

200-PO-1 Groundwater Operable Unit



Overview

Waste sites overlying the 200-PO-1 operable unit have contaminated groundwater in the southern 200-East Area and southeast corner of the Hanford Site. Tritium, iodine-129, and nitrate plumes have the largest extent. At this time there are no viable technologies to remediate these plumes. The contaminants are attenuating naturally through dispersion and radioactive decay.

Limitations

The water table is flat in the 200-East Area, so the direction of groundwater flow in this area is uncertain. However, flow direction in the 600 Area appears to be east/southeast toward the river.

Multiple sources of contamination, including waste cribs and underground tanks, are located near each other, making it difficult to pin down the source of contamination.

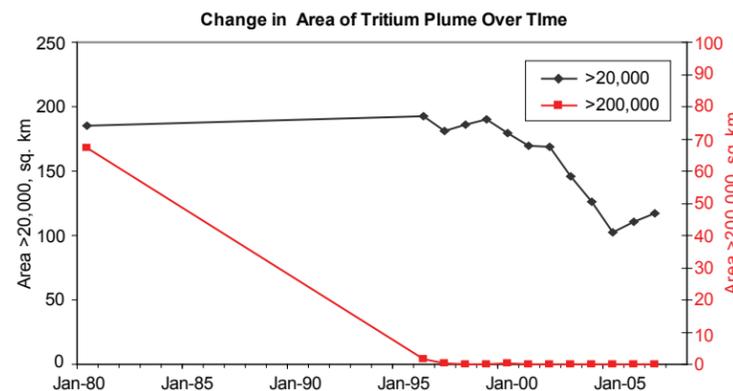
