

Twenty-five Years of Change in the Water Quality of the Eastern Snake River Plain Aquifer
at the Idaho National Laboratory, Idaho

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Since 1952, wastewater discharged to infiltration ponds and disposal wells and waste buried at the Idaho National Laboratory (INL) have affected water quality in the eastern Snake River Plain aquifer underlying the INL. Operations that generate wastewater have changed in the past 25 years in response to the Idaho Cleanup Project. The U.S. Geological Survey, in cooperation with the U.S. Department of Energy, maintains groundwater monitoring networks at the INL to determine hydrologic trends, and delineate the movement of radiochemical and chemical wastes in the aquifer. This presentation will describe how changes in wastewater disposal at selected facilities at the INL have influenced the water quality in the eastern Snake River Plain aquifer. Comparisons will be made between the water-quality data from the late 1980s to more recent data in terms of changes in concentrations of tritium, strontium-90, iodine-129, chloride, sodium, nitrate, and volatile organic compounds. Recent data on water-quality trends in selected areas of the INL will also be presented.