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SEDIMENT REMEDIATION OF AN OILED STREAM IN BELLINGHAM, WA, JULY 1999

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The explosion and fire that resulted from the Olympic Pipe Line Company leak on June 10, 1999, in Bellingham, WA, affected approximately 3 miles of the Whatcom Creek system. One component of the response program involved remediation of the affected stream bed sections. The objectives of the project were to remediate the stream-bed affected by the spilled gasoline and by the fires to accelerate its recovery to a healthy biological system, and to effect this remediation in a safe and efficient manner. Another goal was to carry out the remediation without causing secondary effects to stream banks or to down-stream environments. An initial interagency stream-bed survey provided information and guidelines on an appropriate remediation strategy. The strategy for the remediation was approved by the Joint Restoration Committee. The project was conducted between July 6 and August 16, 1999.

A combination of mechanical, manual, and hydraulic *in-situ* treatment techniques were used to remove product from the stream bed and stream banks. The primary treatment involved mechanical and manual (raking and washing) agitation of sediments and a series of controlled, hydraulic flushes at night that were effected by opening the sluice or control gates at the head of Whatcom Creek. Additional larger flushes were implemented prior to, and upon completion of, the treatment operations. The Joint Restoration Committee supported the operation through a series of stream inspections. These interagency inspections provided guidance for continuing activities and set operational goals for the field supervisors.