Layers of Oppression at Washington State’s Hanford Nuclear Reservation: Teaching Hanford history through the eyes of stakeholders

NWTSJ conference
October 23, 2021 (1pm PDT) on zoom
Amy Hagopian & Liz Mattson
Hagopian@uw.edu & lizm@hanfordchallenge.org
Welcome!

We’ve taught Hanford at Garfield High for many years

UW grad students teach high school students
This is best taught in a classroom with small group set ups.
Amy Hagopian, UW Professor
hagopian@uw.edu
206-616-4989

Liz Mattson, Senior Program Strategist
lizm@hanfordchallenge.org
828-279-8445
Introductions

Please share in the chat:
• your name/pronouns
• subject/s, grades you teach
• what attracted you to this workshop
• anything else you’d like to share
Conference Ground Rules

• Mute yourself on Zoom when not talking.

• Respect opinions and ideas of others.

• Be open to learning.

• Challenge people respectfully.

• Be aware of the impact of your words and acknowledge/take responsibility when they hurt other people (even when that wasn’t your intent).

• Make space/take space. (If you’re the one who usually speaks up, wait for others to speak. If you’re the one who usually keeps quiet, share thoughts and feedback.)

• Be aware of power and voice in the workshop.

• Please respect privacy. Do not record the keynote or any other sessions. Do not take or post pictures of the keynote or conference participants without their permission.
Plan for Today

• Overview of Hanford
• Power mapping exercise
• Other Hanford teaching ideas
• Reflection
• Resources for teaching Hanford
Learning objectives

Students can describe the historical significance of the Hanford Site, identify the current and historical actors in what has happened there, explain why Hanford is a threat to the environment and human health today, and map the power and influence potential of stakeholders at this largest Superfund site in North America.
What comes to mind when you think about Washington State?
What do you know about Hanford?
The Hanford Nuclear Site

Geographic location and principal facilities at the Hanford Site.

October 2015, UW students tour Hanford site
Native Americans and Hanford

“If you clean up the place to comply with the Treaty of 1855 we protect all future generations, not just the Yakama.”

– Dr. Russell Jim

[Image of a map showing Hanford and surrounding areas with cultural sites marked]

[Image of Native Americans holding a banner: "CLEAN UP HANFORD"]
Workforce Exposures

Study: Traces of radioactive contamination found in homes of six Hanford workers
Originally published June 14, 2018 at 6:00 am

Circle Of Radioactive Waste Spread Keeps Growing At Hanford

57% of Hanford nuclear site workers surveyed by WA state report toxic exposures
BY ANNETTE CARY
UPDATED JULY 07, 2021 2:27 PM

Hanford ill worker compensation case appealed to U.S. Supreme Court
BY ANNETTE CARY
UPDATED SEPTEMBER 14, 2021 1:44 PM
African Americans and Hanford

Fig. 5.--Group of Negro dwellings, Pasco, Washington.
Getting the uranium

U.S. Brigadier General Leslie Groves, created the Combined Development Trust (CDT) in 1944, which extracted more than 3.4 million pounds of uranium from the Belgian Congo alone for the Manhattan Project. Daily laborers worked for minimal wages around the clock to meet demand for the United States. Many died. Closed in 1960, but radioactivity from the uranium's decay continues to be released into the environment and some remaining uranium has been smuggled out.

After exploiting the Congo for uranium, mining companies turned to the Navajo Reservation, where more than 1,000 mines were established across the Navajo Nation reservation, with almost 4 million tons of uranium being mined there from 1944-1989.

https://www.atomicheritage.org/history/uranium-mining
Downwinders

“Downwinders” are loosely defined as those individuals that lived “downwind” from nuclear production facilities or nuclear test sites. In the United States, Downwinder communities exist primarily in the Pacific Northwest and intermountain range between the Cascades and the Rockies, in states like Nevada, Utah, Washington, Idaho, and New Mexico.

Downwinders also exist at former Manhattan Project sites including, but not limited to, Oak Ridge, Fernald, and Rocky Flats, where airborne radiation was released offsite. Due to American atmospheric nuclear testing, Downwinder communities also exist throughout the Marshall Islands.

https://www.atomicheritage.org/tour-stop/hanford-downwinders-struggle-justice#.YW4huBDMLAw

Cancer experts help downwinders apply for financial compensation before the law expires

The Radiation Exposure Compensation Act is set to expire in July 2022.

Hanford sent up a cloud of radioactive iodine and xenon into the atmosphere on December 2, 1949. Known as the “Green Run,” this radiation rained down on Walla Walla.
Bombing Nagasaki

On August 9, 1945, three days after the bombing of Hiroshima, the U.S. bombed the Japanese city of Nagasaki, population 263,000, with the Fat Man plutonium bomb, a bomb much more sophisticated than the Little Boy bomb used at Hiroshima, which used uranium-235 in a fairly conventional explosive mechanism. Detonated 1,650 feet over Nagasaki with a yield of 21 kilotons, it was 40 percent more powerful than Little Boy had been.

