Rachel B. Birch

Politics, Power and Potatoes

[Water increasing in volume….]

[Larry Bates][1]

[Meat grinder]

That was Larry Bates. He survived an encounter with a tidal wave in Southeast Idaho. A tidal wave in a landlocked mountain state? This is your host, Rachel Birch, and this special two-part episode of "Roots to a Republic" will discuss a 1976 dam collapse causing a tidal wave to sweep through the Snake River Valley in Southeast Idaho. This tragedy revealed how political maneuvering inadvertently connected Idaho water regulation to civil rights, and how the institutional hubris that led to dam collapse washed away a politician's ambitions. We'll explore the many political and bureaucratic connections of this disaster through "Politics, Power and Potatoes."

[podcast theme music]

[birds chirping, summer sounds, morning music] Close your eyes for a moment and imagine a beautiful farming valley where spring is emerging, fields are being planted, and the smell of the earth awakening from its annual nine-month winter. The sun is bright and there is a slight chill in the breeze but there is a promise of future warmth. This beautiful valley is the Snake River Valley in Southeast Idaho. This picturesque scene suddenly changed from an impressionist's spring painting to a churning flood of 80 billion gallons of muddy water that washed away farmland and small farming communities on June 5, 1976.[2] While on the onset the event seems like an abrupt accident, scholar Andy Horowitz asserts that disasters occur over time and are

[1] "Bates, Larry. The Day the Teton Dam Broke." Contributed by Kirk E. Hathaway. Familysearch.org. May 31, 2015. Accessed October 1, 2022. https://tinyurl.com/2p9xvvzb.

[2] Nathan J. Snorteland; P. Shaffner; D. Paul. "Fontenelle dam, Ririe dam, and Teton dam: An examination of the influence of organizational culture on decision-making." Association of State Dam Safety Officials Annual Conference 2009. *Dam Safety 2009*. Jan 2009. 4. Accessed September 8, 2022. https://tinyurl.com/bdey6hsz.

inherently political.[3] The first part of this episode will discuss how political maneuvering inadvertently connected Idaho water regulation to civil rights, discuss the advancement of legislation for the construction of a water regulation system in Southeast Idaho and ultimately the dam breach. The second part of the episode will touch on survivor experiences and cultural reactions to the emergency, demonstrate the institutional hubris causation of the dam failure, and the consequences that led to dam safety reform, and the end of a political career.

If you are unfamiliar with the Southeast Idaho climate, the Idaho Snake River valley is considered a cold desert. This arid environment makes agricultural cultivation challenging because of the lack of reliable water resources for farmers and ranchers. They learned to accommodate water supply fluctuations through ninety years of irrigation practices which have led to a profitable livestock industry and thriving crops such as potatoes, hay, and grain.[4] While the farming community was resourceful with available water, the demand for reliable water availability seemed to be answered in the early twentieth century as dams became a popular method for water regulation in the United States. The Bureau of Reclamation, or BOR, began exploratory drilling in the Snake River valley in 1932, in search of a site for a dam to create a reservoir to regulate water through drought and flood years. The water stored in the reservoir would provide irrigation water for over 111,000 acres of land as well as a potential source for hydroelectricity.[5] The Bureau identified an eligible site about fifteen miles from Rexburg, Idaho.[6]

---

[3] Andy Horowitz; Remes, Jacob A. C.. "Introducing Critical Disaster Studies" *Critical Disaster Studies.* Edited by Jacob A.C. Remes and Andy Horowitz, 1-8. (Philadelphia: University of Pennsylvania Press, 2021.) 3. https://doi.org/10.9783/9780812299724-001.

[4] U.S. Congress. House of Representatives. Subcommittee on Irrigation and Reclamation of the Committee on Interior and Insular Affairs "To provide for the construction of the lower Teton division of the Teton Basin Federal Reclamation project, Idaho and for other purposes." 88th Congress. 2nd Session. Jun 25, 26 1964. 3.

[5] Robert Boyer. "Teton River Canyon Resource Management Plan." *Reclamation Managing Water in the West*. U.S. Department of the Interior Pacific Northwest Region Snake River Area Office. December 2006. 15.

[6] Snorteland. "Fontenelle dam, Ririe dam, and Teton dam" *Dam Safety.* 2009. 1.

While the proposal of a dam on a tributary of the Snake River had been initiated in the 1930s, the legislation for dam construction continually failed to progress through Congress. Then in 1961, Fremont and Madison counties, in Idaho, were declared drought emergencies, and then high winter runoff caused record flooding leading to population evacuation and crop spoilage in the spring of 1962. Within six months this area was declared both a drought and flood emergency.[7] Two years later, after three decades of stalled proposals in the United States Senate, an Idaho Senator used his burgeoning political influence to push through the Bureau of Reclamation's plans for an earthen dam in the Southeast corner of Idaho.

[Clicking of cameras]: Enter, Freshman Idaho Senator, Frank Church.

[Political Maneuvering]

Water has always been an important political topic in the mountain West: Arizona Senator Barry Goldwater declared to President Jimmy Carter,

> *["There are three things we value in the West. We value women, we value gold, and we value water. And you can fool around with our women and with our gold. But damn you, Mr. President, don't touch our water!"]*[8]

Because of the Snake River Valley desert environment, water rights (meaning those with a legal claim to use water resources) are highly contested, fought over and considered the lifeblood of the community. Fights over water rights have a long and contentious history in Southeast Idaho, and this conflict is amplified because states like Nevada and California have older water rights thus priority on water usage even while it is still upstream in Idaho. This

[7] House of Representatives. Subcommittee on Irrigation and Reclamation "Construction of the Lower Teton Division" Jun 25, 26 1964. 3.
[8] Adam R. Eastman. "From Cadillac to Chevy: Environmental Concern, Compromise and the Central Utah Project Completion Act." (PhD, diss, Brigham Young University, 2006). 1. Vocalized by Ethan Clark.

challenge and controversy is demonstrated in a letter from H.T. Nelson of the BOR Boise, Idaho office to William Warne the Director of California Water Resources on January 3, 1964. Nelson was responding to Warne's proposal of a Snake River diversion plan to store water in an aquafer for the use of California municipalities. Nelson was not in favor of the diversion proposal and adamantly argued the problems with the proposed diversion including the cost of probable legal proceedings and the potential damage to Idaho's ecology.[9] Nelson letter also quotes a promise from Senator Frank Church stating that the federal government had no intention of approving a Snake River water diversion for the use of other states and regions.[10]

Senator Church had always been a champion of water resources in Idaho staying in Idaho. While water is vital for agricultural and domestic purposes, in the 1950s water was also becoming a popular source for electrical power in the Mountain West. During this time period, water controversies also arose over hydro-electric power in Oregon and Idaho because while public power advocates wanted a federal hydroelectric dam, private power company interests blocked legislation movements towards a federal dam by smearing any steps towards publicly funded power as a move towards socialism. When former Oregon governor Douglas McKay became Secretary of the Interior, he immediately granted authorization to build three dams in Hells Canyon by the Snake River.[11] In 1956, Oregon Senator Wayne Morse submitted the dam authorization bill to the Senate, where the bill was immediately defeated. Meanwhile, both the Oregon and Idaho governors who were in favor of a federal dam were up for re-election. Both governors were defeated as opponents continued to pose publicly funded dams as a Socialist move on electrical power.[12] While the two governors lost because of their stance on federal dams, one Democratic candidate for the U.S. Senate ran on the idea that a Hells Canyon power