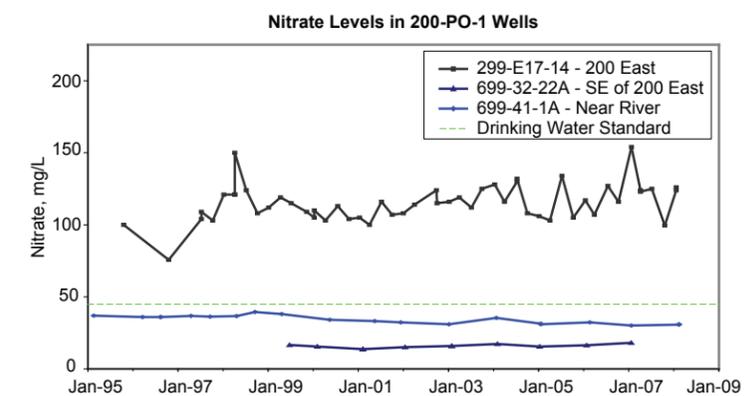
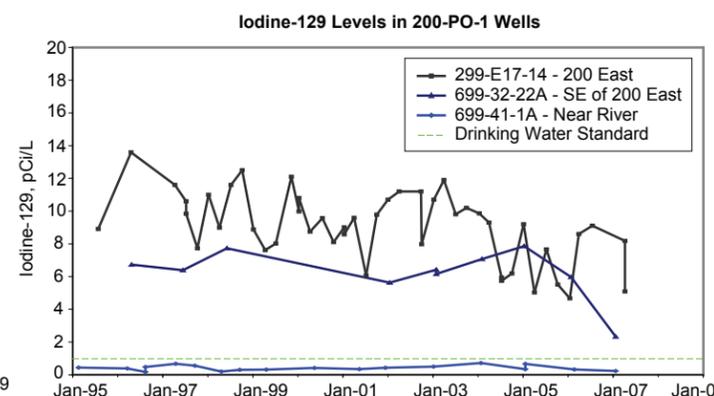
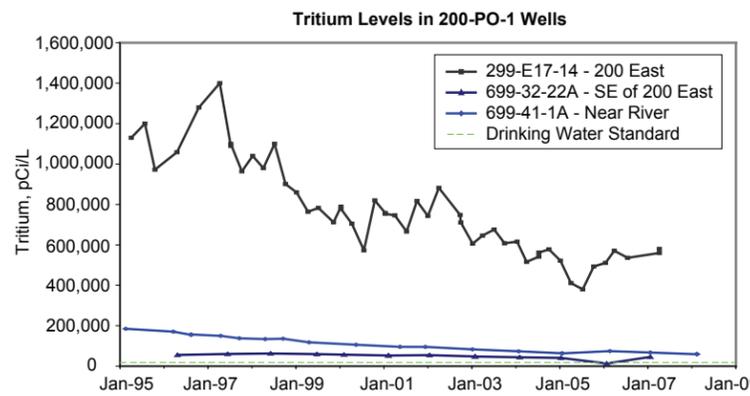
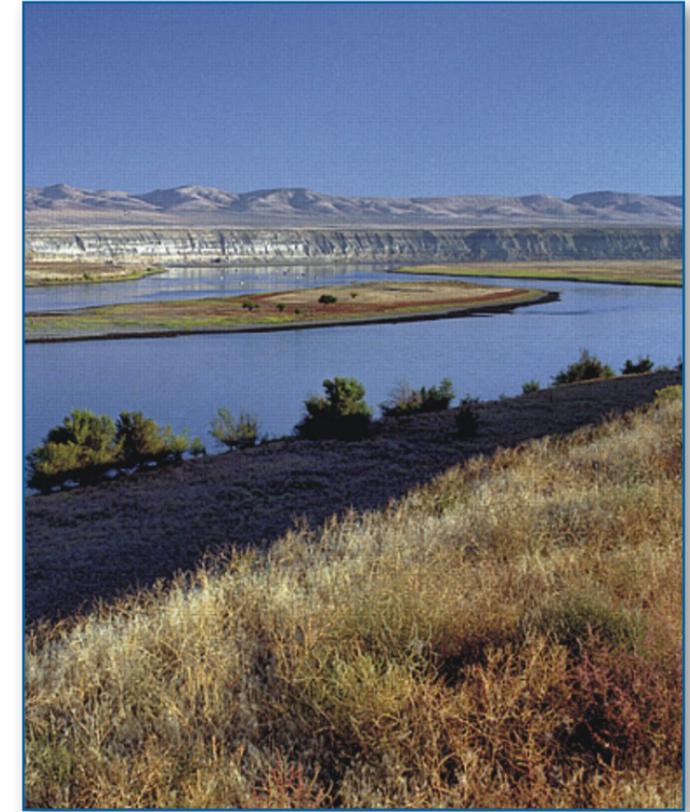
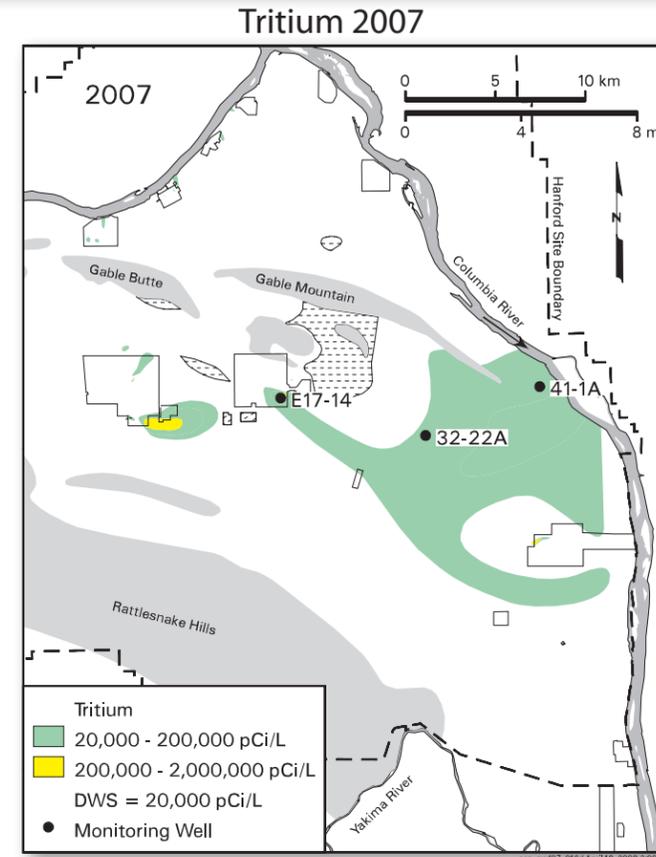
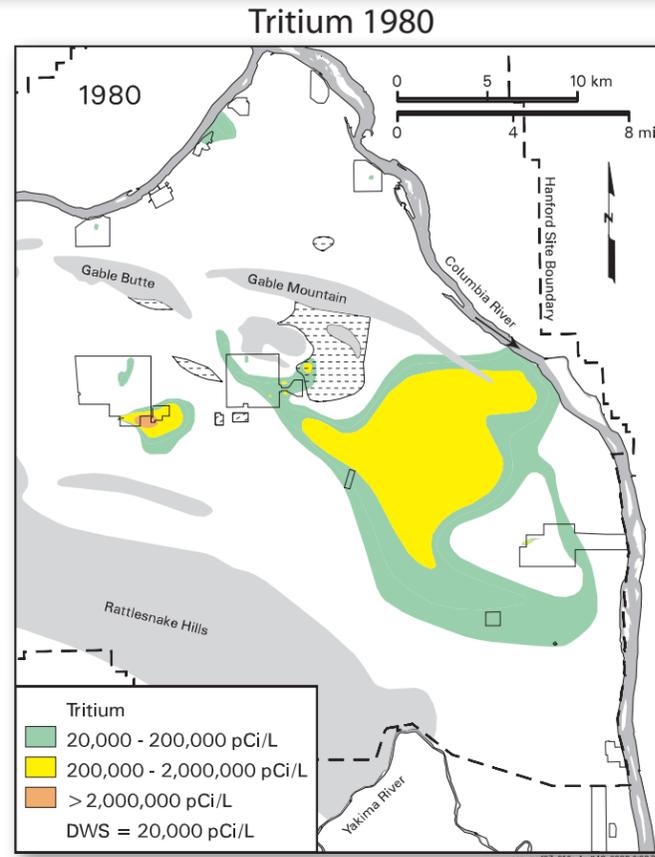
Conclusions

Contaminant concentrations generally are decreasing within the large plumes.

The area of the tritium plume with concentrations greater than the 20,000 pCi/L drinking water standard has decreased 36% since 1980. In 2007 the portion of the plume with concentrations 10 times the drinking water standard was only two-tenths of one percent as large as it was in 1980.

Some wells near waste sites show variability in contaminant concentrations.

DOE has installed an extensive network to monitor groundwater quality. Routine monitoring and reporting of contaminants is conducted annually.



5/21/08