

DWR Climate News Digest

December 2015



Disclaimer: The information and links provided on this web page are not intended to state or imply any formal position of the California Department of Water Resources

The information provided herein is a selected compilation of recent popular news articles, publications, and other information relevant to climate change and water management. The links provided herein are intended to provide educational and thought-provoking material for water managers and water users.

To subscribe to the DWR Climate News listserv and receive notifications when new editions are posted, send an email to: climatechange@water.ca.gov.

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

****Special Section: COP21 – 2015 Paris Climate Conference****

Coalition of business leaders challenges 2C climate change target

[The Guardian – December 6, 2015] (*“Richard Branson’s B Team group of chief executives urges Paris climate talks to embrace ‘carbon neutral by 2050’ goal”*)

Top U.S. scientist: World must act now to reverse climate change

[National Geographic – December 7, 2015] (*In this interview with John Holdren, the President’s science and technology advisor, he states that “It is absolutely essential, if we want to avoid catastrophic impacts of climate change, that we turn this problem around starting now”*)

Paris climate change talks 2015: Christiana Figueres, UN Climate Chief, reaches pivotal moment in five-year journey [International Business Times – December 8, 2015]

Paris climate talks headed toward global deal, but is it enough?

[Scientific American – December 8, 2015]

[The troubling science that's pushing the world toward a much tougher climate goal](#)

[Washington Post – December 10, 2015]

[Paris accord considers climate change as a factor in mass migration](#)

[New York Times – December 12, 2015]

[Historic Paris agreement on climate change](#)

[United Nations Framework Convention on Climate Change – December 12, 2015]

[Adoption of the Paris Agreement](#)

[UN Framework Convention on Climate Change – December 12, 2015]

[Paris climate deal: key points at a glance](#) [The Guardian – December 12, 2015]

[Paris climate deal provides 'best chance we have' of saving the planet](#)

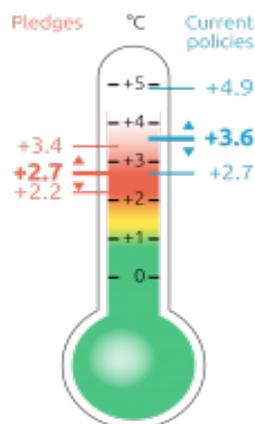
[The Guardian – December 13, 2015]

[Here's what the Paris world climate agreement will do – and what it won't](#)

[LA Times – December 14, 2015]

[Businesses back Paris climate agreement](#) [US News and World Report – December 14, 2015]

[Paris was just a waystation in the climate change fight](#) [Newsweek – December 18, 2015]



“Thermometer shows the global mean temperature increase above pre-industrial by 2100, with an uncertainty range originating from carbon-cycling and climate modelling.”

Image source: <http://climateactiontracker.org/>

Reports

[**America's Preparedness Report Card**](#) [States at Risk – December 2015] (*"This report card explores the preparedness actions that each of the 50 states are taking in relation to their current and future changes in climate threats"*)

Climate Change, Global Food Security, and the US Food System

[US Department of Agriculture – December 2, 2015]

Expert Consensus on the Economics of Climate Change

[Policy Integrity – December 2015]
(*"There is a clear consensus among economic experts that climate change poses major risks to the economy and that significant policy responses will be needed to avoid large economic damages"*)

The Messengers – What birds tell us about threats from climate change and solutions for nature and people (pdf)

[National Audubon Society and BirdLife International – December 2015]

Published Literature

[**Examining the effectiveness of climate change frames in the face of a climate change denial counter-frame**](#) [Topics in Cognitive Science – November 2015]

Assessing the observed impact of anthropogenic climate change (abstract)

[Nature Climate Change – December 21, 2015] (*"We find that almost two-thirds of the impacts related to atmospheric and ocean temperature can be confidently attributed to anthropogenic forcing (which has)...been a major influence for approximately three-quarters of the impacts observed on a continental scale"*)

Agriculture/Food Production

[**As Big Food feels threat of climate change, companies speak up**](#) [NPR – December 1, 2015]

USDA report warns climate change likely to impede progress on global food security