[9] H.T. Warne. "Letter to William Warne." "Willis Papers." BYU-Idaho Special Collections and Archives. 2.
[10] Ibid. 2-3.
[11] Robert A. Caro. *The Years of Lyndon Johnson: Master of the Senate*. (New York: Random House, 2002.) 896.
[12] Caro. *The Years of Lyndon Johnson*. 2002. Ibid. 897.

source would produce low-cost, affordable electricity. This candidate, Boise, Idaho native Frank Church beat incumbent Idaho Senator Herman Welker.[13]

Freshman Senator Church became a leader of the seven Mountain states co-sponsoring the Hells Canyon Dam legislation because of the potentials of inexpensive power and ample irrigation water. However, because of the public stigma of socialist planned economies, any movements towards a federal Hells Canyon Dam repeatedly failed to gain traction in the U.S. Senate for the legislation to even progress to committee consideration.

The 1957 U.S. Senate session proved to be tumultuous because of civil rights clashes centered on Southern Senators who would only accept certain conditions in a civil rights bill.[14] Majority Leader Lyndon B. Johnson knew that Southern Senators would not accept losing on these points and would filibuster anything else to achieve their goals. Johnson recognized a connection between the Western senators not having enough votes for their public power initiatives and the South's lack of allies for their version of civil rights.[15] Johnson negotiated a coalition. "[I]n return for southern votes for Hells Canyon," [16]

['I got the western liberals to back the southerners' on civil rights."][17]

After the negotiated agreement, Church gained access to Johnson's inner circle by giving a scathing speech against Idaho Power's private power plans as

[*"'small plans for small tomorrows.'"]*[18]

[13] Ibid.
[14] Ibid. 895.
[15] Ibid. 898.
[16] Ibid. 899.
[17] Ibid. 901. Vocalized by Joseph R. Bodily
[18] Caro. *The Years of Lyndon Johnson*. 2002. 905. Vocalized by Nicholas Birch.

In return for Church's performance, he was shot into the national spotlight, the Hells Canyon High Dam Bill made it to committee instead of dying upon proposal, and the Southern Senators were able to get what they favored in the Civil Rights Bill. The "southern-western coalition" set a precedent for Southern and Western vote alliances, as well as the success of any Frank Church Western water proposals.[19]

In 1960, support was renewed for an earthen dam in the Snake River Valley, and BOR began to do more in-depth investigations on the chosen site in Southeast Idaho with plans to finish their "reconnaissance report" by June 1961. Local officials began to express increased support for the dam plans and political pressure began to heighten for research and construction to be expediated.[20] Because of past water legislation successes, Senator Church was the natural choice to sponsor and support a dam project in the Snake River Valley. On March 19, 1963, Senator Church introduced Senate Bill 1123.

> [*"To provide for the construction of the Lower Teton division of the Teton Basin Federal reclamation project, Idaho, and for other purposes*."][21]

After introduction on the floor of the Senate, committee hearings commenced quickly. It is important to note that Senator Church wasn't the first Idaho Congressional representative to introduce a Snake River dam proposal, but the legislation had always stalled and died in Congress.[22] Given Church's track record with water bills and his position in the Senate Majority

---

[19] Ibid. 909.
[20] "Letter to Representative Henry Dworshak." "Willis Papers." BYU-Idaho Special Collections and Archives. Box 1. Folder 2.
[21] U.S. Congress. Senate. "To provide for the construction of the Lower Teton division of the Teton Basin Federal reclamation project, Idaho, and for other purposes." S. 1123. 88th Congress. 1st Session. March 1963. 1. Accessed August 31, 2022.https://tinyurl.com/mrjn3j35. Vocalized by Mandi Campbell.
[22] News from the Office of the Governor of Idaho. "Opening Statement of Governor Robert E. Smylie to the Special Water Problems Study Group." March 10, 1964. BYU-Idaho Special Collections and Archives. "Teton Dam Collection." Box 3. Folder 9.

Leader's inner circle, confidence was high that the legislation would be fast tracked through the Senate. Church declared

> *["I wholeheartedly agree with [the BOR] findings that to prevent future floods, the most feasible solution would be to build the Fremont Dam and Reservoir to hold the surplus water"]*[23]

and to also regulate the variable water flow. For emphasis, Church cited the 1961 drought followed by the 1962 and 1963 floods that caused hundreds of thousands of dollars in damage. Both Idaho senators emphasized that there was no opposition, and the dam proposal was free from controversy.[24] Indeed, community leaders, politicians, interest groups and citizens testified of the need for the Teton dam (originally known as the Fremont Dam) and all-round public support of the dam proposal.

Contrary to claims of no opposition, there was a dissenting opinion from Idaho Power Co. Just as in the Hells Canyon dam debate, Idaho Power opposed the Teton dam construction because of the possibility of increased competition in the power generation and distribution market.[25] In the end, with Church's efforts combined with Johnson's influence, S.B. 1123 was fast tracked through Congressional proceedings and signed into law on September 7, 1964.[26]

While the Teton dam bill had gone quickly through the congressional process, Church's influence hadn't budged the Teton dam proposal from the Senate Appropriations committee to obtain money for the project. In 1967, Church testified that unless funds were approved for the

---

[23] U.S. Congress. Senate. Subcommittee on Irrigation and Reclamation of the Committee on Interior and Insular Affairs. "A bill to provide for the construction of the Lower Teton division of the Teton Basin Federal reclamation project, Idaho, and for other purposes." 88th Cong. 2nd Session. Mar 1964. 17. Vocalized by Nicholas Birch.
[24] Senate. Subcommittee on Irrigation and Reclamation ."A bill to provide for the construction." Mar 1964. 6, 17.
[25] U.S. Congress. Senate. Committee on Public Works Appropriations. Bureau of Reclamation and Department of the Interior Power Marketing Agencies. "Public Works Appropriations, 1956." Apr 20-24, 28-30, 1964. 88th Congress. 2nd Session. 743-791. Accessed September 7, 2022. https://tinyurl.com/597t4t5n.
[26] Eric A. Stene "Teton Basin Project: Bureau of Reclamation." (MA, Thesis: Brigham Young University. 2006.) 7.

project immediately, further emergency relief funds would have to be distributed to the annual flood victims in Idaho.[27] Further, the BOR published a cost/benefit analysis of 1 to 2.23 for the dam project and expressed that any further delay would, in fact, cost the government more money than pushing forward with the project.[28] The appropriation was soon approved.

