

**State and Private Forestry  
FY 2010 Western Competitive  
Resource Allocation  
Single-State Project Proposal**

Filename	
10_form_WA SOD detection VerSept28_09.doc	
Administration Information	
Dollar Amount Requested:	<b>\$300,000</b>
Matching Share:	<b>\$300,000</b>

Applicant Information	
<b>State Forestry Agency:</b>	Washington Department of Natural Resources (WA DNR)
<b>Contact Person:</b>	Karen L. Ripley
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Project Information			
<b>Descriptive Title of Project:</b>	Phytophthora ramorum (SOD) early detection and technical information		
<b>Names of Partnering Agencies / Organizations:</b>	Washington Dept of Natural Resources (WA DNR), Washington State Dept of Agriculture (WSDA), Washington State University - Puyallup (WSU), Oregon Department of Forestry (ODF), Oregon Department of Agriculture (ODA), California Department of Fire and Forestry (CalFire), University of California Extension - North Coast (UC), California Department of Food and Agriculture (CDFA).		
<b>State(s):</b>	WA, OR, CA	<b>Congressional Districts:</b>	WA: 1, 2, 3, 6, 7, 8 and 9; OR: 1, 3, 5 and 4; CA: 1
<b>Counties:</b>	Western WA; Western OR; Northern CA	<b>Forest Service Regions:</b>	6, 5

Total Leverage							
Please specify each 3 <sup>rd</sup> party contributor (partnering organizations and agencies, including other Federal) and the dollar value of each contribution. Please DO NOT show grant requested funds in this table.							
<b>Contributors:</b> (Please specify by name)	ODF	CalFire	WSDA	WA DNR	WSU Puyallup		<b>TOTAL</b>
<b>Value of Contributions:</b>	\$2,800,000	\$70,000	\$417,635	\$80,000	\$105,692	\$0	<b>\$3,473,327</b>

Project Budget					
	Grant Share (\$ requested)	Applicant	Non-Federal Contributors	TOTAL	
		Cash <sup>1</sup>	In-Kind <sup>2</sup>		
4	<b>Personnel / Labor:</b>	\$43,180	\$0	\$0	<b>\$43,180</b>
	<b>Fringe Benefits:</b>	\$12,065	\$0	\$0	<b>\$12,065</b>
	<b>Travel:</b>	\$5,715	\$0	\$0	<b>\$5,715</b>
	<b>Equipment:</b>	\$0	\$0	\$0	<b>\$ 0</b>
	<b>Supplies:</b>	\$2,540	\$0	\$0	<b>\$2,540</b>
	<b>Contractual:</b>	\$225,000	\$0	\$0	<b>\$225,000</b>
	<b>Construction:</b>	\$0	\$0	\$0	<b>\$ 0</b>
	<b>Other:</b>	\$0	\$300,000	\$0	<b>\$300,000</b>
	<b>Indirect Costs:</b>	\$11,500	\$0	\$0	<b>\$11,500</b>
	<b>TOTAL:</b>	<b>\$300,000</b>	<b>\$300,000</b>	<b>\$ 0</b>	<b>\$600,000</b>

Project Duration	
5	What is the duration of this project? <input type="checkbox"/> One Year <input checked="" type="checkbox"/> Two Years <input type="checkbox"/> Three Years

National Relevance	
6	Conserve Working Forest Landscapes <input checked="" type="checkbox"/> Protect Forests From Harm <input checked="" type="checkbox"/> Enhance Public Benefits From Trees and Forests <input checked="" type="checkbox"/>

Project Description	
7	<p>Maximum 5500 Characters Including Spaces – Clearly summarize the proposed project, including goals, objectives, measurable outputs, outcomes, and how grant funds will be used towards successful completion of the project.</p> <p>The goal of this project is to detect and monitor Phytophthora ramorum, the organism that causes Sudden Oak Death (SOD), in high risk areas of the West Coast. Collaborators will work with partners to identify sites and conduct stream-baiting and ground surveys according to USDA Forest Service Forest Health Monitoring (FHM) National SOD Survey protocols and to provide education and technical assistance support to stakeholders in western Washington, western Oregon and northern California. Results will be reported to FHM along with the National SOD Survey results. Washington DNR (WA DNR) will establish interagency agreements to fund the work in Oregon and California. WA DNR will use its Consolidated Payment Grant authorities to provide the balance of "match" to result in 100% match of federal funds.</p> <p>In Washington, currently the FHM National SOD Survey provides funding for P. ramorum stream baiting on the 10 highest priority sites adjacent to nurseries and/or the Sammamish River. This proposal does not replace the existing FHM efforts. It expands water monitoring sampling to additional high priority sites that are not covered by FHM funding and also provides for educating the public and citizen volunteers in order to develop a more comprehensive detection and prevention program. In a collaboration between Washington State University (WSU), Washington State Dept of Agriculture (WSDA) and WA DNR, 20 sites on at least 10 different waterways will be selected and monitored for approximately six 2-week sampling periods in 2010 or 2011. Samples will be analyzed</p>

