

# HANFORD HAHIKU 2011

[www.hanfordchallenge.org](http://www.hanfordchallenge.org)







## River Releases

Birds skim the river—

Isotopes settle in silt

A bed of half-lives

*Nancy Dickeman*



*Photos: Liz Mattson*

## DECEMBER 2010

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

## FEBRUARY 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28					

### Let There Be...

From war, peace should bring

Power recycled, contained.

Mind the lasting light.

*Dixie Partridge*



Power plant plume at Hanford, January 2006.

*Photo: public domain*

# JANUARY 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1 New Year's Day
2	3	4	5	6 Epiphany	7	8
9	10	11	12	13	14	15
16 Hanford Site selected, 1943	17 Martin Luther King Jr. Day	18	19	20	21	22
23	24	25	26	27	28	29
30	31					





*Photo: Marco Kaltfen*

O uranium!  
How you mar the desert plain  
And give us all jobs.

*Lisa Staudinger*



*Photos: Liz Mattson*



# JANUARY 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

# MARCH 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

## Growing Up

A young engineer  
Wants to make a difference  
Jaded by Hanford

*Reade Weber*



# FEBRUARY 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
			Groundhog Day	Chinese New Year	Hanford Challenge Improv Night and Auction, Seattle	
6	7	8	9	10	11	12
13	14	15	16	17	18	19
	Valentine's Day					
20	21	22	23	24	25	26
	President's Day					
27	28		Workers at the Hanford Site uncovered a one-gallon glass bottle containing several hundred milligrams of plutonium in December 2004. The plutonium is more than 60 years old. Washington Closure Hanford/U.S. Department of Energy			





White Bluffs, Columbia River

The clear blue river  
Flows past the reservation.  
We paddle faster

*Diane Goheen*



*Photos: U.S. Department of Energy*



## FEBRUARY 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28					

## APRIL 2011

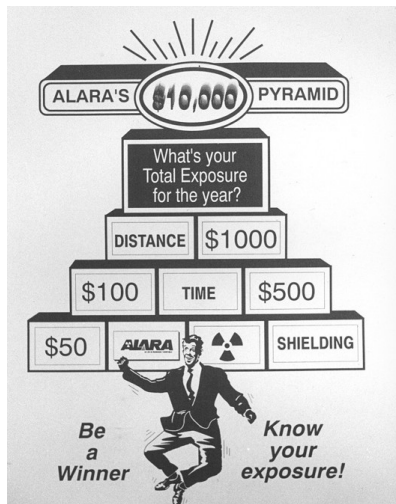
Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

# MARCH 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
	Lent Begins		Ash Wednesday			
13	14	15	16	17	18	19
Daylight Saving Time Begins				St. Patrick's Day		
20	21	22	23	24	25	26
Purim Spring Begins		World Water Day			Three Mile Island meltdown, 1979	
27	28	29	30	31		

More than just people,  
Current versus currency  
Our atomic scars

*David Yabusaki*



As Low As Reasonably Achievable exposure poster. ALARA: Bob Del Tredici





## Hanford's Termination Winds

Workers wiped the grit

From their eyes and hightailed it—

Paychecks in pockets.

Nancy Dickeman

In the early morning hours of October 9, 2010, three structures at Hanford's 300 Area came crashing to the ground as planned.

*Photo: U. S. Department of Energy*



# MARCH 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

# MAY 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Blowing dust darkens  
 Making day like ruddy night  
 Wind terminates work.

*John Schur*



Hanford Site Fire  
 Source unknown

# APRIL 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
					April Fools Day	
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
Palm Sunday	Passover Begins				Earth Day Good Friday	
24	25	26	27	28	29	30
Easter Sunday		Chernobyl, 1986			Arbor Day	



Seining salmon in the Columbia River, circa 1914

*Photo: USGS Bulletin 614*

Fish of my fathers

Ripple my Columbia

Leaving alpha tracks

*Marco Kaltrofen*



## APRIL 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

## JUNE 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

Migratory home  
Gravel beds for salmon roe  
The plume creeps closer  
*Bruce Hoefft*



# MAY 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
				Cinco de Mayo		
8	9	10	11	12	13	14
Mother's Day						
15	16	17	18	19	20	21
Tri-Party Agreement signed, 1989						Armed Forces Day
22	23	24	25	26	27	28
29	30	31	Aerial view of N Reactor, which was Hanford's last plutonium production reactor. President Kennedy commissioned the reactor on September 26th, 1963. It was closed January 7, 1987. <i>Photo: U.S. Department of Energy</i>			
	Memorial Day					