However, the Bureau's cost/benefit analysis began to be an item of contention for some groups in Idaho who began to question the need for a dam in the Snake River Valley. In an April 1972 Senate Appropriations committee hearing, the Environmental Policy Center, Sierra Club, and Idaho Environmental Council testified in opposition to the Teton Dam proposal as well as noting dissenting opinions from Idaho Fish and Game Department and the Idaho Wildlife Federation.[29] The objection stemmed from studies of the environmental damage imposed by the dam, as well as assertions of the BOR inflating the benefit analysis. Tom Davis, of the Idaho Environmental Council, asserted that Bureau had used a record drought year to calculate maximum cost/benefit calculations and was therefore not an accurate depiction of average environmental factors.[30] Davis testified that if calculations were based on an annual average of drought and flood years instead, the cost/benefit ratio of dam construction would actually be 1 to .69.[31] The BOR's reported estimates were more than three times the cost/benefit analysis reported from the Idaho Environmental Council. In fact, the Idaho Environment Council, with other members of dam opposition, filed suit against the Bureau of Reclamation on allegations of

[27] U.S. Congress. Senate. Committee on Appropriations. Public Works Appropriations for Fiscal Year 1967, Part 2. Apr 26-29, May 3-5, Sep 20, 1967. 89th Congress. 2nd Session. 3098-3099. Accessed September 8, 2022. https://tinyurl.com/5n99ev4m.
[28] United States Department of Interior, Bureau of Reclamation. Region 1. "Lower Teton Division: Teton Basin Project, Idaho." July 1967. "Willis Papers." BYU-Idaho Special Collections and Archives. Box 1. Folder 2. 3.
[29] U.S. Congress. Senate. Committee on Appropriations. "Public Works and Atomic Energy Commission Appropriations." 92nd Congress. 1972. 2nd Session. 417; 715. https://tinyurl.com/337r9ern.
[30] News Dispatches. "30,000 Flee as Idaho Dam Bursts." *The Washington Post*. Jun 6, 1976. ProQuest Historical Newspapers. 3.
[31] Senate. Committee on Appropriations. "Public Works and Atomic Energy Commission Appropriations." 1972. 417, 715.

an inaccurate environmental impact statement that violated the National Environmental Policy. In the end, the ninth circuit court of appeals overturned the claimants' assertion, stating that

> ["the ultimate decision to proceed with the projects, whether made by Congress or an agency, is not strictly a mathematical determination. Public affairs defy the control that precise quantification of its issues would impose."][32]

In other words, the court stated that the economic and environmental cost was subservient to the public good-and what was in the public good was decided by Congress.

Regardless of the mounting opposition, Morrison-Knudsen Company Inc. was awarded the dam construction contract of over thirty-nine million dollars[33] with a directive to begin construction on December 14, 1971.[34] On the onset, from a local's perspective, this dictated initiation date is problematic as the Idaho ground is frozen solid by the middle of December which hinders any kind of construction progress, but the project continued forward. Local environmental factors started to become an obstacle and appropriations had to be increased.

[Construction]

Dam construction did begin in earnest in early 1972. The proposed site was consisted primarily of basalt, rhyolite, and streambed loess.[35] The volcanic rock throughout the site was naturally fractured with large voids through the cliff face and stream bed. The pocketed river walls and stream bed allowed water to flow through and around the entire area. Bureau geologists "'recognized early [on] that the reservoir rim could transmit water in large quantities

[32] Trout Unlimited v Morton. 509 F.2d 1276 (9th Cir. 1974). 7.
[33] Pacific Northwest Region Public Affairs Office. U.S. Department of the Interior Bureau of Reclamation. "Teton Dam History and Facts." *Reclamation Managing Water in the West.* June 2016. 1. Accessed August 30, 2022. http://www.usbr.gov/ssle/damsafety/index.html.
[34] Stene. "Teton Basin Project." 1996. 7.
[35] Ibid.

and that seepage from the reservoir could occur.'"[36] Additionally, the project engineer reported to BOR superiors that cave-like cracks, "some large enough for a man to walk through" continued to be discovered throughout the building site.[37]

While the local rhyolite and loess were not ideal types of fill for earthen dam construction because of the porousness and perviousness, the BOR determined that importing materials would be costly and time consuming, so all fill materials were taken from downstream of the dam site. The Teton dam design was created with holes bored along the foundation and apron (or front of the dam) and filled with grout to compensate for the less-than-ideal building materials. [38] Additionally, any crevices and empty pockets would be filled with grout. As construction progressed, half a million cubic feet of grout was utilized. This was almost twice the original estimate for the entire build. If holes could not be filled, the contractor was directed to cap-off the hole and move forward. Gilbert Stamm, Commissioner of the Bureau of Reclamation admitted

> *['"'We knew before we ever went in…we had [a] soft porous, fissured rock [foundation]'" and "'[w]hen the geologic faults were discovered in 1974, '[we] did not consider halting construction.'"*[39]

The dam was considered complete in November 1975, and water began to be diverted to the Teton reservoir at the recommended flow of one cubic foot per day. On March 23, 1976, the

---

[36] Idaho Department of Emergency Management. "Dam Collapse: 1976 Teton Dam Collapse." 2. Accessed August 26, 2022. https://ioem.idaho.gov/news/a-history-of-idaho-disasters/dam-collapse/.
[37] "Teton Cracks Spotted in 1974." *Idaho Statesman*. June 11, 1976. 1A.
[38] N. Delatte; Solava, Stacey. "Teton Dam Failure Case Study." *Lessons from the Failure of the Teton Dam*. 3rd ASCE Forensics Congress. (San Diego, California. October 2003.) 1.; United States. Bureau of Reclamation. "Teton Basin Project, Lower Teton Division: Environmental Impact Statement." April 1971. Volumes D,F and comments on draft B1. 7. Accessed September 6, 2022. https://tinyurl.com/3sh9wjk8.; Stene. "Teton Basin Project." 1996. 8-9.; Timothy, J Randle; Bountry, Jennifer A.; Klingler, Ralph; Lockhart, Allen. "Geomorphology and River Hydraulics of the Teton River Upstream of Teton Dam Teton River, Idaho." Technical Service Center. (Denver: Colorado. May 2000.) 55.; Ian Smalley. "The Teton Dam: rhyolite foundation + loess core=disaster." Geology Today. January-February 1992. 1.
[39] Idaho Department of Emergency Management. "Dam Collapse: 1976." 2. Vocalized by Daren Campbell.

