

# waterfrontline

The water's edge is the front line.

Niobrara, Nebraska. 2019.

Following the bomb cyclone storms in the upper midwest in March 2019, flooding and ice dam breakage coupled with already inundated land led to dam breaches that devastated the farming towns above the Missouri River.

In flood events, catastrophic failures are often caused by the water surge throwing debris against a solid bridge or dam until it breaks. In Nebraska, the debris was massive blocks of ice.

BEFORE: The Niobrara River Spencer Dam, as it existed in September 2018:



(Source: *the Holt County Independent* [www.holtindependent.com/news/nioibrara-river-project-partners-take-major-step-to-protect-river/article\\_64aace28-c19e-11e8-877c-bb60d5468746.html](http://www.holtindependent.com/news/nioibrara-river-project-partners-take-major-step-to-protect-river/article_64aace28-c19e-11e8-877c-bb60d5468746.html))

AFTER: And that dam 6 months later after the March 2019 flood and ice broke through it:  
(<https://youtu.be/F1ImFYhtRfM>)



The dam break destroyed an adjacent residence, washed out US Highway 281, the Mormon Canal Bridge in Niobrara, and Highway 12. Water service for 2,000 was cut off when a pipeline in the riverbed was carried away. (See [https://journalstar.com/news/state-and-regional/nebraska/foot-wall-of-water-one-dam-breaks-three-counties-suffer/article\\_eaf487d7-acc0-53a8-8786-9eccb43942ed.html](https://journalstar.com/news/state-and-regional/nebraska/foot-wall-of-water-one-dam-breaks-three-counties-suffer/article_eaf487d7-acc0-53a8-8786-9eccb43942ed.html)). This photo from the NEStatePatrol twitter feed (<https://twitter.com/NEStatePatrol/status/1107024352137134081?s=20>) shows the Highway 12 bridge section that was relocated downstream by the force of the surge:



In the town of Niobrara (population 370), the flood threw huge chunks of ice against buildings, demolishing them. Roads into the town, the town's water system, its sewage system, small businesses, and basic necessities were all severely damaged.



See the full local news story (screen shot above) here: <https://youtu.be/LJudVmBD18k>

The roads into town that hadn't been destroyed by the flood were covered by ice blocks:  
(from <https://twitter.com/thosewholove/status/1106411318121246720?s=20>)



The impact to rivers could be seen from space, as tweeted by the Nebraska State Patrol:  
(<https://twitter.com/NEStatePatrol/status/1107692835447468032>)



**NEStatePatrol**

@NEStatePatrol

Follow

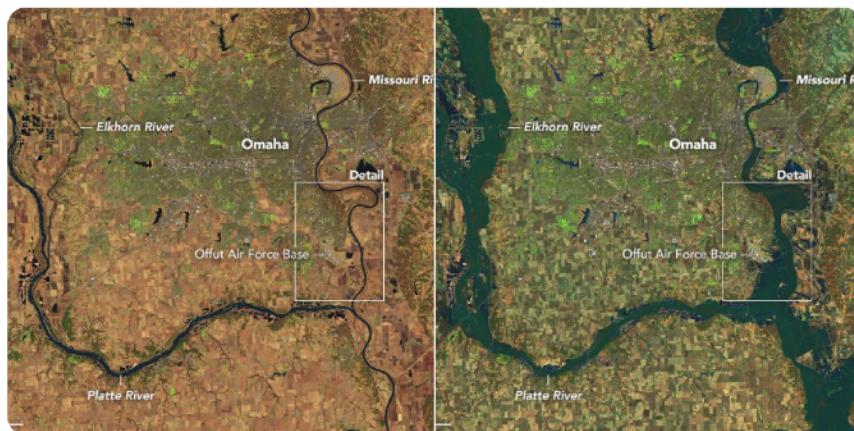


Check out these images from [@NASA](#).

Left is from March 2018.

Right is from Saturday.

Troopers have shared images from ground and from the air, but to see if from space is even more eye opening.



What does this look like up close? See *this video*: (screen shot below)  
<https://www.facebook.com/klkntv/videos/435720577166755/?v=435720577166755>

That's from Ann Kepler's family farm in Keya Paha County, Nebraska. Their farm was covered by an iceberg 20 feet high, 200 yards wide and a mile long. When it melted, it left behind a thick clay layer that turned their fields into the consistency of riverbeds.  
(Screen shot from the video:)



On a positive note: on the strength of donations and contributions of volunteer efforts, the Niobrara cafe was rebuilt. ([https://www.omaha.com/news/state\\_and\\_region/customers-and-volunteers-step-up-rebuild-niobrara-s-country-cafe/article\\_e5fe52bb-e094-529f-b59a-9ea027439e31.html](https://www.omaha.com/news/state_and_region/customers-and-volunteers-step-up-rebuild-niobrara-s-country-cafe/article_e5fe52bb-e094-529f-b59a-9ea027439e31.html))

According to the Encyclopedia Britannica (<https://www.britannica.com/place/Niobrara-River>), the name “Niobrara” is of Omaha or Ponca Indian origin, and means “running (or spreading) water.” Downstream from this flood, the Missouri River area would be under a flood emergency status for a record 279 days, from March to December of 2019. For many along the river, the entire planting season was lost.

---

*Footnote:*

In many floods, the losses include lives as well as property. As noted, the adjacent residence to the dam was destroyed. Its occupant's body was never found, and his widow is now suing the dam's owner, the Nebraska Public Power District. See <http://netnebraska.org/article/news/1203942/widow-seeks-5-million-nppd-death-damages-following-collapse-spencer-dam>