

# THE SACRIFICE ZONE

## HANFORD IN THE LONG RUN

Computers predict the movement of Hanford's waste over the next thousand years

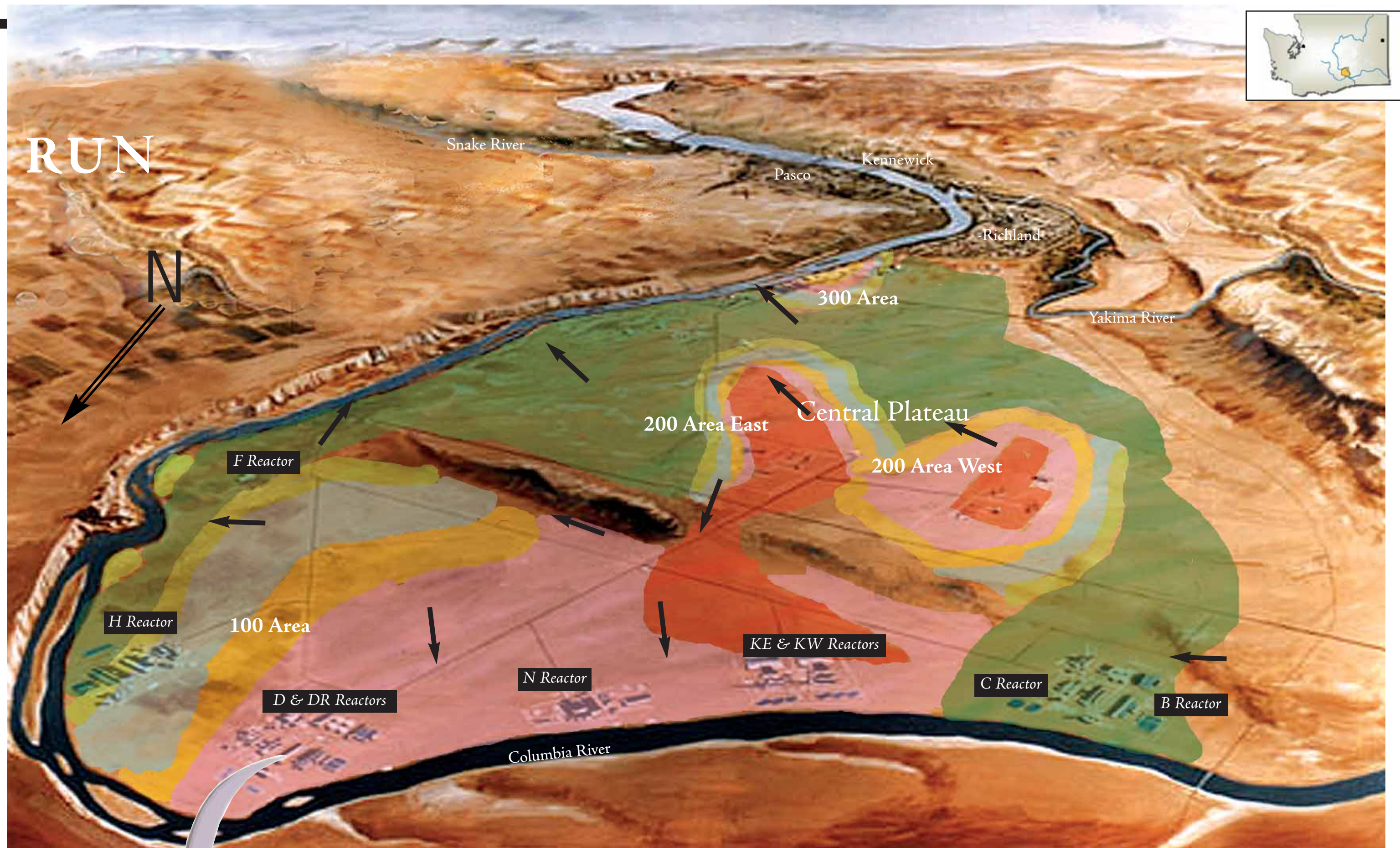
**H**anford has dumped 450 billion gallons of contaminated liquids into the ground since 1944. Much of this waste remains above the water table, but large amounts have reached groundwater. Predictions about the future course of this contamination will guide decisions about cleaning it up.

The maps on the next four pages show the results of computer modeling done in 2002. Another computer analysis based on three-dimensional modeling was produced in 2003, with different results.

The colors on these maps represent the amount of radioactivity in the groundwater. They predict the dose that a hypothetical person would get who used water from a well sunk into the aquifer at any given point across the site. They are different than the map on page 6 which shows the different radioactive substances and where they have traveled.

On these maps, red represents the most contaminated water, and yellow represents the least. These maps, produced by Hanford computers, show increases in radioactivity in the groundwater over 1,000 years. They estimate the annual dose from drinking 2 liters of Hanford groundwater water daily from corresponding colored areas on the map.

The big map at right is an enlarged representation of the 2000 results, and is not to scale. North is in the direction of the lower left corner in all maps.



→ Direction of groundwater flow in local areas.