Bureau's Teton Dam Project office was given permission from the BOR Denver office to increase the fill rate to two cubic feet per day. Further, on May 13, 1976, the rate of water flow increased to three feet and ultimately to 4.3 cubic feet per day-more than four times the recommended rate.[40]

On June 3, 1976, BOR staff found two springs of water approximately six hundred to nine hundred feet downstream from the dam. The next day a spring was discovered 100 feet from the base of the dam.[41] On June 5 at 10:15a.m., a wet spot was viewed on the upper left-hand side of the dam and bulldozers began to push fill materials into the rapidly expanding hole to try to stop the flow of water.[42] Within forty-five minutes a whirlpool developed upstream from the dam, the side banks began to collapse, and the bulldozers began to be sucked into the void on the upper left hand side of the dam, and by 11:15a.m. the left side of the dam collapsed.[43]

Geography professor Dale Howard witnessed the collapse and recounted

> *["The sound was just a roar like we were standing at the bottom of a waterfall. The powerhouse disintegrated like it was made of cardboard…There was a beautiful grove of cottonwood trees, and they bowed over like matchsticks."[44]]*

As the earthen works collapsed, eighty billion gallons of water, no longer held back by the dam, surged down the river valley carrying four million cubic yards of embankment materials towards unsuspecting farming communities.[45]

---

[40] Idaho Department of Emergency Management. "Dam Collapse: 1976." 32.
[41] Stene "Teton Basin Project." 1996. 9.;
Report of the Comptroller General of the United States. "Actions needed to Increase the Safety of Dams Built by the Bureau of Reclamation and the Corps of Engineers." June 3, 1977. 3. Accessed September 10, 2022. https://tinyurl.com/3h32e92h.
[43] Stene "Teton Basin Project." 1996. 10.
[44] O.K. Johnson. "Tragedy: A chronology of the Teton Dam disaster." *The Blackfoot News and The Standard Journal*. 9. Accessed October 6, 2022. Museum of Rexburg Collection, Idaho. Vocalized by Gary Marlowe.
[45] Snorteland. "Fontenelle dam, Ririe dam, and Teton dam" *Dam Safety 2009*. 4.; Randle. "Geomorphology and River Hydraulics." May 2000. 8.

This ends part one of "Power, Politics and Potatoes." Please tune in for the second part of this episode which includes survival testimonials, the cause of the dam collapse and how it led to the conclusion to Senator Frank Church's political career.

Part 2 of "Power, Politics and Potatoes"

[June 5, 1976]

Welcome back to the concluding episode of "Power, Politics and Potatoes." The first part of this episode discussed the need for water regulation in Idaho and how the Teton Dam bill was pushed rapidly through Congress based on political capital gained through the Senate civil rights battles in the late 1950s. The first episode ended when the dam collapsed and millions of gallons of water rushed towards nearby communities. This episode will touch on survivor experiences and the cultural reaction to the emergency, demonstrate the dam's failure due to institutional hubris which led to dam safety reform, and also discuss the end of a political career.

As dam water rushed towards the valley floor, water spread out eight miles wide and moved at an average of ten to fifteen miles per hour.[46] Just downstream from the dam, the small town of Wilford was destroyed, and the fifteen-foot wall of water reached the town of Sugar City by 1:00 pm. When the embankment-filled water reached Sugar City, utility poles, sections of houses and detritus from a log mill were mixed into the water creating a battering ram effect as flood water swept through the valley.[47] Three hours after the dam failure, flood waters boomed through Rexburg, Idaho. Thirty-thousand acres of agricultural and pasture lands were inundated with dam water and twenty percent of those acres were irrecoverable for use.

---

[46] Stene "Teton Basin Project." 1996. 25.
[47] Stene "Teton Basin Project." 1996. 25.; Janet Thomas; Bernie McCowin; Mary Tingey; Margaret Thomas. *That Day in June: Reflections on the Teton Dam Disaster*. (Rexburg: Ricks College Press. 1977). 1.

> ["Gas and chemical fires followed in the wake of the flood and there were some problems being experienced with rattlesnakes."][48]

The general belief in the community was that that the dam would not or even could not break. So, when the flood waters and associated debris swept through the valley, there was a combination of both shock and awe. A local pilot, Ralph Gugliotta, was flying over the flooded scene and declared,

> ["'This is just unbelievable, totally unbelievable, How in the hell could something like this happen? We have colleges and universities turning out engineering majors every year and something stupid like this happens.'"][49]

Because of the disbelief of dam failure or if it would even really impact area communities, many people didn't evacuate until they saw the water approaching with their own eyes.[50] Edward Evans, from Sugar City, recounted

> ["' I was sitting in the house reading the newspaper when I heard this awful roar. Must have been around 12:30. Then I could hear trees and logs hitting against the house. Water jammed in the door and broke out the windows and thundered into the house.'"][51]

Evans barely made it up his stairs and then watched the homes around him disintegrate. His whole house moved downstream about a half a mile. After the water (and his house) stopped moving he got up and walked to the remains of nearby Sugar City.[52]

---

[48] News Dispatches. "30,000 Flee." *The Washington Post.* 3. Vocalized by Mandi Campbell.
[49] O.K. Johnson. "Tragedy: A chronology." *The Blackfoot News and The Standard Journal*. 8. Vocalized by Eric Lee.
[50] Graham, Wayne J. "The Teton Dam Failure-An Effective Warning and Evacuation." Reclamation Managing Water in the West. July 2008. Accessed August 28, 2008. https://tinyurl.com/mtu7utwv.
[51] Greater Idaho Falls Chamber of Commerce. *Idaho East*. (Idaho Falls: Idaho). Winter 1977. 72. "Teton Dam Collection." BYU-Idaho Special Collections and Archives. Vocalized by Burton Rampton.
[52] Chamber of Commerce. *Idaho East*. 72. "Teton Dam Collection." BYU-Idaho Special Collections and Archives.

Every person carries differing event perspectives, and children always seem to have an interesting lens. A two-year-old from St. Anthony emphatically believed and said that "'the river blew up.'" ["'The river blew up.'"][53]

Another family, the Lathams, lived five miles north-west of Rexburg in a manufactured home. After hearing of the dam collapse, the family evacuated to the Rexburg hill and watched the water roll through the valley. Lorna Latham remembers,

[Lorna experience][54]

Lorna's eldest daughter, Cindy, was thirteen when the dam collapsed. Cindy recalls her impressions,

[Cindy as a twelve year old perspective][55]

The scale of the flood was unlike anything this bucolic farming community had ever experienced. Southeast Idaho is somewhat unique in that a majority of the population were members of the Church of Jesus Christ of Latter-Day Saints (CJCLDS) and a church school, Ricks College, was based in Rexburg, Idaho. This prominent religious culture pivoted from religious worship to pragmatic disaster relief. By the evening of June 5, the CJCLDS had organized relief workers, volunteers and had transported enough supplies to feed and clothe flood refugees. Ricks College became the communication and command center for relief efforts, and over the next several weeks, provided housing for the displaced population as well as serving around 213,000 meals.[56]

---

[53] Sugar City Idaho 2nd LDS Ward. "A daily log of the Teton Dam flood, June 5, 1976 to November 7, 1976." (Sugar City: Idaho. 1976.) 63. Vocalized by Wilder Clark.
[54] Lorna Latham; Southwick, Mike and Cindy. "Teton Flood." Interviewed by Rachel B. Birch. Ammon, Idaho. Oct 7, 2022.
[55] Ibid.
[56] Alyn B. Andrus. "Teton Dam Disaster." Teton Oral History Program. Ricks College, Idaho State Historical Society, Utah State University: History Department. August 24, 1977. Accessed September 12, 2022.

