategies and systems have been validated through this project (e.g., through on-farm trials, large plot tests, or other methods used to confirm efficacy)?
   b. How many educational materials were delivered? To whom? And what are the impacts or potential impacts?
   c. What is the number of growers/personnel trained? And what are the impacts or potential impacts?
   d. For a Web site, what volume of traffic and type of use has the site experienced? (For example, number of visitors per day or month; number of page views; number of unique user sessions; change in volume during growing season; average viewing time.) And what are the impacts or potential impacts?
   e. How many more people adopted IPM practices as a direct result of your project, or how many people adopted new IPM practices?
   f. Are there other ways in which your work will result in improved use or increased implementation of IPM strategies in your region or across the West?
5. Has your project or study increased collaboration among stakeholders interested in the development and implementation of improved IPM strategies and systems?