People had heard the all-clear after an earlier aircraft raid warning, and had left their shelters. Everything within a mile of ground zero was annihilated. Fourteen thousand homes burst into flames. People close to the blast were vaporized; those unlucky enough to be just outside that radius received horrific burns and, there and further out, radiation poisoning that would eventually kill them. Perhaps 40,000 people were killed by the initial detonation. By the beginning of 1946, 30,000 more people were dead. And within the next five years, well over 100,000 deaths were directly attributable to the bombing of Nagasaki.

https://www.nationalww2museum.org/war/articles/bombing-nagasaki-august-9-1945
Making more bombs

The Hanford site was one piece of the Manhattan Project puzzle. It developed plutonium for the Trinity Test, the bomb dropped on Nagasaki, and Cold War weapons. By 1965, there were nine weapons reactors, five reprocessing plants, hundreds of support and research buildings, and 177 underground waste tanks. Ultimately, Hanford produced 74 tons of plutonium, roughly two-thirds of the US’s stockpile. The production facilities were phased out as the Cold War ended and the Dept. of Energy delegated cleanup to various private companies. (ICAN website)

https://www.washington.edu/uwired/outreach/cspn/Website/Classroom%20Materials/Pacific%20Northwest%20History/Lessons/Lesson%2024/24.html

Construction of the three Washington Public Power Supply System (WPPSS) reactors continued during the 1970s, fueling the local economy, but by 1982 it had become clear that nuclear power plants would not be an anchor for the future.

Nuclear reactors line the riverbank at the Hanford Site along the Columbia River in January 1960. The N Reactor is in the foreground, with the twin KE and KW Reactors in the immediate background. The historic B Reactor, the world’s first plutonium production reactor, is visible in the distance.

https://magazine.wsu.edu/web-extra/gallery-historical-hanford/
Whistleblowers
Overview of the layers of oppression

- clearing the land-tribal treaties broken
- mobilizing a segregated workforce
- harvesting the uranium
- making a mess
- bombing Nagasaki
- making more bombs
- finally pivoting to clean up in response to pressure/dissolution USSR
Why is Hanford the Cold War’s Hot Mess?

EarthFix video
2016
3 minutes
Who’s in charge?
Tri-Party Agreement (TPA) Agencies

- The United States Department of Energy (DOE) is the owner and operator of the Hanford Nuclear Site.
- WA State and EPA are the regulators.
Your Task: mapping the stakeholders

Group #___
Reporter: _______

From what perspective are you mapping?
Group 1 - US Dept. of Energy (DOE)
Group 2 - Hanford Workforce
Group 3 - Contractors
Group 4 - Public Interest Group
Group 5 - Washington State Dept. of Ecology
Break out groups and report backs
What about? Did we get all these actors?

- Tribes
  - Yakama Nation
  - Confederated Tribes of the Umatilla Indian Reservation
  - Nez Perce Tribe
  - Wanapum (note no treaty rights)
- Workforce - Unions, Non-Union/Non-Management
- Contractors
- Interested Public
- Public Interest Groups/Watchdog Groups
- Local Government
- Future Generations
- Retired Workers

- Department of Energy - Headquarters, Local Offices
- Local Business Groups
- Government Agencies
- Hanford Advisory Board
- Washington State
  - Dept. of Health
  - Dept. of Ecology
  - Elected officials: Legislators, Governor, Attorney General

- Oregon State Department of Energy
- Academics
- Congress
Where do these stakeholders gather to debate Hanford’s cleanup mission and make decisions?

- Hanford Advisory Board
- Natural Resources Damage Assessment
- Court
- Media
- Oregon Hanford Cleanup Board
- State Tribal Government Working Group
- Congressional hearings
- Public meetings (used to be more common)
The Hanford Advisory Board

- 32-Member Advisory Board that provides consensus advice and recommendations to the Tri-Party Agreement Agencies
- Meets in committee to learn about cleanup issues and forms issue manager teams to develop advice for consideration.
- Before advice can come before the full HAB, the committee has to come to consensus.
Various scenarios you could use to present this to students

• Mock HAB meeting to discuss a “piece of advice”
• Frank closed-door meeting of DOE officials to debate strategy
• Congressional debate over a budget and/or policy question
• Press conference with agency officials
• Environmental activist group meeting debating tactics
• Lobbyist trade group meeting
• Manhattan Project National Park - Hanford exhibits, how to tell the story/history of Hanford
• Writing op-eds from perspective of different stakeholders
Learning Objectives

I can describe the historical significance of the Hanford Site, identify the current and historical actors in what has happened there, explain why Hanford is a threat to the environment and human health today, and map the power and influence potential of stakeholders at this largest Superfund site in North America.
SURVEY

More resources

Take Action!

Liz Mattson | lizm@hanfordchallenge.org | 828-279-8445 | hanfordchallenge.org
Amy Hagopian | hagopian@uw.edu
Optional Affinity Spaces and Groups to Continue Conversation
2:45pm to 3:15 pm pst

1. **Affinity Spaces** are for individuals who identify with the group identity. Please only join groups if you share that identity. There will be a facilitator.

2. **Themed Discussions** are open to anyone and will be facilitated.

3. **Open Rooms** are for those who would like to lead their own debrief of the conference with friends/colleagues.
Thank you for completing the survey!

• Your feedback helps us reflect on our time together and helps NWTSJ plan for next year.

• Please take a few minutes now to fill out the workshop evaluation form by clicking “Feedback Survey” in the Sched workshop description or via this link: tinyurl.com/nwtsjeval