

# DWR Climate News Digest

July 2016

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The information provided in the DWR Climate News Digest is a selected compilation of recent popular news articles, publications, and other information relevant to climate change and water management, and is intended to provide educational and thought-provoking material for water managers and water users.

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TOPICS [Find older items in the [Climate News Archive](#)]

## **Reports**

### **[Current and Future Exposure of Infrastructure in the United States to Natural Hazards](#)**

[Rand Corp– July 2016]

## **Published Literature**

### **[Observed forest sensitivity to climate implies large changes in 21<sup>st</sup> century North American forest growth](#)** [Ecology Letters – July 2016]

## **Agriculture/Food Production**

### **[Climate change: What's your plan?](#)** [Growing Produce – July 4, 2016]

**[Gauging the impact of climate change on U.S. agriculture](#)** [MIT News – July 7, 2016] (*“Under a scenario in which greenhouse gas emissions are unconstrained, the model projected that the U.S. will experience fewer frosts, a longer growing season, more heat stress, and an earlier start of field operations by the end of the century...When greenhouse gas emissions reduction policies...were applied, projected changes in four out of the five indices were cut in half.”*)

## **General Water Management**

### **[Study role of climate change in extreme threats to water quality](#)** [Nature – July 19, 2016]

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## **Extreme Weather Events**

### **[Too hot to work: Global warming to cost \\$2 trillion in lost productivity](#)**

[Reuters – July 19, 2016]

### **[The Middle East heat wave and climate change](#)**

[Bulletin of the Atomic Scientists – July 22, 2016]

## **Sea-level Rise and other Ocean Impacts**

### **[Climate change risk threatens 18 U.S. military sites, study finds](#)**

[Huffington Post – July 27, 2016]

## **Human Health Impacts**

### **[Health issues due to sea level rise impact communities in South Florida](#)**

[Science News – July 12, 2016]

### **[Study quantifies climate change related deaths](#)** [National Geographic – July 14, 2016]

### **[Climate change could curb malaria risk in West Africa by end of century](#)**

[Carbon Brief – July 18, 2016]

## **Tribal Impacts & Traditional Ecological Knowledge**

### **[Tanzania’s Maasai facing impacts of climate change](#)** [Climate Central – July 14, 2016]

### **[Inuit elders tell their experience of Arctic climate change](#)**

[Radio Canada International – July 18, 2016] (*Inuit elders say that berries are smaller and less tasty, weather is drier and windier, and caribou are thinner and also taste different than they recall from their youth.*)

### **[In Alaska’s remote towns, climate change is already leaving many hungry](#)**

[NPR – July 27, 2016] (*“Warmer winters, early springs and a shift in typical storm patterns have hampered the ability of Alaska Native families...to harvest the subsistence foods they’ve relied on for more than a millennium.”*)

## **Wildlife and Ecosystem Impacts**

### **[Climate change could alter interactions among species](#)** [Scientific American – July 5, 2016]

### **[Mussels off the menu within 85 years due to climate change](#)** [Telegraph – July 6, 2016]

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[How sea otters help save the planet](#) [The Guardian – July 10, 2016] (*“The difference in annual absorption of atmospheric carbon from kelp photosynthesis between a world with and a world without sea otters is somewhere between 13 and 43 billion kg of carbon.”*)

[Scientists connect massive die-off of Australian mangroves to climate change](#)

[Climate Progress – July 13, 2016]

[Climate change causing evolutionary impacts to trout](#) [Wyoming Public Media – July 19, 2016]

[Colorful, venomous lizard is declining due to climate change](#)

[National Geographic – July 22, 2016]

[Voices: A bird’s-eye view of climate change](#) [USA Today – July 27, 2016]

### **Greenhouse Gas Mitigation**

[How renewable energy is blowing climate change efforts off course](#)

[New York Times – July 19, 2016]

[Beyond Cap-and-Trade: Many environmentalists say California will improve climate policy if it reduces emissions at source](#) [East Bay Express – July 19, 2016]

### **Climate Adaptation**

[“Living shorelines” will get fast track to combat sea level rise](#)