CJCLDS leaders also counseled the population to begin digging and cleaning out properties rather than wait for government assistance. The president of the Church of Jesus Christ of Latter-Day Saints, Spencer W. Kimball counseled church members,

> *[“’Our program is a program that we all understand. It works automatically. Everybody knows their duty.’”]*[57]

While the refugees were being housed and fed at Ricks College, Angela Rydalch, a Rexburg five-year old, remembers feeling like the experience was

> *[“like a big-long sleepover and then the college opened the vending machines and you could have whatever you wanted.”]*[58]

Because of the alacrity of the church’s response, when government agencies arrived in Rexburg on Monday, June 7, the federal relief efforts were placed in a supporting role rather than a primary source of aid. Senator Frank Church commented on the relief organization in a Senate hearing:

> *[“The local agencies, the private agencies, the churches, have just done a job that people can 't believe. The first night of the tragedy, with thousands of people homeless, they were all bedded down and fed.”]*[59]

Many were concerned how their children would process the traumatic experience. Barbara Schwartz remembers,

---

https://tinyurl.com/2p935ksa..; Ricks College News Release. “Ricks College Food Serving.” BYU-Idaho Special Collections and Archives. “Teton Dam Collection.”. Box 3. Folder 9.

[57] Ricks News Release. “Rexburg-Flood.” BYU-Idaho Special Collections and Archives. “Teton Dam Collection.” Box 11. Folder 9. 2-4. Vocalized by Regan Brough.

[58] “The flood from the eyes of a child.” *Standard Journal*. June 3, 2016. 7A. BYU-Idaho Special Collections and Archives. “Teton Dam Collection.” Box 17. Vocalized by Savannah DeMarino.

[59] U.S. Congress. Senate. Committee on Interior and Insular Affairs, Subcommittee on Energy Research and Water Resources. S.3542. 94th Congress. 2nd Session. June 15, 1976. 20. https://tinyurl.com/3vmtmkry. Vocalized by Nicholas Birch.

[Barbara Schwartz Part 4][60]

[Institutional Hubris]

A few weeks after the dam collapse, BOR Commissioner, Gilbert Stamm stated,

[“’Theoretically what happened could not happen.’”][61]

But it did happen, and the local population was negatively impacted by institutional choices that were made in the dam construction and design process. This experience changed people. Senator Church, in cooperation with Idaho Governor Cecil Andrus, launched immediate investigations into the dam failure by appointing an Independent Review Panel.[62]

These investigations revealed major failings in the Bureau’s project design, chiefly that water was able to flow through the abatement (or the side of the dam) because of the rock type used in dam construction. Further, design decisions did not account for site geological anomalies, and finally outdated engineering assumptions and bureaucratic failings contributed to the sheer momentum of the project.[63] No one would stop the project, regardless of warning signs.

In January 1977, Senator Frank Church stated,

[“’In the judgment of the panel, ‘the bureau is held responsible for inferior design of the Teton Dam itself and for insufficient precautions which could have prevented the disaster.’”][64]

---

[60] “Interview Bob and Barbara Schwartz Part 4.” Contributed by Dorothy P. Kennedy. Familysearch.org. February 3, 2019. Accessed 10/1/2022. https://tinyurl.com/cryhx49a.
[61] “What now? Put it together.” *Ashton Herald*. Vol 78, Number 3. June 17, 1976. 1. BYU-Idaho Special Collections and Archives. “Teton Dam Collection.” Vocalized by Daren Campbell.
[62] Snorteland. “Fontenelle dam, Ririe dam, and Teton dam” *Dam Safety 2009*. 3,5.
[63] Department of the Interior and State of Idaho. Independent Panel to Review Cause of Teton Dam Failure. “Summary and Conclusion.” Dec 1976. iii..; Smalley. “The Teton Dam: rhyolite.” January 1992. 4.
[64] Elmer W. Lammi. “U.S. Initiating Changes in Dam-Building Methods.” *The Washington Post*. Jan 1977. ProQuest Historical Newspapers. A6. Vocalized by Nicholas Birch.

The BOR dam design included rhyolite and local streambed loess for much of the dam composition and fill. While the Bureau considered the rhyolite "strong and competent," the natural cracks and rock permeability soaked up any and all grout applied and continued to crack and shift even after holes had been capped off. [65] During construction the head of the Bureau's Earthen Dam section said

> *["the Teton damsite was one of the most pervious foundations on which the Bureau has ever built a dam."]*[66]

Additionally, the BOR acknowledged that the "windblown silt material was not ideal because of its brittleness and erodibility" but claimed that the streambed loess was the only local rock that was suitable for construction and readily available.[67]

While designers understood the nonideal construction materials, in December 1972, government geologists warned Bureau of Reclamation engineers and designers that the dam design was "dangerous and should not be built." The letter defined the hazards and warned that a breach would occur because of the construction materials and steep abatement design. The Department of Interior and the Bureau of Reclamation informed the geologists "that they were being paid to map geology and not to meddle in the construction of dams."[68] These geological warnings were reinforced by the fact that the amount of grout that was inserted in just two, six-inch holes was as much as was originally estimated for the entire project. When cracks would suddenly appear throughout the structure, twenty yards of grout would be poured to remedy the

---

[65] Smalley. "The Teton Dam: rhyolite." January 1992. 1.
[66] Ibid. 38. Vocalized by Trevor Merrell.
[67] Report of the Comptroller. "Actions needed to Increase." June 3, 1977. 42.
[68] Senate. Committee on Interior and Insular Affairs. 94th Congress. Second Session. June 15, 1976. 41.; "Teton Dam Disaster." *The Spotlight*. Jan 16, 1978. 12. BYU-Idaho Special Collections and Archives. "Teton Dam Collection."

crack, and cold air could be felt escaping the hole, implying that there was air flow throughout the structure.[69]

> *["[T]his case stands as a warning against overconfidence and hubris. "'As every dam engineer knows, water also has one job, and that is to get past anything in its way.'"]*[70]

Another way to think of the amount of grout being applied to cracks is to visualize five hundred sacks of grout being added to a hole in the morning, repeated in the afternoon and then the processes repeated again for the next two days.[71] Susan Bodily remembers discussing the issue with some friends who were on the dam site construction crew.

> *[Susan S. Bodily]*[72]

Severe warnings from the federal government's own experts and consultants were ignored based on the Bureau's own confidence in dam construction. Additionally, when local contractors took notice of these anomalies and notified all four congressional representatives, members responded that there was overwhelming support for the project and it was too late to stop construction.[73] Both the Bureau and political representatives pushed forward in their institutional hubris that nothing wrong could happen.