Hanford Underground Tanks Construction

*Photo: U.S. Department of Energy*

Nineteen forty-four  
Not knowing, Hanford workers  
Dig up death camas

*Ruth Yarrow*



*Sage Brush Steppe*



*Photo: left, WA Fish and Wildlife, right, US Fish & Wildlife Service*



## MAY 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

## JULY 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

### Transition

Cherenkov blue glowed  
 From waste tanks in the desert  
 And now we make wine

*Lisa Staudinger*



Eastern Washington vineyard.  
 Photo : Marina King

# JUNE 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8 Shavout	9	10	11
12	13	14 Flag Day	15	16	17	18
19 Father's Day	20	21 Summer Begins	22	23	24	25
26	27	28	29	30		



Rattlesnake sits guard

Over shrub-steppe and desert

Bathed in glow of peace

*Jim Stoffels*

Rattlesnake Mountain, Benton County, Washington

*Photo: Pacific Northwest National Laboratory*



## JUNE 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

## AUGUST 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

### Hanford Air Releases

Wind spins isotopes -

Streaming past borders,

Beyond the Horse Heaven Hills

*Nancy Dickeman*



# JULY 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
	Independence Day					
10	11	12	13	14	15	16
						Trinity Test, 1945
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	Completed in December 1944, T Plant was the world's first large-scale plutonium separation facility. The chemical separation buildings are massive canyon-like structures, 800 feet long, 65 feet wide, and 80 feet high, nicknamed "Queen Marys" because of their size and shape. T Plant ceased chemical separation in 1956 but continues to be used to support remediation.					

*Photo: U.S. Department of Energy*



*Photos: US Department of Energy*

To get us some work  
We came from ol' Missouri.  
My, the wind do blow.

*Ginger Wireman*



*Glovebox Madonna: Bob Del Tredici*



## JULY 2011

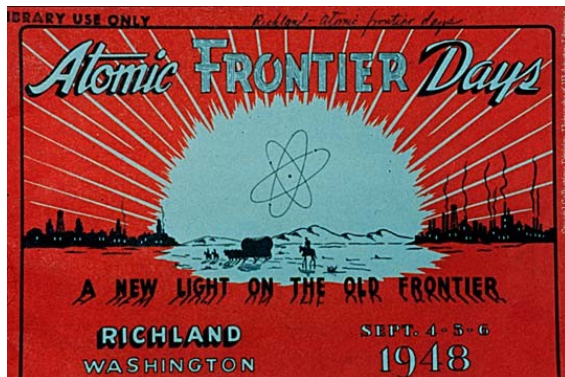
Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

## SEPTEMBER 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

The Hanford Reserve –  
Past, present and future times –  
Controversial

*Diane Goheen*



# AUGUST 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1 Atomic Energy Act signed, 1946 First of Ramadan	2	3	4	5	6 Hiroshima, 1945
7	8	9 Nagasaki, 1945	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31 End of Ramadan			



The blade has 2 sides  
Killing them but wounding us.  
Cosmic irony. *Marina King*

Hanford's B Reactor—the first plutonium production reactor in the world. Plutonium from this reactor fueled the Trinity-Test Bomb in 1945 and the bomb that exploded over Nagasaki in 1945.

*Photo: Bob Del Tredici*



## AUGUST 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

## OCTOBER 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

# SEPTEMBER 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5 Labor Day	6	7	8	9	10
11 Patriot's Day Grandparent's Day	12	13	14	15	16	17
18	19	20	21	22	23 Fall Begins	24
25	26 N Reactor commissioned, 1963	27 B Reactor commissioned, 1944	28 Rosh Hashanah	29	30	

Family cancer list -  
 "but don't get me wrong," she adds  
 "those were real good jobs"  
*Ruth Yarrow*



Photo: U.S. Department of Energy



Our winter of need

For DOE money to

Keep Washington green

*Allyn Boldt*



Satellite View of Hanford & Surrounding Areas. *Map: Google & USGS Image*

*Photos: Left ,Top Two, Stills from the Documentary **Arid Lands***

*Photo: Left Bottom: US Department Of Energy*



## SEPTEMBER 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

## NOVEMBER 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

Outside the dusty car  
Our orchard disappears.  
I will miss my farm.