[Scientific American – July 6, 2016] (*“Wetlands, sand dunes and mangroves could protect shorelines more inexpensively than walls and bulkheads”*)

[Are seawalls the best answer to rising sea levels – or is retreat a better option?](#)

[The Guardian – July 19, 2016]

### **International Planning**

[How China could peak CO2 emissions by 2022](#) [Climate Home – July 8, 2016]

[Project helps farmers adapt to climate change in China](#) [The World Bank – July 13, 2016]

[Canada to introduce national carbon price in 2016, minister says](#) [Bloomberg – July 15, 2016]

[New UK leader Theresa May shuts climate change department](#) [CBS News – July 16, 2016]

### [India plants 50 million trees in one day, smashing world record](#)

[National Geographic – July 18, 2016] (*“A reported 800,000 volunteers from Uttar Pradesh worked for 24 hours planting 80 different species of trees along roads, railways, and on public land...the effort is part of the commitment India made at the Paris Climate Conference in December 2015.”*)

### [China’s coal peak hailed as turning point in climate change battle](#)

[The Guardian – July 25, 2016] (*“As coal declines, clean electricity in China is increasing with solar power up 28% in the first half of 2016, nuclear up 25% and wind and hydropower both up 13%.”*)

### [János Áder: Hungary’s unlikely climate change leader](#) [July 29, 2016]

## **Climate Change Modeling**

### [Climate change modeling is closer than you think](#) [Insurance Journal – July 28, 2016]

## **Communicating Climate Change**

[Stories from the front lines](#) [Climate Central – July 14, 2016] (*“Climate Central supports the next generation of climate change communicators through partnership with Stanford University.”*)

### [A new climate change documentary focuses on solutions, not doom](#)

[Popular Science – July 18, 2016] (*“**Time to Choose**, released this past month, is the latest documentary to attempt to tackle the subject and...aims to effectively and truthfully explain the solutions to climate change that we have at our disposal, and just how feasible and realistic these solutions are, rather than beating the viewer over the head with all the ways the apocalypse will occur.”*)

## **BLOGS/Commentary**

David Suzuki on [“How the world’s most fertile soil can help reverse climate change”](#)

[Common Dreams – July 10, 2016]

Bernard Weinstein on [“Fuel cells can help battle climate change”](#) [The Hill – July 11, 2016]

Senator Sheldon Whitehouse on “[What phony op-eds about climate change have in common](#)”

[Columbia Journalism Review – July 12, 2016] (*Conflation of civil vs criminal law, persistent and vitriolic climate denial authors, and a lack of understanding about the fact that fraud is not protected speech are common denominators in op-eds criticizing the Justice Department’s civil fraud investigation of the fossil fuel industry.*)

Ted Norhaus and Ray Rothrock on “[Environmentalists are undermining their own goals by shutting down zero carbon energy plants](#)” [USA Today – July 15, 2016]

James Conca on “[Closing Diablo Canyon nuclear plant will cost money and raise carbon emissions](#)” [Forbes – July 15, 2016]

Dana Nuccitelli on “[These are the best arguments from the 3% of climate scientist ‘skeptics’. Really.](#)” [The Guardian – July 25, 2016]

Stephen Cohen on “[Climate change and the complexity of science](#)”

[Huffington Post – July 27, 2016] (*“Having stepped down the path of technologically based economic development, we should not expect a pristine planet. But we can expect and work toward an environmentally sustainable Earth.”*)

### **Additional Items of Interest**

[Top U.S. science organizations hammer Congress on climate change – again](#)

[Scientific American – July 1, 2016]

[New research: Climate may be more sensitive and the situation more dire](#)

[The Guardian – July 5, 2016] (*“...a new study finds energy budget climate sensitivity estimates consistent with climate models”*)

[Climate change is spreading Lyme disease](#) [The Week – July 7, 2016]

[Arctic sea ice crashes to record low for June](#) [The Guardian – July 7, 2016] (*“...from mid-June onwards, ice cover disappeared at an average rate of 29,000 miles a day, about 70% faster than the typical rate of ice loss, experts say”*)

