Do you know of a colleague and/or student who would be interested in receiving these Bulletin Boards? Please forward to them. A quick email to Geosciences-BBoard@att.net with the word “subscribe” in the subject line and the email address will be added to the listing.

**Geoscience Bulletin Board – 5 August 2019 – compiled by Elaine J. Hanford**

Perspective: The great climate conundrum – “how much of the 19th-century warming is attributable to a recovery from volcanic cooling versus the influence of human activity, and whether there are any artefacts from splicing together proxy-based records and instrumental observations”

- https://www.nature.com/articles/s41561-019-0428-1

UC-Merced student helps unearth Triceratops skull in Hell Creek Formation in Badlands, North Dakota


Robert Ballard found the Titanic – now he will hunt for the Amelia Earhart airplane


Toxic food & toxic water could be killing Orca whales in British Columbia – PCBs, microplastics


Cobriza Mine tailings failure – high resolution image from SkySat


Abundance of ammonia-oxidizing Archaea (AOA) in deep biosphere in seafloor sediments

Octopi are notorious for camouflage – they also make quicksand

Small piece of Juan de Fuca plate beneath central Oregon is “dying” – hole is actually a tear

Method to predict seismic activity resulting from injection of wastewater

Sea spray is an important component of air-sea interface exchange

Increase in rainfall leads to increased activity of hundreds of slow-moving landslides in California

NASA Picture of the Day: Lightning strike on peak of Volcán de Agua

Professor Emerita Tanya Atwater receives Penrose Medal – geophysicist & marine geologist

Pioneering geologist Marie Tharp noted bathymetry of valleys & ridges of Mid-Atlantic Ridge

Just how old is the Moon? 100M years older than previously thought

Extremes in the ocean

Shape of meteorites drastically changed by interaction with atmosphere

Meteotsunami in the Persian Gulf

Cambroraster falcatus - 500 myo fossil species in Burgess Shale named after “Millennium Falcon”
Ice cores may help resolve conflict of models with actual tropospheric ozone levels & mixing
• https://eos.org/articles/how-ice-cores-are-helping-to-track-preindustrial-ozone

11 facts about blue whales

Chemistry of drop of water influences thinking on origins & timeline of plate tectonics

Maryborough Meteorite: 17-kg massive stony chondrite found in Australia
• http://www.sci-news.com/space/maryborough-meteorite-07443.html

New model may help predict most damaging volcanic eruptions

Vacationing school teacher finds 2.12 carat brown diamond at Crater of Diamonds State Park
• https://www.foxnews.com/science/vacationing-schoolteacher-finds-2-12-carat-brown-diamond

Best landslide videos of 2019

Ambassador to Zambia calls for geological information of mineral resources
• https://www.lusakatimes.com/2019/08/01/us-ambassador-to-zambia-calls-for-geological-information-on-zambias-mineral-resources/

Putting an end to the hot spot debate? Hot spots do move
• Paper: https://www.nature.com/articles/s41467-019-11314-6

Understanding Sahelian thunderstorms improves forecasts of mid-latitude weather
• Paper: https://www.nature.com/articles/s41467-019-11081-4

Vertical redistribution of salt and changes in salinity layering in the ocean
• Paper: https://www.nature.com/articles/s41467-019-11436-x

Mesoproterozoic Velkerri Formation provides weathering record in absence of biological influence
• Paper: https://www.nature.com/articles/s41467-019-11421-4

Want to buy an extinct volcano? Posbury Clump is for sale in Devon, England
• https://www.atlasobscura.com/articles/for-sale-extinct-volcano

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Environmental Science Bulletin Board – 5 August 2019 – compiled by Elaine J. Hanford

July 29 was Earth Overshoot Day – one full year of resources already used by humans
•  https://www.msn.com/en-us/news/causes/earth-overshoot-day-shows-were-tearing-through-resources-faster-than-ever/ar-AAF0Q1J

Why there are almost no mosquitoes in Disney World – unlike the majority of Florida swampland

US fertility rates decline 2% to “all-time low” in the US

Megadroughts may once again occur in the American Southwest – Note: 14 megadroughts occurred BEFORE “man-made global warming” between 800 and 1600 AD
•  https://start.att.net/news/read/article/newsweek-decades_without_rain_america_set_for_megadroughts-newsweek/category/news
•  Paper:  https://advances.sciencemag.org/content/5/7/eaax0087

“Airbnb bill” in Arizona allowing developers to overrun towns – limits local control – increasing noise, trash & traffic in neighborhoods

Anthrax is endemic to parts of Texas – Situational Update 4
Abandoned Usolyekhimprom chemical manufacturing facility in Siberia poses toxic environmental risk


Rebuilding following Nepal 2015 M7.8 Earthquake is an ongoing activity


Davenport, Iowa, re-considering wall to protect city from floods

- [https://www.apnews.com/c074a4e4698a4e62a84d5e720461904d](https://www.apnews.com/c074a4e4698a4e62a84d5e720461904d)

Honolulu pondering flood risk project for Ala Wai Canal & plan to clean up most polluted waterway


Oregon is lagging in disaster preparedness for wildfires & earthquakes


Perspective: Agroecology – improved seed & fertilizer are not sufficient for productivity


Will a “virtual border wall” be effective in protecting our national security?