[US Department of Agriculture – December 2, 2015]

[**Climate change brews perfect storm of food woes**](#) [Scientific American – December 7, 2015]

(*"Farming will be hard hit by global warming but could also help reduce greenhouse gases"*)

[Save the planet. Eat ugly.](#) [New York Times – December 10, 2015] (*“Tapping into a growing international movement to sell and consume food deemed too visually unappealing to make its way to market” is a great way to reduce food waste and mitigate climate change*)

[U.S. bread basket shifts thanks to climate change](#) [Scientific American – December 23, 2015] (*An interdisciplinary group of researchers has “proposed the creation of a network of field research sites that would collect data on current and future crops, different cropping systems and farm-level management practices. It would emphasize collecting field data to better inform climate modeling in the region, and participating facilities would conduct experiments to test different adaptation and mitigation strategies”*)

[Sorry, you can’t have fries with that: 10 foods that may disappear thanks to climate change](#)
[Alternet – December 27, 2015]

General Water Management

[Climate change may boost groundwater supply in tropical nations](#)
[Climate Wire – December 11, 2015]

[Groundwater depletion adding to global sea-level rise](#) [WTSP – December 20, 2015]

Extreme Weather Events

[Extreme weather poses increasing threat to US power grid](#)
[The News & Observer – December 22, 2015]

Sea-level Rise and other Ocean Impacts

[Fish stocks are declining worldwide, and climate change is on the hook](#)
[NPR – December 14, 2015] (*“This is where ecosystem-based management comes in. It’s not only fishing that is impacting these resources...We need to take a more holistic view of these resources and include that in our management”*)

[Phytoplankton like it hot: Warming boosts biodiversity and photosynthesis in phytoplankton](#)
[Science Daily – December 17, 2015]

[Coastal marshes more resilient to sea-level than previously believed](#)
[Science Daily – December 18, 2015]

[Groundwater depletion adding to global sea level rise](#) [The Desert Sun – December 19, 2015]

Water/Energy Nexus

[Water management in a changing environment](#) [MIT – December 4, 2015]

[The vicious circle of climate change and water security](#) [Huffington Post – December 8, 2015]

Human Health Impacts

[New climate change agreement a historic win for human health](#)

[World Health Organization – December 18, 2015] (*“As stated in the agreement, ‘the right to health’, will be central to the actions countries take. This is a historic opportunity for WHO and the entire health community”*)

Tribal Impacts & Traditional Ecological Knowledge

[What do the Indigenous voices say on climate change?](#) [SBS Australia – December 8, 2015]

[Ice melt highlights Inuit plight](#) [Climate News Network – December 9, 2015]

[The Amazonian tribespeople who sailed down the Seine - video](#)

[The Guardian – December 10, 2015]

[The face of climate change: How Inuit youth lead the fight to save the Arctic](#)

[The Guardian – December 10, 2015]

[Climate change threatens traditional Inuit food supply in Alaska](#) [Globe and Mail – December 29, 2015]

Wildlife and Ecosystem Impacts

[Plants may not battle climate change as much as previously thought](#)

[Climate Wire- December 11, 2015]

[Fish stocks are struggling to rebound. Why climate change is on the hook](#)

[NPR – December 14, 2015]

[Climate change rapidly warming world’s lakes](#) [Science Daily – December 16, 2015] (*“A total of 235 lakes, representing more than half of the world’s freshwater supply, were monitored for at least 25 years”*)

[Missing tropical animals could hasten climate change](#)

[Scientific American – December 18, 2015] (*“Defaunation (loss of frugivores – fruit eating vertebrates) may reduce a tropical forest’s ability to store carbon by between 5 and 20 percent, depending on the tree species that compose the forest in a given area”*)

[Scientists say climate change could cause a ‘massive’ tree die-off in the U.S. Southwest](#)

[Washington Post – December 21, 2015]

[Northern reindeer, muskoxen, caribou feel effects of climate change](#)

[Arctic Journal – December 21, 2015] (*“The Arctic serves as a model system to understand the impact of climate change on host-parasite interactions and disease emergence and can inform our understanding of these issues globally”*)