[Climate change, bats, and Zika: 2016’s weirdest relationships](#) [Climate Progress – July 8, 2016]

[Gulf Stream slowdown to spare Europe from worst of climate change, experts predict](#)

[Science Daily – July 11, 2016]

[Another inconvenient truth: It’s hard to agree how to fight climate change](#)

[New York Times – July 11, 2016]

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[Fossil fuel industry risks losing \\$33 trillion to climate change](#) [Bloomberg – July 11, 2016]

[Clouds get high on climate change](#) [Scientific American – July 12, 2016] (*“Changes in cloud patterns match predictions from climate simulations of a warming world.”*)

[California seeks to extend landmark climate change effort](#) [ABC News – July 12, 2016]

[Americans are becoming more worried about climate change. Here’s why.](#)

[Think Progress – July 14, 2016]

[Climate change exposes U.S. infrastructure to natural hazards](#)

[Insurance Journal – July 14, 2016] (*“Even under moderate global warming scenarios the amount of transmission line exposed to increased wildfire risk is projected to rise by 35 percent by 2040. Exposure would increase 142 percent by 2100 under worst-case scenarios.”*)

[Web of denial: The US Senate climate campaign is critical](#) [Climate Home – July 18, 2016] (*“The issue of manipulation of public perception of science is reflective of a much larger problem in America today: political inequality has allowed vested interests to hijack and distort discourse and democratic governance, crippling our ability to act on the issues of our time.”*)

[Greenland lost a staggering 1 trillion tons of ice in just four years](#)

[Washington Post – July 19, 2016]

[Reporting these broken temperature records is probably as tiring as it is reading about them](#)

[Climate Progress – July 19, 2016] (*“The last time the world experienced any month where it was cooler than average was December 1984, when President Reagan was finishing up his first term.”*)

[The hottest cities in the U.S. vs. the fastest warming](#) [Climate Central – July 19, 2016]

[Toxic waters and climate change – how are they linked?](#) [PhysOrg – July 20, 2016] (*“Most severe water quality issues are exacerbated by weather. As climate change alters weather patterns, the conditions that create severe water quality problems are likely to become more frequent...”*)

[How markets can help us adapt to climate change](#) [New York Times – July 21, 2016]

[Amateur diving data could help climate change studies](#) [Engadget – July 22, 2016]

[Fire seasons are becoming hotter, drier and longer](#) [LA Times – July 24, 2016] (*“Rising global temperatures and unrelenting drought contribute to the longer fire seasons. Average annual temperatures rose by 1.9 degrees Fahrenheit in the last decade, and snowpacks are now melting up to four weeks earlier in the year, leaving landscapes drier and causing fire seasons to start sooner.”*)

[UN & Google team up against climate change](#) [Android Headlines – July 25, 2016]

[Climate change scientist speaks up about deniers – and why he’s still hopeful](#)

[Researchgate – July 25, 2016] (*“Twenty-two years ago, it appeared we had no path toward solving the challenges of global warming. Today we have many options.”*)

[Why climate negotiators have turned their attention to your air conditioner](#)

[Time – July 25, 2016] (*“Research shows that following through on a strong agreement [on HFCs] could single-handedly prevent 0.5°C (0.9°F) in temperature rise by 2100.”*)

[The business of climate change](#) [Technology Review – July 26, 2016] (*“From eliminating our dependence on fossil fuels to changing the paradigm of how we extract, manufacture, distribute, and consume products worldwide, all kinds of technology-enabled activities will be needed both to reduce the impact of future changes and to remediate the mess that has been made thus far. Both will naturally involve companies both large and small that are making a difference in the value chain.”*)

[Poll finds Californians back climate change efforts despite cost](#)

[Sacramento Bee – July 27, 2016]

[Climate change fingerprints are all over California wildfires](#)

[Scientific American – July 29, 2016]

[How we use the sun to reduce climate change and make fuel at the same time](#)

