



# Hanford Challenge

*Protecting our future with a cleanup that works*

"Nothing poses a more dire threat to the Pacific Northwest than the millions and millions of gallons of deadly nuclear waste entombed at Hanford. Hanford Challenge gives me renewed hope, because its leaders have the integrity, experience and determination to pull us back from the brink." **Denis Hayes, President, Bullitt Foundation**

## TEN FACTS that may change the way you think about HANFORD

1. The Hanford Nuclear Site is the most contaminated site in the Western Hemisphere. Covering 586 square miles in Eastern Washington, Hanford was established in 1943 to produce plutonium for nuclear weapons. "Slow motion fallout" from this contamination threatens our health and environment for generations.

2. A third of Hanford's mammoth underground waste storage tanks have leaked one to ten million gallons of high-level radioactive waste into the soil and groundwater. In 1995, dissident scientists at Hanford disproved Hanford's claims that this contamination was not leaking into the groundwater.

3. Hanford cleanup will take at least *100 years*, and *tens of billions of dollars*. Current plans would leave behind a 75-square mile "national sacrifice zone" that will be off limits to development for the foreseeable future.

4. Hanford's reactors pumped billions of gallons of radioactive water into the Columbia River making it the "hottest" river in the world. Over one and a half trillion gallons of contaminated liquids were also dumped directly into the soil, equivalent to several weeks flow of the Columbia River.



*The K-W reactor, one of Hanford's 1,400 separate EPA Superfund sites.*



*Defunct nuclear reactors dominate the western shore of the Hanford Reach, where the Columbia River flows through the site.*

5. The Hanford Reach section of the Columbia is the spawning ground for 80% of the river's salmon, yet the health of these salmon runs are at risk. Fish in the Columbia River exhibit dangerously high levels of radionuclides and toxic chemicals.

6. Tribal people eating river fish from the Hanford Reach face a 1 in 50 risk of contracting cancer, according to a 2002 EPA study.

7. The Columbia River provides drinking water, irrigation and recreational opportunities for over one million people living in Portland and other communities along the Columbia River between Hanford and the

Pacific Ocean.

8. Pollution has travelled far from the site. In 1964, a Scripps Oceanographic Research Team detected the radioactive chemical, zinc-65 8,000 times higher than normal in shellfish and squid at Cannon Beach, Oregon, 365 miles from the site. Hanford radionuclides have been detected in the Puget Sound.



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## TEN FACTS continued...

9. Hanford's radioactive inventory is one of the largest in the United States. Hanford stores hundreds of millions of curies of radioactivity in temporary storage tanks, pools, and in the soil. Regulatory limits to protect human health are measured in *trillionths of a curie*. Some of the radioactive material lasts millions of years, and pose a grave health threat to future generations.

10. Hanford's Waste Treatment Plant is the only disposition path for stabilizing the 53 million gallons of high-level radioactive waste stored at Hanford. Design flaws, missed deadlines, rising costs and indeterminate quality assurance makes this plant a worrisome project in desperate need of effective oversight.



*Just across the river from the former plutonium production site, the white bluffs of the Hanford Reach are unique in the region.*

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## OUR FOCUS

### **Monitor Cleanup Progress**

We monitor the tank farms and Waste Treatment Plant and advocate for improved safety and accountability.

### **Protect Human Health and Safety**

We advocate for workers in need of compensation and improved safety practices.

### **Conduct Environmental Analysis**

We use our sampling program to investigate Hanford pollutants migrating off site.

### **Advocate for Systems Change**

We work with stakeholders to change the system that supports a wasteful, unsafe, secretive work culture.

### **Facilitate International Collaboration**

We collaborate with Russian and European colleagues facing similar cleanup challenges.

## HOW YOU CAN HELP

- Get informed, share what you learn with friends and colleagues.
- Host a Hanford discussion party and invite Hanford Challenge to speak.
- Become a member of [Hanford Challenge](#).
- Write your legislators and demand more accountability.



*The Tank Farms: one of Hanford's most dangerous worksites.*

