

**Talking Points for June 4th Council Budget Hearing and June 6th Historic
Landmark Commission (HLC) Hearing. K. Fisher June 1, 2019**

1) Solutions - recommendations:

a) Condition approvals prohibiting building at 4 Ave site:

- i) Condition appropriation and HLC exception permit on the DPU moving the Well to the park at State Street and Canyon Road. *Expressly condition the appropriation to prohibit building at 4th Ave and Canyon Road.* An underground transmission line would be built from the existing 4th Ave well borehole to a separate chemical treatment plant. Plant would be redesigned to be more flood, earthquake and terrorist resilient.
- ii) Condition on requiring the DPU and-or Mayor's office requesting critical facility siting assistance – which if free – from the Utah Geologic Survey.
- iii) Condition on directing the DPU to apply to the RDA for a supplemental loan or grant to move the Well via an interlocal agreement.

b) Fund another 1.5M USD to move the Well:

- i) Raise DPU water, sewer and lighting rates by 8 mills.
- ii) Defer other DPU projects in the 2019-2020 budget from one year and reallocate more money to move and build the Well.
- iii) Have the Council and Mayor in their capacity as the RDA Board and Director make a loan or grant to move the Well. The CBD is the primary beneficiary and should contribute more in proportion to what it will receive.

2) Problems - 4th Ave site and design:

- a) **Earthquake Risk** – During a predicted 6.75 magnitude or greater earthquake, ground liquefaction could cause the building to fail, breach the chemical sodium hypochlorite (bleach) storage container, and result in neighbors have to deal with a chlorine gas cloud and-or chemical spill while the digging their neighbors out from the rubble.
- b) **Flooding Risk** – The 4th Avenue site is in the geologic streambed of City Creek. Although City Creek at this point bypassed by the 1910 conduit and flood protection was upgraded after the 1983 flood, the site is a risk for cloudburst flooding of 2,400 cubic per second, as occurred at Perry's Hollow in 1945. Possible cloudburst flows are multiple times beyond the capacity of existing flood protection control structures.
- c) **Management Factors** – The DPU has already spent about \$500,000, including common project administrative overhead, on siting and construction preparations. The Council should put a stop to the debate and direct the DPU to concentrate on a more technically and socially optimal site.
- d) **Terrorist Risk** – The unique siting at the mouth of Canyon Road makes the chemical treatment plant too an attractive target for a terrorist attack in which the sodium hypochlorite stored inside would be used as one part of a binary chemical weapon. This siting constraint is unique to Memory Grove and does not extend to the other proposed treatment plant at “U” and 5th Avenue, also in the 2019-2020 budget.
- e) **Building Design** – On May 9, the DPU proposed a smaller building (30 x 60 feet) in response to neighborhood input. This industrial facility is intrinsically incompatible with the historic neighborhood. It could be resized and redesigned to make it more earthquake, flood, and terrorist design. That is the inherent design dilemma that cannot be resolved at the 4th Ave site. Those engineering trade-offs are solvable at the proposed, but more expensive, relocation site.

- 3) **Rebuttal: Equity Justification and the Increased Cost of Relocation:** In 2016, the Council waived at least \$7.1 million in developer fees in order to spur high density growth in the CBD, but claims will now be made that there is not enough money to move the Well. Now that the growth is here, water infrastructure upgrades for water quality and higher water pressure are needed for the CBD. If built at 4th Ave and if surrounding property values decline 8%, property owners will lose an estimated at \$992,000. The Well primarily benefits the CBD, and the CBD should be required to contribute to moving the Well in proportion to the benefits that the CBD will receive.

4) Images and multimedia

- What happens when irresponsible teenage boys mix small amounts of sodium hypochlorite and ammonia - <https://youtu.be/56hxLYWIKfs?t=36>
- What happens when irresponsible teenage boys mix small amounts of sodium hypochlorite and brake fluid - <https://youtu.be/iwhzbiPuLS8?t=81>
- Cloudburst Flooding
 - Salt Lake Telegram, August 20, 1945.

STORM COSTS S. L. \$300,000

City Digs Out After Rain, Wind, Hail, Flood Strike



Workers and trucks at Salt Lake City street department continue work of cleaning road, trees and huge boulders left in wake of a huge storm which swept into the city from the west Sunday night. Workers here are clearing at 1st ave. and 2nd st.