Greenhouse Gas Mitigation

[Technology that could disrupt the course of climate change](#) [CBS News – December 2, 2015]

[Climate change plan B: going negative](#) [ABC.au – December 7, 2015] (*“If world leaders can’t agree to drastically reduce greenhouse gas emissions, technologies that remove carbon from the atmosphere could be our only hope for avoiding extreme climate change”*)

[EPA chief: US is ready to push forward on climate change](#) [The Hill – December 8, 2015]

[Blocking the sun is no plan B for global warming](#) [Scientific American – December 9, 2015]

[The power plants that can reverse climate change](#) [PBS – December 9, 2015]

[Can pulling carbon from air make a difference on climate?](#)

[Yale Environment 360 – December 10, 2015]

[An unusual tech bet could slow climate change](#) [Scientific American – December 15, 2015]

[NOAA: Salt marshes combat climate change](#) [News Press – December 24, 2015] (*“This study shows that we can add carbon sequestration to the reasons to use natural, living shorelines, along with preventing shoreline erosion, the clearing of nutrient pollution and protecting the habitats of essential fish populations”*)

Climate Adaptation

[Caribbean looks to aquaculture food security to combat climate change](#)

[Inter Press Service – December 10, 2015]

International Planning

[See what climate change means for the world’s poor](#)

[National Geographic – December 1, 2015]

[Airpocalypse now: China and climate change](#) [Newsweek – December 3, 2015]

[4 cities that are leading the world on climate action](#) [Climate Progress – December 4, 2015]

[Russia proposes nanotechnology in stopping climate change](#)

[Science Times – December 8, 2015]

[China and the world turn to California for climate change expertise](#)

[LA Times – December 9, 2015]

[Japan to consider emissions trading in climate change plan](#) [Bloomberg – December 21, 2015]

[Food manufacturers hail climate change deal](#) [Food Manufacture UK – December 22, 2015]

[Korea unveils 2nd phase of climate change measures](#) [The Korea Herald – December 23, 2015]

['City needs to grow with nature to survive climate change'](#)

[Times of India – December 29, 2015] (*"To avoid getting flooded like Chennai in a changing climate, Delhi will need to integrate its human settlements with small and large biodiversity habitats such as wetlands, scrub forests and floodplains"*)

Climate Change Modeling

[UCLA climate change researchers find way to improve accuracy of global climate models](#)

[UCLA – December 10, 2015]

Communicating Climate Change

[Climate change is the 'largest science communication failure in history'](#)

[CBC – December 8, 2015]

[Climate of apathy: Ad men on how to get people engaged in the climate change debate](#)

[ABC Australia – December 8, 2015]

BLOGS/Commentary

Naomi Oreskes and Auden Schendler on "[Corporations will never solve climate change](#)"

[Harvard Business Review – December 4, 2015]

Nature Climate Change (journal) on "[The promise of Paris](#)"

[Nature Climate Change – December 7, 2015]

Adam Frank on "[Humanity's coming of age on planet Earth](#)" [NPR – December 8, 2015] (*"..the long view tells us that Earth and life are going to be just fine. Our climate change crisis is not about saving Earth. What's at stake is not the planet but this civilization we have built with the planet's resources."*)

Joelle Thomas on "[Climate change and millennials: The future is in our hands](#)"

[Scientific American – December 8, 2015]

Michael Mann on "[The assault on climate science](#)" [New York Times – December 8, 2015]

Myles Allen on "[Can we hold global temperatures to 1.5C?](#)"

[Carbon Brief – December 12, 2015]

Bill McKibben on "[Falling short on climate in Paris](#)" [New York Times – December 13, 2015]

John D. Sutter on "[This is the end of fossil fuels](#)" [CNN – December 14, 2015]

Michael Specter on "[How not to debate nuclear energy and climate change](#)"

[The New Yorker – December 18, 2015]

Elizabeth Kolbert on "[The siege of Miami](#)" [The New Yorker – December 21, 2015] (*A great article that describes the direct impact of climate change on the lives of Miami Beach citizens*)

Additional Items of Interest

[Short answers to hard questions about climate change](#) [New York Times – November 28, 2015]