[Forbes – July 30, 2016] (*“The new breakthrough...is like an artificial leaf, mimicking the process of photosynthesis in which plants use sunlight and carbon dioxide to create fuel in the form of sugars.”*)

## Images to Ponder

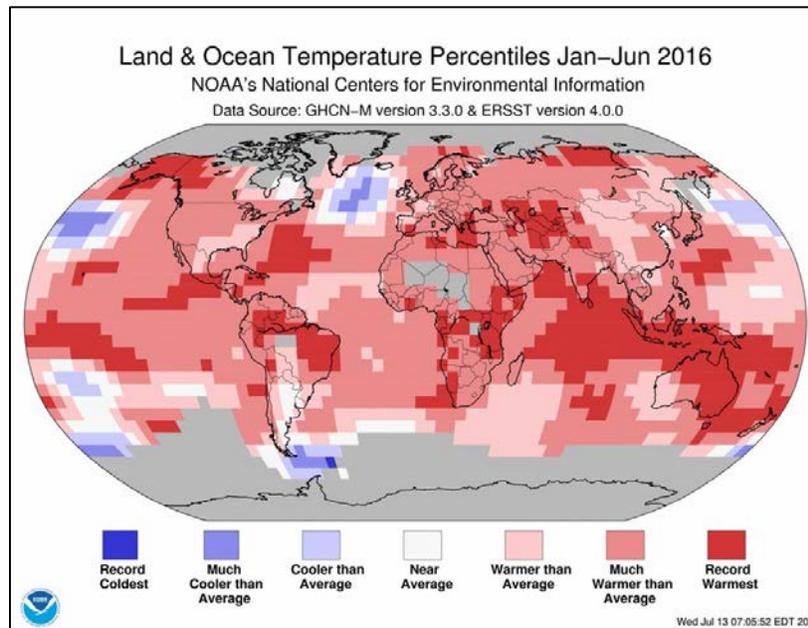
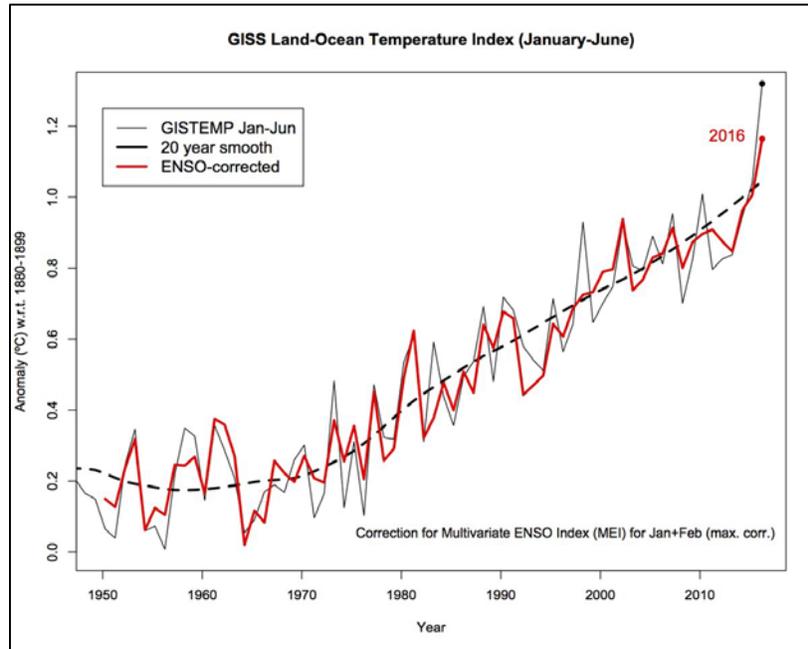


Image source (for both) :[http://thinkprogress.org/climate/2016/07/19/3799860/another-record-hot-month/?utm\\_source=newsletter&utm\\_medium=email&utm\\_campaign=cptop3&utm\\_term=3&utm\\_content=12](http://thinkprogress.org/climate/2016/07/19/3799860/another-record-hot-month/?utm_source=newsletter&utm_medium=email&utm_campaign=cptop3&utm_term=3&utm_content=12)

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