Uncovering a battle front battlefield after heavy strafing by enemy planes, these aircraft at Salt Lake airport Monday were lifted in the over \$100,000 damage caused there by Sunday's storm. Two planes were lifted over an eight-foot fence by wind.



Some of the damage caused by swirling walls of water and mud-laden storm is shown in this general view picture of the burial ground. (Mayor Earl J. Glade estimated cemetery damage at over \$60,000.)

Salt Lake City Monday was digging out from under the debris and repairing damage from Sunday night's record wind-rain-hail storm and flood, as unofficial estimates placed the damage between \$300,000 and \$400,000.

Damage at the Salt Lake airport alone was expected to top \$100,000, with 35 planes reported damaged or destroyed and 2000 windshields in hangars and buildings shattered.

Severe damage was reported to the City cemetery by Mayor Earl J. Glade, who estimated the loss there alone would reach between \$60,000 and \$75,000.

No estimates were available on damage to private property throughout the city, although Mayor Glade said damage to city streets and installations would "run into several thousands of dollars."

Mayor Glade made his estimates after a tour of the city's north bench and the airport, where the storm struck hardest.

"Damage to the municipal airport buildings and hangars will total \$55,000 at least," he said.

"One can hardly imagine what the storm did unless he has surveyed the picture," he concluded.

Water still was standing in some streets where storm sewers were clogged and pedestrians were treading slippery ever layers of clay and silt several inches deep in some near downtown streets.

Fallen trees and broken limbs lay across sidewalks, and barrels, tin cans and empty paper were strewn across well-tended walks and lawns, bearing testimony to the passage of refuse-laden waters sweeping across the city from the canyon.

Hundreds of windows were smashed, auto tops damaged and flowers and shrubbery damaged by hailstones in the north and west sections of the city.

The near-hurricane storm was confined to within a few miles of Salt Lake, with considerable variation in intensity found even within the city. It was part of a "storm front" which moved in from Idaho Sunday. Other points reported light showers, but the thunderstorm activity was confined mainly to Salt Lake, Davis, Weber and Utah counties.

Hailstones "as big as eggs and golf balls" were reported in some areas. In some instances the hail was as big as eggs and golf balls. In some instances the hail was as big as eggs and golf balls. In some instances the hail was as big as eggs and golf balls.

Huge "blast" of water was observed first about a block north of the Salt Lake Memorial museum on 15th ave. From there it rushed across the Salt Lake City cemetery in a giant, swirling river and into the city.

Damage to the cemetery included the graves blown over, headstones and flowerbeds washed away and deep gullies across some plots. Some graves were damaged.

Plotted ones were moved three blocks and a section of street paving 10 feet square was swept away. Hailstones "as big as soccer balls" were reported on South Temple and north bench streets.

Blowing clouds

A three-foot wall of water rushed down 2nd street from Lincoln square, carrying with it 200 tons of mud and debris and washing eight cars a block down the street. Large chunks of sidewalk were torn loose.

The horses were washed away as a wall near the gravel pit on Dry canyon. One west bound truck was overturned, but the others were still moving.

Hurricane gusts of wind, ranging up to 50 mph, were reported at the airport, where hangars are being repaired.

See Page 2, Column 1.

ii) Salt Lake Telegram, August 24, 1918.

PROPERTY DAMAGED BY BIG CLOUDBURST

Serious damage to private property in the vicinity of West Capitol and Wall streets was caused by last night's cloudburst. The city street department went into action this morning to clear up the debris washed down by the flood. Hundreds of dollars of damage will be caused to private property, according to an announcement made today by W. P. Gillespie, superintendent of the city street department.

Front lawns, gardens and even cellars were inundated today by a layer of silt and debris a foot deep in some places. It was reported that debris had been carried as far as Second West street.

Dr. Wooley's summary of the event as reported in the August 24, 1918 Deseret News, stated that "great boulders were carried several blocks" and that silt at 200 West was 1 foot deep:

Great boulders were carried several blocks, and lawns and roadbeds were washed out or covered with debris. Storm centered on hill north of State Capitol. Silt carried to Second South Street was 1 foot deep. (DN Sept. 24, 1918.)