After the collapse, in Congressional investigation hearings, Congressman Leo Ryan of California asked BOR Commissioner Stamm if the Bureau had ever halted a dam's construction

---

[69] Debabrata Giri. Tanmaya Kumar Nayak. "Analysis of Failed Teton Dam." *International Journal of Engineering & Technology*. Vol 5 Issue 09. Sep 2016. Accessed August 30, 2022. www://www.ijert.org. 56.; U.S. Government. Department of the Interior. "Failure of the Teton Dam: A Report of Findings." Failure Review Group. April 1977. 223.
[70] Snorteland. "Fontenelle dam, Ririe dam, and Teton dam" *Dam Safety 2009*. 8. Vocalized by Mandi Campbell.
[71] U.S. Congress. Senate. Committee on Energy and Natural Resources United States Senate. Subcommittee on Energy Research and Development. "To receive information about possible causes for the failure of the Teton Dam." 95th Congress. 1st Session. Jan 24, 1977: Washington D.C.; Feb 21, 1977: Idaho Falls, ID. 36. Accessed September 10, 2022. Accessed September 10, 2022. https://tinyurl.com/3vmtmkry.
[72] Bodily, Susan Southwick. "Teton Flood." Interviewed by Rachel B. Birch. Ammon, Idaho. Oct 9, 2022.
[73] Stene. "Teton Basin Project." 1996. 22.

because of signals of possible dam failure. Stamm stated that the Bureau had never halted construction on a project once it had commenced.[74]

In further congressional hearings, Senator Church asked members of the Independent Review Panel if the repetitive nature of filling cracks with grout was a sign of potential problems. Wallace Chadwick stated that, yes, in order to complete the project, contractors stopped filling minor cracks which then allowed even more water to travel throughout the structure and weaken the integrity of the dam. Fellow panelist R. Keith Higginson further clarified that attributes of rock permeability and inelasticity, in addition to the shapes of the trench, should have been considered and "foreseen by the designers,"[75] and the design, grouting process and construction practices were faulty.

Some of these design failures and negligent practices may have been due to outdated technological knowledge. BOR has created many estimable dams, but the Teton Dam marked a significant blemish on the record of the Bureau. This failure was reiterated by Commissioner Stamm when discussing the fact that hydraulic fracturing was not well understood during dam construction, and that the outdated stress principles utilized by the BOR did not include newer knowledge surrounding hydraulic fracturing.[76] As the reservoir was rapidly filled, the hydraulic fracturing caused the immediate breakdown of the dam structure's materials. In other words, the pocketed rhyolite's shifting combined with the inelasticity of the loess allowed water to flow freely throughout the dam shield and foundation.

---

[74] U.S. Congress. House of Representatives. Committee on Government Operations. "Teton Dam Disaster." 94th Congress. 2nd Session. August 5, 6, 31, 1976. 404. Accessed September 8, 2022. https://tinyurl.com/2p97kjs4.; Stene "Teton Basin Project." 1996. 22.

[75] U.S. Congress. Senate. Committee on Energy and Natural Resources Subcommittee on Energy Research and Development. "Teton Dam Failure." 95th Congress. 1st Session. Publication No 95-34. June 1977. 18. Accessed September 8, 2022. https://tinyurl.com/yzukp72y.

[76] Senate. Committee on Energy and Natural Resources Subcommittee on Energy Research and Development. "Teton Dam Failure." June 1977. 107.

In a Senate hearing, Senator Church confirmed that all but one of the professionals involved in the Teton dam design retired prior to 1977 and the remaining engineer was close to retirement. This indicates that damsite complexities may have been beyond the scope of the staff involved in the design process, which may have contributed to the overall institutional hubris of the Teton dam design, construction, and ultimately dam failure.[77] Part of the panel's recommendations included procedures to halt construction and reservoir filling when "'unforeseen hazards and problems arise.'"[78]

Former BOR commissioner John Keys remembers,

> *["the Teton Dam was the absolute low point for Reclamation, because it told the world that we were vulnerable. We'd made a mistake, a bad mistake…It changed the way we did business forever. It made us over-design stuff two or three times, made us review the hell out of stuff."]*[79]

[Legislative Reform and Political Impacts]

The Independent Review Panel also asserted that part of the Teton dam failure could be accounted for in lack of independent design review in the BOR design process. All Bureau activities, including design, inspection, and approval, were done "in-house." If there was an inner-department deficiency, there would be no independent source to shed light on problems.[80]

---

[77] Senate. Committee on Energy and Natural Resources United States Senate. "To receive information about possible causes." Jan 24, 1977. 151.
[78] Senate. Subcommittee on Energy Research and Water Resources. June 15, 1976. 41.
[79] John D. Keys, III. "Oral History Interview." Interview conducted by Brit Allen Story. Bureau of Reclamation Oral History Interviews. Denver, Colorado. 2007. 109, 111. Vocalized by Stan Swim.
[80] Senate. Committee on Energy and Natural Resources United States Senate. "To receive information about possible causes." Jan 24, 1977. 29.

Higginson recommended seeking outside design consultants and engineers to bolster safety and design checks before and throughout the construction process. To the credit of the Bureau of Reclamation, after the Teton dam collapse, it enacted a Dam Safety Program which became a model for dam constructions worldwide and was soon followed by the Dam Safety Act, which became law on November 2, 1978. This law broadened the need for the BOR to conduct corrective measures in dam sites and future construction, to conduct more thorough environmental considerations, and to enact more public involvement in the decision-making process.[81] The Bureau also began to hire external organizational engineers, changed dam filling procedures and safety practices, and conducted an intense investigation of all the dams to update precautionary standards.[82] This raised awareness was evident when the New Mexico Nambe Dam filling was stopped in 1976 because of the evidence of seeping. The water was subsequently lowered and embankment and construction problems were remedied before pushing forward with reservoir filling.[83]

The Bureau of Reclamation did accept responsibility for the Teton dam collapse, and in early 1977 finished repairs to irrigation systems, rivers and roadways in counties affected by the dam failure. Additionally, by 1987 the Federal government had paid more than 322 million dollars in restitution claims. Considering inflation, in 2022 dollars, this would be more than 840 million dollars. Reform was enacted and restitution money was paid, but there was still a lingering desire for political culpability.

---

[81] Pacific Northwest Region Public Affairs Office. "Teton Dam History and Facts." *Reclamation Managing Water in the West*. June 2016. 2.
[82] Gaylord Shaw. "U.S. Initiating Changes in Dam-Building Methods" *The Washington Post*. Jan 1977. ProQuest Historical Newspapers. A10.; U.S. Congress. House of Representatives. Subcommittee of the Committee on Government Operations. "Dam Safety." 95th Congress. 1st session. March 15,17; June 30, 1977. https://tinyurl.com/ycknhhrt.
[83] *Los Angeles Times*. "Safety Fears Halt Filling of New Mexico Reservoir." *The Washington Post*. June 5, 1977. ProQuest Historical Newspapers. 23.

While BOR was in the spotlight, Senator Frank Church came under some scrutiny for his role in the political initiatives for dam construction. As I reviewed oral histories and talked to people who lost their homes, there wasn't anger or calls for reckoning against Church and there was recognition that Church was one of the biggest advocates for swift compensation to impacted Idahoans. Susan Bodily provided insights that seemed to sum up the population's general sentiment:

[Susan Bodily][84]

On the day of the dam break, Senator Church was campaigning in Ohio in a bid for United States President. His son, Forrest Church, recalls that Church arrived in Southeast Idaho on Sunday, June 6 to survey the disaster area. The Frank Church family believed that the Teton dam collapse marked a close to "Frank Church's quixotic quest for the presidency"[85] as well as an end to his political career. While people didn't outwardly harbor negative feelings towards Frank Church, the 1980 election results demonstrate disapproval and a desire for different leadership.

