

September 6, 2021

News and Notes

I've been on vacation for the past week, so I'm just posting a few items on news and notes this week. I'll return to depositional environments next week.

As I noted last week, Hurricane Ida gave the USA a real s**t kicking last week and then moved on to Atlantic Canada; here are a few stories:

- [Heavy rainfall continues as remnants of Ida soak Maritimes](#)
- [These Images Show Just How Bad Hurricane Ida Hit Louisiana's Coastline](#)
- [Satellite Observes Power Outages in New Orleans](#)
- [More than 45 dead after Ida's remnants blindside Northeast](#)
- [Before-and-after satellite images show flooding in NY, NJ after Hurricane Ida](#)

Many commentators are blaming the ferocity of Hurricane Ida on climate change. I am not sure if that is an accurate assessment. First, climate change is a long term phenomena and blaming any weather event on this process may be mistaking the noise for the signal. However, there is some truth to the concern that extreme weather events may be a symptom of climate change. We have had about 200+ years of relatively stable climate; that seems to be changing. Increased volatility in weather is likely to be the norm for the future. The contribution of greenhouse gasses to this process is under debate, but is likely to exacerbate the process by retaining more heat in the system.

[Bjorn Lomborg has a comment here in the Wall Street Journal](#) and here on [Facebook](#) (the WSJ article is behind a pay wall) .

Other news:

- [Photos of Mars rocks from NASA](#), the link from the [news page of Geology.com](#) absurdly says "Rocks on Mars Look a Lot Like Rocks on Earth"
- Also on Mars, [the rover Perseverance begins collecting Martian rock samples](#).
- Got lots of money to spend? [A fossil skeleton of a Triceratops is coming up for auction](#) October 21 at the Hôtel Drouot auction house in Paris, France.
- With regards to climate change, from the United States Geological Survey (USGS), [How Rising Seas Push Coastal Systems Beyond Tipping Points](#). As I noted in my [August 23](#)

[posting](#), coastal environments are dynamic systems. Add rising sea levels, by whatever cause, and there are going to be many effects, many of them adverse to human activity.

- More on climate change, an environment advocate reports that the [Russian Arctic Is Experiencing Dramatic Ice Loss](#). Are they biased? Of course they are! Their name, Tree Hugger, gives it away. However, they have links to legitimate studies and if you can think critically, you can look past the opinion to ascertain the facts.
- Even more on climate change, [Glaciers are a 'very large thermometer that visualize climate change'](#). Glaciers are fascinating, a lot of the surficial geology in my part of the world is related to glaciation, as I discussed in my [July 19th posting](#).
- Also on glaciers, congratulations to Glaciologist Regine Hock for being awarded the [2021 Richardson Medal](#) by the [International Glaciological Society](#).
- Some journalists are chasing [Spectacular photos of lava flows in Iceland](#). Looks like fun to me.
- This is interesting, the USGS reports that [Increased Pumping in California's Central Valley During Drought Worsens Groundwater Quality; full paper here](#). The over use of aquifers is a big problem. We essentially preclude future use of these water sources in order to meet current needs/desires. It is not only unsustainable, it leaves things worse than they were before. In this case, overuse is causing the aquifer to be contaminated by nitrates from fertilizers, as in Figure 1. Interestingly, they didn't link it to climate change.

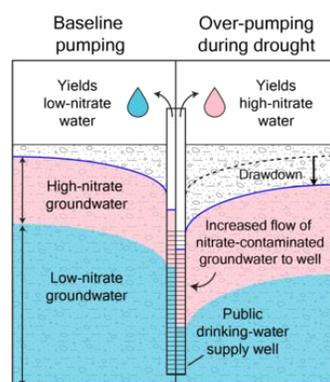


Figure 1 - Drawdown Cone and Nitrate Contamination
Credit: USGS, [public domain](#)

Here are some photos from my road trip, these were taken along Highway 93 that runs from Jasper AB to Lake Louise AB taken Sept. 1, 2021.



Athabasca Falls



It began to snow as we got into the higher elevations, this was at 1250 metres above sea level. The highest point on the Highway was 2200 metres above sea level.



The outdoor temperature at this point was 2° C. At the highest point in the trip, it was 1° C



Here is the Columbia Icefield



The Columbia Icefield carved out a U shaped valley