

NOAA Hazardous Waste Site Report

Western Processing (X-6)

Kent, Washington

April 13, 1984

Nature and Location of the Site:

Western Processing is located in the Green River Valley, five miles east of Puget Sound (Figure 1). Mill Creek forms the western boundary of the site. Operations at the facility began in 1957 when dried animal blood was converted into plywood glue. Over the next two and a half decades, operations grew to include recycling or reclaiming of a variety of industrial chemicals. Solvent recovery, acid and caustic neutralization and heavy metal precipitation were the primary activities at the facility. Materials were stored in large tanks, drums, lagoons, and open ponds on the ten-acre site. Solvents, heavy metals, caustics and acids are present on site. A total of 87 priority pollutants have been detected there.

Proximity and Risk to Coastal Waters:

Mill Creek flows into the Green and Duwamish Rivers via Spring Brook Creek and the Black River. The Duwamish flows into Elliot Bay in Puget Sound.

Groundwater up to 175 feet below the site is contaminated. Leaks and spills from transfer operations, lagoons and drums have resulted in both indirect and direct surface water discharges through surface runoff into Mill Creek.

The U.S. Environmental Protection Agency (EPA) has just completed an extensive off-site sampling program which included groundwater, surface soil, and sediments from Mill Creek and other drainage areas surrounding the site (1). Six indicator metals, chromium, nickel, zinc, arsenic, cadmium, and lead were measured. The highest contaminant levels in Mill Creek were for zinc (1,120 ppm) and chromium (1,620 ppm). Three-quarters of a mile downstream from the facility, zinc (102 ppm) and chromium (90 ppm) levels were still elevated. Organic analysis showed tri-chloroethane (1,510 ppb), methylene chloride (1,710 ppb), and toluene (668 ppb) among other contamination in the creek sediments.

Marine Resources at Risk:

Mill Creek, part of the headwaters of Spring Brook Creek supports the highest numbers of spawning coho salmon in the Black River Drainage. The Black River and Spring Brook Creek are important transportation and rearing areas for salmon. The Duwamish-Green River system is the fourth,

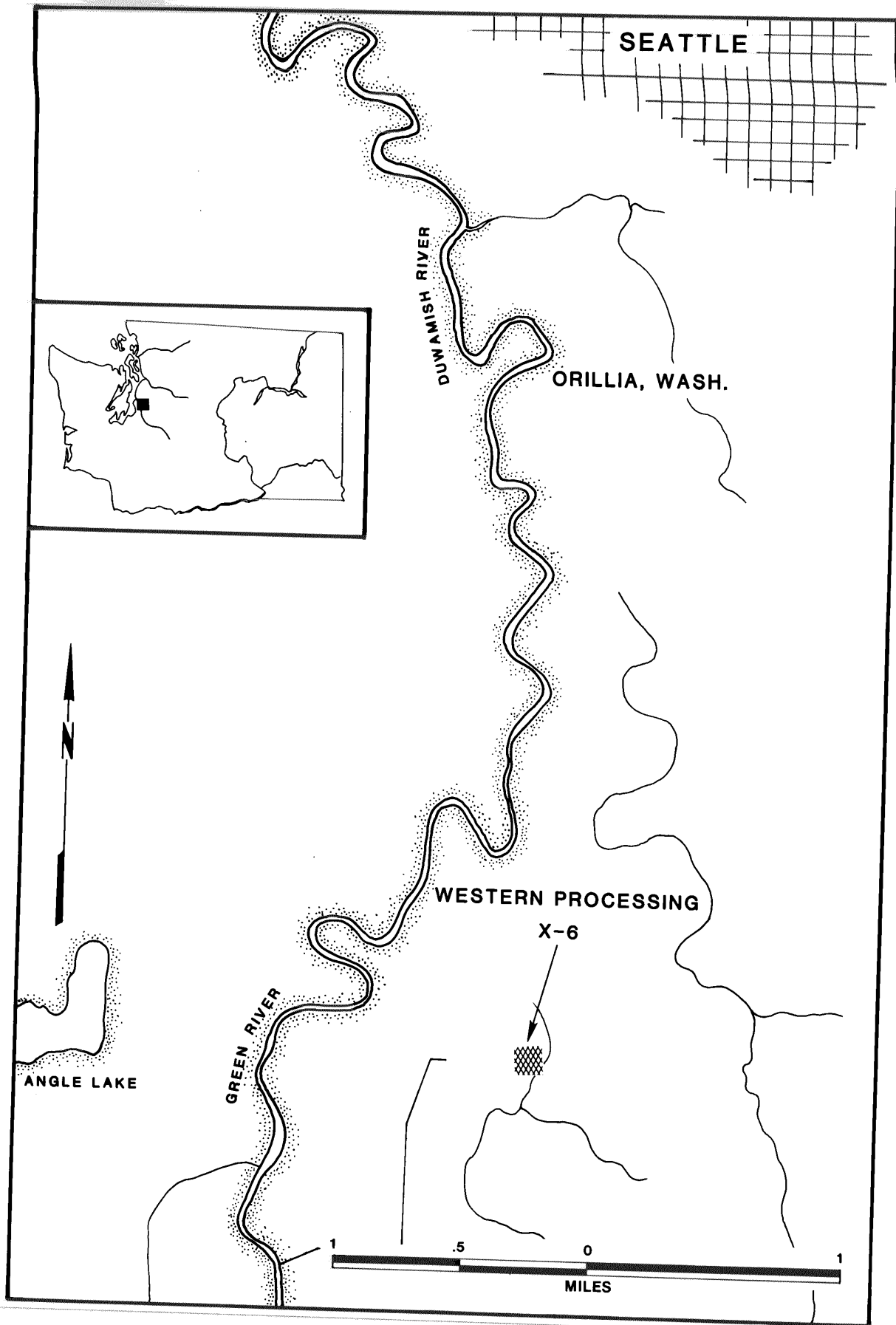


FIGURE 1. Site location.

fifth, and sixth-most important river in Washington for steelhead, chinook and coho salmon (2). Contaminants found at Western Processing have been shown to have deleterious effects on salmon.

A variety of waterfowl are found in the Green River Valley. During winter months species include; geese, mallards, gadwalls, teal, widgeons, mergansers and grebes. The Department of Interior maintains an interest in resources found near Western Processing. Principal concerns of the agency are waterfowl, anadromous fish and Indian treaty fish grounds (3).

Summary of Site Related Actions:

EPA has taken emergency action to stabilize wastes at this site. These mitigation measures have reduced offsite movement of contaminated surface waters. Groundwater remains the primary focus of remedial action planning. A simulation model of groundwater movement is being developed to map flow patterns. A major study which evaluates cleanup alternatives is near completion by EPA. A number of on-site and off-site mitigation measures are being considered.

The owner of Western Processing denies responsibility for offsite contamination and has claimed he is unable to fund remedial action. EPA is working with companies which disposed of waste at the site to develop an agreement for payment of cleanup costs.

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References:

- 1) U.S. Environmental Protection Agency, 1984. Western Processing Alternatives Assessment Study, 1983. EPA Region X, Seattle, Washington. 29pp, two appendices.
- 2) Washington Dept of Fisheries, 1975. A Catalog of Washington Streams and Salmon Utilization, Vol 1. Olympia, WA.
3. Blanchard, Bruce, 1984. Letter to Gene Lucero, Director , Office of Waste Programs Enforcement, EPA, Washington D.C. Feb. 27, 1984.