<sup>1</sup> 'Cash' is the value of any qualifying match the applicant pays for such as cash, staff time, supplies, or equipment.

<sup>2</sup> 'In-Kind' is the value of any qualifying match contributed by a non-federal 3<sup>rd</sup> party contributor such as donated time, supplies, or equipment.

by WSDA Plant Pathology and Oregon State University (OSU) Laboratories. Timely follow-up ground surveys and sample processing to search for infected plants in the vicinity of positive detections are anticipated for two to three sites if needed. Samples will be shared with WSU for genetic identification. Some direct costs of grant oversight will be applied.

OR: Budget \$100,000. The proposal expands and intensifies early detection of *P. ramorum* by stream baiting and ground surveys. The purpose is to detect *P. ramorum* early enough to allow effective eradication treatments in the California border area. The proposal will establish at least 10 stream bait sites on private and federal land in addition to the existing FHM National SOD Survey sites, and will conduct ground surveys on approximately 1,200 acres of forest land. Stream baiting sites will be monitored for 6 months in 2010. In Oregon, early detection of *P. ramorum* by stream baiting is supported in part by an FHM grant for participation in the National Survey program. Ground surveys, whether related to stream bait detection or not, are essential for early detection and presently are poorly supported. All samples will be processed at OSU and shared with the Oregon Department of Agriculture (ODA). Some match will be provided by Oregon Department of Forestry (ODF).

CA: Budget \$100,000. This proposal will expand and further intensify the essential early detection of *P. ramorum* by stream baiting and ground surveys on the northern edge of the infestation area in NW California. The pathogen is spreading northward in California. The Mendocino, Humboldt and Del Norte County areas represent the critical gateway to the Pacific Northwest. Early detection in this area is essential for the viability of the Oregon eradication efforts. Additional stream monitoring sites in this region will be added to the network of sites currently funded by FHM National Survey. Based on results of this monitoring, the funds will be used to: 1) coordinate responses to new spot infestations outside of the known *P. ramorum* perimeter in Humboldt County; 2) assist in providing technical assistance to resource managers, industry groups, and landowners to develop realistic goals for managing *P. ramorum* on their properties; and 3) educate residents, industry groups, land managers, and organizations in the three-county area (Mendocino, Humboldt, and Del Norte) about *P. ramorum* to maintain awareness of the pathogen's potential impacts and help prevent artificial spread. Samples will be processed at University of California (UC) and shared with the California Department of Food and Agriculture (CDFA). Some match will be provided from UC and California Department of Fire and Forestry (CAL FIRE).

## Program Integration

### Maximum 1250 Characters Including Spaces

These detection and outreach efforts will integrate fully with the Forest Service FHM National SOD Survey and reporting protocols. Results from early detection surveys will support state and federal quarantines.

Grant administration will be overseen by WA DNR through interagency agreements with ODF and UC, improving efficiency because only one federal grant will be required.

**8** This project is related to SOD monitoring and education, so can be funded 100% either SPS5 and/or SPCH.

The presence of SOD (or fear of its presence) has serious potential consequences for nearly all forest landowners and, thus, all State and Private Forestry programs. Tree Improvement nurseries are already affected by regulations to ensure that *P. ramorum* host material and soil are disease-free. Urban Forests are likely bridges between horticultural nurseries (frequently implicated in transport of *P. ramorum*) and the forest environment. Urban Forestry programs have a critical role to train arborists and educate the public. Landowner Assistance programs assist non-industrial private forest landowners and provide information and training. *P. ramorum* kills OR and CA trees, increasing fire risk and the need for Fire Prevention and Preparedness programs.