The 1980 election was complicated for Democrats nationwide, and unfortunately for Church, he was running for re-election in 1980. An incumbent Democratic president, Jimmy Carter, was running for re-election against a highly popular Republican contender, Ronald Reagan.[86] Between Reagan's coattails and the Iran hostage crisis, Carter's campaign collapsed early, and Church lost his re-election bid to Republican challenger, Steve Symms by a little over four thousand votes across the state of Idaho.[87] An analysis of the Federal Election Commission

[84] Bodily. "Teton Flood." Ammon, Idaho. Oct 9, 2022.
[85] Church, F. Forrester. *Father and Son: A personal biography of Senator Frank Church of Idaho*. (New York: Harper & Row, 1985). 119. Accessed September 28, 2022. https://tinyurl.com/yr8pm8yu.
[86] Church. *Father and Son*. 1985. 143-144.
[87] Orbis Cascade Alliance. Archives West. "Frank Church Papers, 1941-1984." Accessed September 28, 2022. https://archiveswest.orbiscascade.org/ark:/80444/xv50912.

results for the 1980 election, in Idaho, report a county-by-county vote allocation for each candidate.[88] Interestingly, if the counties that were impacted by the Teton dam collapse are removed from the 1980 vote totals, Church actually wins the election by over five thousand votes. This reveals that without voters in the impacted Snake River Valley counties voting against Church, Church would have won the statewide election handily and returned to the Senate. Residents in the pathway of the Teton dam flood waters may not have openly blamed Church for the disaster, East Idahoan citizens voted with their feet against Church, shifting the statewide election and ultimately ending Senator Frank Church's senatorial career. He never held public office again.

[Conclusion]

["'Nature bats last.'"][89]

Disasters are inherently long-term political events. The Teton dam collapse was no exception to this rule. Political forces, empowered by past trading of political support, utilized a genuine need for water regulation to thrust a dam design and construction quickly through Congress without thoroughly considering local geological site factors. Political capital was used to construct a faulty dam in pursuit of political influence and to demonstrate prowess of political achievement. Additionally, institutional hubris was exercised by the Bureau of Reclamation relying on outdated knowledge in hydraulic fracturing, pushing construction forward with flawed assumptions, and emboldened in its rush by the political climate to press for the completion of the project and refusing to halt construction even with evidentiary proof of danger.

[88] United States of America. "Idaho-Senate 1980 Election data." Federal Election Commission. Accessed October 1, 2022. https://www.fec.gov/data/elections/senate/ID/1980/.
[89] H. G. Arthur "Teton Dam Failure: The Evaluation of Dam Safety." *Engineering Foundation Conference Proceedings, American Society of Civil Engineers.* New York. 1976. 71. Accessed September 12, 2022. https://sylvester.faculty.geol.ucsb.edu/Teton_Dam/narrative.html. Vocalized by Mandi Campbell.

The population of the Snake River Valley dug themselves out from the flood and bounced back quickly. Within a few months of the dam collapse and flood, Rexburg, Idaho was back to normal daily life, and, in the face of tragedy, vital dam safety and Bureau of Reclamation reforms were enacted. And, while Frank Church continuously advocated for Idahoan prosperity and recovery, his impressive career trajectory ended on June 5, 1976.

This concludes our special two-part episode of "Power, Politics and Potatoes." Please join us again on this podcast of Roots to a Republic as we explore cultural, social and political interactions. Special thanks to Adam Luke at the BYU-Idaho archive for his insights on Idaho water political history, all of the participants who shared personal experiences and vocal talent, and lastly the Roy Rosenzweig Center for History and New Media in technological assistance and expertise.

Bibliography

Arthur, H.G. “Teton Dam Failure: The Evaluation of Dam Safety.” *Engineering Foundation Conference Proceedings, American Society of Civil Engineers.* New York. 1976. 71. Accessed 9/12/2022. https://sylvester.faculty.geol.ucsb.edu/Teton_Dam/narrative.html.

“Bates, Larry. The Day the Teton Dam Broke.” Contributed by Kirk E. Hathaway. Accessed 10/1/2022. Familysearch.org. May 31, 2015. https://tinyurl.com/2p9xvvzb.

Bodily, Susan Southwick. “Teton Flood.” Interviewed by Rachel B. Birch. Ammon, Idaho. Oct 9, 2022.

Boyer, Robert. “Teton River Canyon Resource Management Plan.” *Reclamation Managing Water in the West*. U.S. Department of the Interior Pacific Northwest Region Snake River Area Office. December 2006.

Caro, Robert A. *The Years of Lyndon Johnson: Master of the Senate*. New York: Random House, 2002.

Church, F. Forrester. *Father and Son : A Personal Biography of Senator Frank Church of Idaho*. New York: Harper & Row, 1985. Accessed 9/28/2022. https://tinyurl.com/yr8pm8yu.

“Conferees Agree on Extension of Revenue Sharing Program: Teton Dam Collapse.” *The Washington Post*. Jun 14, 1976. A2. ProQuest Historical Newspapers.

Delatte, N.; Solava, Stacey. “Teton Dam Failure Case Study.” *Lessons from the Failure of the Teton Dam.* 3rd ASCE Forensics Congress. San Diego, California. October 2003.

Department of the Interior and State of Idaho. Independent Panel to Review Cause of Teton Dam Failure. “Summary and Conclusion.” Dec 1976. https://tinyurl.com/2va9e9cp

Eastman, Adam R. “From Cadillac to Chevy: Environmental Concern, Compromise and the Central Utah Project Completion Act.” PhD diss., Brigham Young University, 2006.

Graham, Wayne J. “The Teton Dam Failure-An Effective Warning and Evacuation.” Reclamation Managing Water in the West. July 2008. Accessed August 28, 2008. https://tinyurl.com/mtu7utwv.

Giri, Debabrata; Tanmaya Kumar Nayak. “Analysis of Failed Teton Dam.” *International Journal of Engineering & Technology*. Vol 5 Issue 09. Sep 2016. Accessed August 30, 2022. www://www.ijert.org.

Horowitz; Andy; Remes, Jacob A. C. "Introducing Critical Disaster Studies" *Critical Disaster Studies.* Edited by Jacob A.C. Remes and Andy Horowitz. Philadelphia: University of Pennsylvania Press, 2021. https://doi.org/10.9783/9780812299724-001.

Idaho Department of Emergency Management. "Dam Collapse: 1976 Teton Dam Collapse." Accessed August 26, 2022. https://ioem.idaho.gov/news/a-history-of-idaho-disasters/dam-collapse/.

"Interview Bob and Barbara Schwartz Part 4." Contributed by Dorothy P. Kennedy. Familysearch.org. February 3, 2019. Accessed 10/1/2022. https://tinyurl.com/cryhx49a.

"John D. Keys, III. Oral History Interview." Interview conducted by Brit Allen Story. Bureau of Reclamation Oral History Interviews. Denver, Colorado. 2007.

