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Spread of *Phytophthora ramorum* to water, soil, and vegetation outside a nursery in Pierce County, Washington

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Since its initial detection in a nursery in 2003, *Phytophthora ramorum* has been found in 48 nurseries, four streams, and three drainage ditches in Washington. In 2004, *P. ramorum*-positive plants were confirmed at a Pierce County nursery. For four years the nursery was inspected and no additional *P. ramorum* was detected, however in 2009 symptomatic plants again tested positive and genotype analysis indicated that both the EU1 and NA2 lineages were present on multiple plants, sometimes in the same lesion. In the spring of 2009, infested ditch water as well as infected salal (*Gaultheria shallon*) was confirmed along the perimeter of the nursery. The furthest infected plants were down the ditch, about 400 feet from the nursery. Genotype analysis of twelve salal samples and one water sample detected only the NA2 lineage. The positive salal along the ditch was removed early fall 2009. In 2010, additional plants were positive on the nursery, and ditch water continued to be positive along the perimeter of the nursery. Composite soil samples collected from along the ditch were also positive in 2010; making this the first location in Washington with evidence that inoculum has spread from a nursery resulting in contamination of water and soil and infection of natural vegetation. With the exception of one NA1 water sample, all samples genotyped in 2010 from the perimeter of the nursery were of the NA2 lineage. This site continues to be monitored by regulatory agencies.