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## Collaboration

	<p><b>Maximum 1250 Characters Including Spaces</b></p> <p>Collaboration between the three states involves sharing methodology, information, and technical assistance products. WA DNR will provide the balance of match required because successful detection efforts in the other states potentially increase our confidence in stream-baiting as a reliable P. ramorum detection tool, increase our understanding of the implications of individual positive stream-bait samples, increase our capacity to share high-quality outreach materials, and provide results that potentially affect sound trade decisions and quarantines.</p> <p>Within each state and between states, confirmed observations of P. ramoram are quickly reported to regulatory, academic, and forestry organizations. Across the states, agencies and cooperators integrate their research capacities, share facilities for sample processing, and share new observations. In hopes of identifying sources and pathways of P. ramorum, positive samples collected in WA and OR all receive molecular analysis to identify the genotypes of the pathogen.</p>
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<p><b>10</b></p>	<p><b>Leverage</b></p>
	<p><b>Maximum 1250 Characters Including Spaces</b></p> <p>This proposal leverages the authority of Washington's Consolidated Payment Grant to support important P. ramorum detection efforts across western states, even if local funding is insufficient to provide required match. Partners will provide and document match as able. Many stakeholder groups, industries, agencies and the public share the goals of early detection and rapid response to P. ramorum. They rely on state academic, regulatory, and forestry agencies to implement effective programs.</p> <p>Oregon's leveraged funds of \$2.8 million represent federal funds for host removal to control disease spread in 2009-2010. This is part of a coordinated effort among the USDA Forest Service (USFS), USDI-Bureau of Land Management (BLM), private landowners and several agencies and organizations. The USFS and BLM fund eradication treatments on their ownerships. The location of host removal projects is based on early detection surveys. Del Norte County is the northernmost coastal CA county and it presently is not infested with P. ramorum. The proposal requests funds specifically to expand/intensify early detection efforts in southern Curry County near the California border in order to prevent spread from OR into CA.</p>

<p><b>11</b></p>	<p><b>Meaningful Scale</b></p>
	<p><b>Maximum 1250 Characters Including Spaces</b></p> <p>Although each western state has a slightly different circumstance with respect to its P. ramorum occurrence and detection efforts, all share the goal of identifying if/where P. ramorum is present in the aquatic or forest environments. The spread of this pathogen into the landscape will trigger a series of quarantines that will have significant economic impact on the horticultural and forest industries across the US. The salal and evergreen huckleberry greenery industries could be completely closed. Stream monitoring is an efficient way to assess broad landscapes for the presence of P. ramorum. The information that will be gained from these detection and outreach efforts is: 1) critical to describing locations that we believe are not currently infested with P. ramorum; 2) aids rapid delimitation of infected sites; 3) predicts environmental impacts of an infestation; and 4) provides timely information to support reasonable quarantines and rapid response if needed. Although there are not sufficient resources available to support detection efforts at every desired site in the west, these funds will significantly contribute to increased capacity for rapid detection and broaden knowledge of P. ramorum's current distribution.</p>

<p><b>12</b></p>	<p><b>Sphere of Influence</b></p>
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	<p><b>Maximum 1250 Characters Including Spaces</b></p> <p>P. ramorum infects over 100 host plants, causes a variety of serious plant diseases, and can easily be transported in soil, water, and infected plant material. Additional information about the occurrence of P. ramorum is critically important to the US because many states have vegetation and climates that are at high risk of damage from P. ramorum. Additional information about P. ramorum distribution, persistence in the environment, and pathways/modes of dispersal are very important across the US and to its trading partners. WA, CA, and OR have been leaders in P. ramorum detection and response activities since the organism was initially detected and described in 2000 in CA. Expanding the area that stream baiting is deployed to increase our knowledge of where it occurs will provide information that is of value to a much wider area than simply these three western states. We will share results with the monitoring community (USDA Forest Service Forest Health Monitoring - FHM), research organizations (example: WSU effort to document the genetic identity of P. ramorum strains and establish introduction/spread pathways), and state regulatory agencies such as CDFA, ODA, and WSDA.</p>
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<b>Sustainability of Outcomes</b>	
<b>13</b>	<p><b>Maximum 1250 Characters Including Spaces</b></p> <p>The results of these detection efforts will increase knowledge of P. ramorum's current occurrence in the western states. Although this snapshot of knowledge has only temporary utility, the additional operational use of stream monitoring and ground surveys, increased understanding of the effectiveness and limitations of stream-monitoring, provision of diverse samples for research efforts, and capacity of stakeholders and the public to participate in detection efforts have lasting impacts that can benefit or be adopted by many other organizations across the country.</p>