Why you might want to think twice before going to a water park


UT-Arlington developing method to test seismic vulnerability of water pipeline systems


Using AI to manage city water


Will smart roofs help urban heat islands?


Photo-essay: Baikalsk: a horrifying example of a high-risk waste storage facility in Russia
Austin, Texas, re-thinking transportation path to cope with considerable traffic congestion
- [https://www.govtech.com/fs/transportation/Growth-Spurt-Forces-Austin-to-Rethink-Its-Transportation-Path.html](https://www.govtech.com/fs/transportation/Growth-Spurt-Forces-Austin-to-Rethink-Its-Transportation-Path.html)

High-tech biosecurity combines software & GPS for immediate outbreak containment

USDA proposed amendments to Great Sage Grouse Land Management Plans

Songbirds are being poached from the forests around Miami, Florida – sold illegally

Climate warming up? – raccoons are loving it and expanding their range

Call for review of failure of the 92-year-old Spencer Dam in March 2019 in Nebraska
- [https://www.omaha.com/news/nebraska/nebraska-asks-for-national-review-of-year-old-spencer/article_88f3da17-29e6-5ca4-90a6-26cf89d1e15e.html](https://www.omaha.com/news/nebraska/nebraska-asks-for-national-review-of-year-old-spencer/article_88f3da17-29e6-5ca4-90a6-26cf89d1e15e.html)

Massacre Rim in NW Nevada is largest and newest Dark Sky Sanctuary

Perspective: Massive amount of plastic waste – change plastic or change humans?
- [https://www.npr.org/2019/07/30/744099949/plastics-or-people-at-least-1-of-them-has-to-change-to-clean-up-our-mess](https://www.npr.org/2019/07/30/744099949/plastics-or-people-at-least-1-of-them-has-to-change-to-clean-up-our-mess)

There have been no reported polar bear attacks on humans in Alaska since 1993

Phasing out certain toxic PFAs chemicals – replacements may be just as bad

Perspective: Some actions to help stratospheric ozone recover may be prolonging the process

New partnership intended to build public awareness of global earthquake risk
Persistent pollutants accumulating since the 1940s are washing out of melting glaciers

“slum upgrading” where do billions of slum-dwellers go when push comes to shove?

Who is to blame for recycling crisis? Government, business, us

Whaley Bridge dam collapse – Toddbrook Reservoir could fail – town evacuated
•  https://www.apnews.com/869680915e6841f094948793d21ff1f1

Reducing & stabilizing human population numbers globally important for rebalancing the planet
•  https://www.sciencedaily.com/releases/2019/07/190731171719.htm

Pericosine A reacts with skunk spray secretions & transforms them to odorless products
•  http://www.sci-news.com/othersciences/chemistry/skunk-spray-odor-07435.html

Wild boars are wreaking havoc on cities across Europe
•  https://www.theguardian.com/world/2019/jul/30/boar-wars-how-wild-hogs-are-trashing-european-cities

NY Power Authority plans $1.1B modernization of Niagara Power Project
•  https://buffalonews.com/2019/07/31/power-authority-to-invest-1-1-billion-in-niagara-power-project-over-15-years/

Butterfly genetic diversity determined by long-term population size & effects of selection
•  Paper:  https://www.nature.com/articles/s41467-019-11308-4

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Coastal Zone Management Bulletin Board – 5 August 2019 – compiled by Elaine J. Hanford

40,000 liters of diesel spilled near remote island off coast of Guarello Island in Patagonia

5 pilot whales beached in Pinellas County, Florida

4th Circuit Court of Appeals vacated permits for proposed 600-mile Atlantic Coast Pipeline

US Coast Guard seized 26,000 pounds of cocaine from smugglers in Pacific waters

Anti-litter groups in Georgia are targeting cigarette butts on beaches or flicked into water

NOAA exploring methane seep field off the North Carolina coast
Deserted, rusting oil tanker off coast of Yemen holds more than million barrels of oil that could leak

More than 150 illegal migrants may have drowned in Mediterranean – 137 returned to Libya

Mysterious disease infecting coral species in Dry Tortugas National Park

Is your marine "eco-tour" eco-conscious?
• https://daily.jstor.org/how-eco-conscious-is-your-eco-tour/

Old coastal landfills at risk of erosion & flooding pose toxic risk to coastal regions
• http://geographical.co.uk/places/wetlands/item/3303-toxic-beaches

Houston is a flood-prone city – always has been – but some still hopeful infrastructure will prevent it

Extensive freshwater aquifer imaged off coast of New England – something for humans to exploit with collateral damages?
• https://eos.org/articles/huge-aquifer-imaged-off-the-atlantic-coast

MOOSE (Mediterranean Ocean Observing System for Environment) to detect long-term anomalies

Sabine Neches Waterway to be deepened by dredging to 52 feet – estimated cost of $1.2B

Concrete tide pool being tested along Harbor Island in San Diego to protect coastline

7 years after Superstorm Sandy -planning levee system & seawall to guard south shore Staten Island
• https://www.accuweather.com/en/weather-news/7-years-after-superstorm-sandy-615m-project-funded-to-guard-against-next-monster-storm/70008851

Cliff collapses onto beach in Encinitas, California – not caused by “global warming”
• https://news.yahoo.com/one-person-dead-beach-cliff-001011513.html