Johnson, O.K. "Tragedy: A chronology of the Teton Dam disaster." *The Blackfoot News and The Standard Journal*. Museum of Rexburg Collection, Idaho. Accessed October 6, 2022.

Latham, Lorna; Southwick, Mike and Cindy. "Teton Flood." Interviewed by Rachel B. Birch. Ammon, Idaho. Oct 7, 2022.

Lammi, Elmer W. "U.S. Initiating Changes in Dam-Building Methods." *The Washington Post*. Jan 1977. ProQuest Historical Newspapers. A6.

Los Angeles Times. "Safety Fears Halt Filling of New Mexico Reservoir." *The Washington Post*. June 5, 1977. ProQuest Historical Newspapers. 23.

News Dispatches. "30,000 Flee as Idaho Dam Bursts." *The Washington Post*. Jun 6, 1976. ProQuest Historical Newspapers.

Orbis Cascade Alliance. Archives West. "Frank Church Papers, 1941-1984." Accessed September 28, 2022. https://archiveswest.orbiscascade.org/ark:/80444/xv50912.

Pacific Northwest Region Public Affairs Office. U.S. Department of the Interior Bureau of Reclamation. "Teton Dam History and Facts." *Reclamation Managing Water in the West.* June 2016. Accessed August 30, 2022. http://www.usbr.gov/ssle/damsafety/index.html.

Randle, Timothy, J.; Bountry, Jennifer A.; Klingler, Ralph; Lockhart, Allen. "Geomorphology and River Hydraulics of the Teton River Upstream of Teton Dam Teton River, Idaho." *Technical Service Center*. Denver: Colorado. May 2000.

Report of the Comptroller General of the United States. "Actions needed to Increase the Safety of Dams Built by the Bureau of Reclamation and the Corps of Engineers." June 3, 1977. Accessed September 10, 2022. https://tinyurl.com/3h32e92h.

Smalley, Ian. "The Teton Dam: rhyolite foundation + loess core=disaster." *Geology Today*. January-February 1992.

Snorteland, Nathan J.; P. Shaffner; D. Paul. "Fontenelle dam, Ririe dam, and Teton dam: An examination of the influence of organizational culture on decision-making." Association of State Dam Safety Officials Annual Conference 2009. *Dam Safety 2009*. Jan 2009. Accessed September 8, 2022.https://tinyurl.com/bdey6hsz.

Stene, Eric A. “Teton Basin Project: Bureau of Reclamation.” Thesis: Utah State University. 1996.

Shaw, Gaylord. “U.S. Initiating Changes in Dam-Building Methods” *The Washington Post*. Jan 1977. ProQuest Historical Newspapers. A10

Sugar City Idaho 2nd LDS Ward. *A daily log of the Teton Dam flood, June 5, 1976 to November 7, 1976.* Sugar City: Idaho. 1976.

“Teton Cracks Spotted in 1974.” *Idaho Statesman*. June 11, 1976. 1A.

“Teton Dam Collection.” Boxes 1-17. BYU-Idaho Special Collections and Archives. Accessed Oct 7, 2022.

Thomas, Janet; Bernie McCowin; Mary Tingey; Margaret Thomas. *That Day in June: Reflections on the Teton Dam Disaster.* Rexburg: Ricks College Press. 1977.

Trout Unlimited v Morton. 509 F.2d 1276. 9th Cir. 1974.

United States. Bureau of Reclamation. “Teton Basin Project, Lower Teton Division: Environmental Impact Statement.” April 1971. Volumes D,F and comments on draft B1. 7. https://tinyurl.com/3sh9wjk8

United States of America. “Idaho-Senate 1980 Election data.” Federal Election Commission. Accessed October 1, 2022. https://www.fec.gov/data/elections/senate/ID/1980/.

U.S. Government. Department of the Interior. “Failure of the Teton Dam: A Report of Findings.” Failure Review Group. April 1977.

U.S. Congress. House of Representatives. Committee on Government Operations. “Teton Dam Disaster.” 94th Congress. 2nd Session. August 5, 6, 31, 1976. Accessed September 8, 2022. https://tinyurl.com/2p97kjs4.

U.S. Congress. House of Representatives. Subcommittee of the Committee on Government Operations. “Dam Safety.” 95th Congress. 1st Session. March 15,17; June 30, 1977. https://tinyurl.com/ycknhhrt.

U.S. Congress. House of Representatives. Subcommittee on Irrigation and Reclamation of the Committee on Interior and Insular Affairs “To provide for the construction of the lower Teton division of the Teton Basin Federal Reclamation project, Idaho and for other purposes.” 88th Congress. 2nd Session. Jun 25, 26, 1964.

U.S. Congress. Senate. Committee on Appropriations. Public Works Appropriations for Fiscal Year 1967, Part 2. 89th Congress. 2nd Session. Apr 26-29, May 3-5, Sep 20, 1967. Accessed September 8, 2022. https://tinyurl.com/5n99ev4m.

U.S. Congress. Senate. Committee on Appropriations. "Public Works and Atomic Energy Commission Appropriations." 92nd Congress. 2nd Session. 1972. https://tinyurl.com/337r9ern.

U.S. Congress. Senate. Committee on Energy and Natural Resources Subcommittee on Energy Research and Development. "Teton Dam Failure." 95th Congress. 1st Session. Publication No 95-34. June 1977. 2nd Session. Accessed September 8, 2022. https://tinyurl.com/yzukp72y.

U.S. Congress. Senate. Committee on Energy and Natural Resources. Subcommittee on Energy Research and Development. "To receive information about possible causes for the failure of the Teton Dam." 95th Congress. 1st Session. Jan 24, 1977: Washington D.C.; Feb 21 1977: Idaho Falls, ID. Accessed September 10, 2022. https://tinyurl.com/3vmtmkry.

U.S. Congress. Senate. Committee on Interior and Insular Affairs, Subcommittee on Energy Research and Water Resources. S.3542. 94th Congress. 2nd Session. June 15, 1976. https://tinyurl.com/3vmtmkry.

U.S. Congress. Senate. Committee on Public Works Appropriations. Bureau of Reclamation and Department of the Interior Power Marketing Agencies. "Public Works Appropriations, 1956." Apr 20-24, 28-30, 1964. 88th Congress. 2nd Session. Accessed September 7, 2022. https://tinyurl.com/597t4t5n.

U.S. Congress. Senate. Subcommittee on Irrigation and Reclamation of the Committee on Interior and Insular Affairs. "A bill to provide for the construction of the Lower Teton division of the Teton Basin Federal reclamation project, Idaho, and for other purposes." 88th Congress. 2nd Session. Mar 1964.

U.S. Congress. Senate. "To provide for the construction of the Lower Teton division of the Teton Basin Federal reclamation project, Idaho, and for other purposes." S. 1123. 88th Congress. 1st Session. Mar 1963. 1. Accessed August 31, 2022. https://tinyurl.com/mrjn3j35.

"Willis Papers." Box 1. BYU-Idaho Special Collections and Archives. Accessed Oct 7, 2022.