*Ginger Wireman*



House, White Bluffs, 1940.  
Photo: U.S. Department of Energy

# OCTOBER 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
					Yom Kippur	
9	10	11	12	13	14	15
	Columbus Day			Succoth		
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					
	Halloween					



## Hanford Life

*Photo: Mason Lowe*

Tumbleweeds Scatter—  
The dosimeter badge clips  
To my father's shirt

*Nancy Dickeman*



## OCTOBER 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

## DECEMBER 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Beautiful river  
Who decided to make tombs  
By your gravel shores?

*Susan MacPherson*



*Photo: Mason Lowe*

# NOVEMBER 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
Daylight Savings Time Ends	(Eid) al Adha	Election Day			Veterans Day	
13	14	15	16	17	18	19
20	21	22	23	24	25	26
				Thanksgiving		First of Muharram
27	28	29	30			



Glowing in the dark

From years of Hanford living

No need for flashlights

*Karrie Gooding*

At gloveboxes such as these inside Hanford's Plutonium Finishing Plant, workers once chemically separated and purified plutonium to metal for nuclear weapons pits.

*Plutonium Boogie: Bob Del Tredici*

*December 16, 1963*



# NOVEMBER 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

# JANUARY 2012

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

# DECEMBER 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2 Green Run, 1949	3
4	5	6 Ashura	7 Pearl Harbor, 1941	8	9	10
11	12	13	14	15	16	17
18	19	20 Hanukkah Begins	21	22 Winter Begins	23	24
25 Christmas	26 Kwanzaa	27	28	29	30	31

Plutonium sits  
On the Hanford desert floor -  
Amidst all that cash.

*Tom Carpenter*



Tank farm at night

Photo: U.S. Department of Energy



[www.hanfordchallenge.org](http://www.hanfordchallenge.org)

## OUR FOCUS

### **Monitor Cleanup Progress**

We monitor Hanford remediation 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.

### **Collaborate**

We work with stakeholders to improve remediation, and build trust.

### **Fight for Accountability**

We protect whistleblowers and advocate their issues.



Hanford Challenge Staff *From left: Tom Carpenter, Liz Mattson, Jen Gregory & Julia Montagnet*

## 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*

Find out how you can get involved at [www.hanfordchallenge.org](http://www.hanfordchallenge.org)!



Hanford Challenge is a 501(c)3 non-profit organization that works for a safe and thorough Hanford remediation. Donations may be made through Network for Good on our website:

[www.hanfordchallenge.org](http://www.hanfordchallenge.org)



**Hanford Challenge** launched a haiku contest in the fall of 2010. We were overwhelmed with the quantity and quality of submissions and were inspired to make this calendar. Thank you to everyone who submitted haiku. The poems that appear in this calendar are the finalists from our contest. We will continue posting submissions on our website. If you are inspired email your Hanford haiku to: [info@hanfordchallenge.org](mailto:info@hanfordchallenge.org)



Hanford's B Reactor was built in secret during WWII and operated until 1957.

*Photo: U.S. Department of Energy*

Like what you see? To order a calendar and/or become a member of Hanford Challenge, go online to [www.hanfordchallenge.org](http://www.hanfordchallenge.org). Stay up to date on the latest Hanford news by registering for our email list online, or by sending an email to:  
[info@hanfordchallenge.org](mailto:info@hanfordchallenge.org)

Calendar design: Marina King

Cover photo: Marco Kaltofen

# THE NEED FOR HANFORD CLEANUP

*More than 40 years of plutonium production for America's nuclear weapons program extensively contaminated the Hanford Site in southeastern Washington state. Following the end of plutonium production in 1989, federal, state and local governments, Native American Tribes, and citizen groups joined together to advocate for and compel Hanford cleanup. Hanford Site workers are now engaged in the world's largest environmental cleanup project. The cleanup encompasses more than 1,900 waste sites, ranging from small areas of surface contamination to 177 aging underground storage tanks containing about 53 million gallons of highly radioactive and chemically hazardous waste.*



Hanford workers cleanup the S-102 spill in Hanford's Tank Farms, November 21, 2007. The spill occurred in July 2007. Photo: US Department of Energy

*Hanford cleanup is necessary to prevent further contamination of the Columbia River, to comply with environmental laws and restore the damaged environment, and to eliminate or reduce risks to people who live in, work in, or visit the area. While significant cleanup progress has been made, success is still far from assured. A number of challenging technical issues remain to be solved and public and regulatory agreement on and acceptance of some cleanup strategies is still needed. Successful cleanup will require a sustained, candid dialogue and substantial agreement and cooperation among stakeholders, regulators and governments. It will also require significant federal funding for the remaining four decades or more needed to complete the work.*