

## **Endothall Use in Irrigation Canals for Sago Pondweed Control**

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The task of controlling aquatic vegetation in irrigation canals is an extremely important venture, especially in the western United States. The waters supplied by these canals are the primary, and in some locations the only, source of water for irrigating agronomic crops. In other locations, these waters supply industrial water users as well. Therefore, aquatic weed control in irrigation canals becomes extremely critical; however, the tools available to canal managers for weed control are limited. Sago pondweed [*Stuckenia pectinatus* (L.) Börner] is a native aquatic perennial that forms dense troublesome infestations in irrigation canals and drainage ditches; thereby, not allowing for proper water delivery or flow. On June 16, 2009, the Twin Falls Canal Company applied endothall to their main canal to control sago pondweed. An initial application was made for 2 ppm endothall for 12 hrs followed by a secondary application of 1 ppm endothall for 12 hrs approximately 40 km from the initial application, when the initial application had reached the location; thereby, providing a total treatment of 3 ppm endothall for 12 hrs. Endothall concentrations moved throughout the entire canal system (2.8 to 3.1 ppm at 107 km from the initial application site) at concentrations targeted to achieve sago pondweed control. Sago pondweed control 11 weeks after treatment is greater than 90% for the entire system. At 15 weeks after treatment, sago pondweed control had decreased to approximately 75% throughout the system. Results from these trials indicate endothall will provide a safer, more effective tool for controlling aquatic weeds in irrigation canals compared to other alternative control methods.