[Why climate skeptics are wrong](#) [Scientific American – December 1, 2015] (*"For AGW skeptics to overturn the consensus, they would need to find flaws with all the lines of supportive evidence and show a consistent convergence of evidence toward a different theory that explains the data...This they have not done"*)

[Poll: Californians say climate change a very serious problem](#)

[Bakersfield Now – December 2, 2015] (*"...57 percent of adults rated global climate change as a very serious problem. Another 23 percent said it is a somewhat serious problem, while 18 percent called it not too serious or not a problem"*)

[What you can do about climate change](#) [New York Times – December 2, 2015] (*"Seven simple guidelines for thinking about carbon emissions"*)

[A sneaky new rhetoric is holding back progress on climate change](#)

[Quartz – December 3, 2015]

[Climate change and choosing where to invest](#) [New York Times – December 4, 2015]

[Five reasons we need to act now on climate change](#) [National Geographic – December 4, 2015]

[How Big Business found religion on climate change](#) [Fortune – December 7, 2015] (*"The number of weather-related events covered by insurance has tripled since the 1980s, and the cost has jumped from \$10 billion annually to some \$50 billion"*)

[Period of soaring emissions may be ending, new data suggest](#)

[New York Times – December 7, 2015]

[Top US scientist: World must act now to reverse climate change](#)

[National Geographic – December 7, 2015]

[Economists agree: Economic models underestimate climate change](#) [Vox – December 8, 2015]

[Bill Gates takes on climate change with nudges and a powerful Rolodex](#)

[New York Times – December 8, 2015]

[Are we getting a peek at peak CO2 emissions?](#) [Slate – December 8, 2015]

[Betting against global warming is a sure way to lose money](#)

[Skeptical Science – December 8, 2015]

[Climate outlook may be worse than feared, global study suggests](#)

[Science Daily – December 9, 2015]

[Kellogg is finally tackling its biggest business risk – climate change](#)

[Huffington Post – December 8, 2015]

[Arnold Schwarzenegger has three questions for climate change deniers](#)

[The Daily Good – December 9, 2015]

[Corporations change their tone on climate deal](#) [Energy Wire – December 11, 2015]

[Accelerated innovation is the ultimate solution to climate change](#)

[Scientific American – December 11, 2015]

[A turning point in combating climate change may be here](#)

[Scientific American – December 14, 2015]

[Obama runs wild with Bear Grylls to promote action on climate change](#)

[The Guardian – December 18, 2015]

[2016 set to be even warmer than 2015 – Met office](#) [Climate Wire – December 21, 2015] (*“This forecast suggest that by the end of 2016, we will have seen three record or near-record years in a row for global temperatures” – This is why saying there has been no warming for ‘X’ years is inaccurate*)

[Understanding the wicked problem of climate change](#)

[University of Notre Dame – December 21, 2015]

[The ‘unfolding global disaster’ happening right under our feet](#)

[Climate Progress – December 21, 2015] (“...soil erosion isn’t just a problem for food security...(it) is also tied to the climate, as the world’s soils represent a massive carbon storage system, containing three times the amount of carbon that is currently in the atmosphere”)

[Poll: Post Paris deal, most Republicans back action on climate change](#)

[Newsweek – December 22, 2015]

[Exxon’s oil industry peers knew about climate dangers in the 1970’s, too](#)

[Inside Climate News – December 22, 2015]

[A fitting end for the hottest year on record](#) [New York Times – December 23, 2015]

[The ghosts of climate past, present and future: Part 1](#) [Skeptical Science – December 23, 2015]

(“This tale is based loosely on Charles Dickens’ classic tale ‘A Christmas Carol,’ updated in the context of climate change and told over three episodes”; [Part 2](#), [Part 3](#))

[Suspecting climate change conspiracy, Judicial Watch sues NOAA for scientists’ e-mails](#)

[Ars Technica – December 23, 2015]

[Huge gas leak undermines California’s climate change plans](#)

[Christian Science Monitor – December 24, 2015]

[Melting sea ice increases Arctic precipitation, major threat to climate change](#)

[Science World Report – December 28, 2015]

Images to Ponder

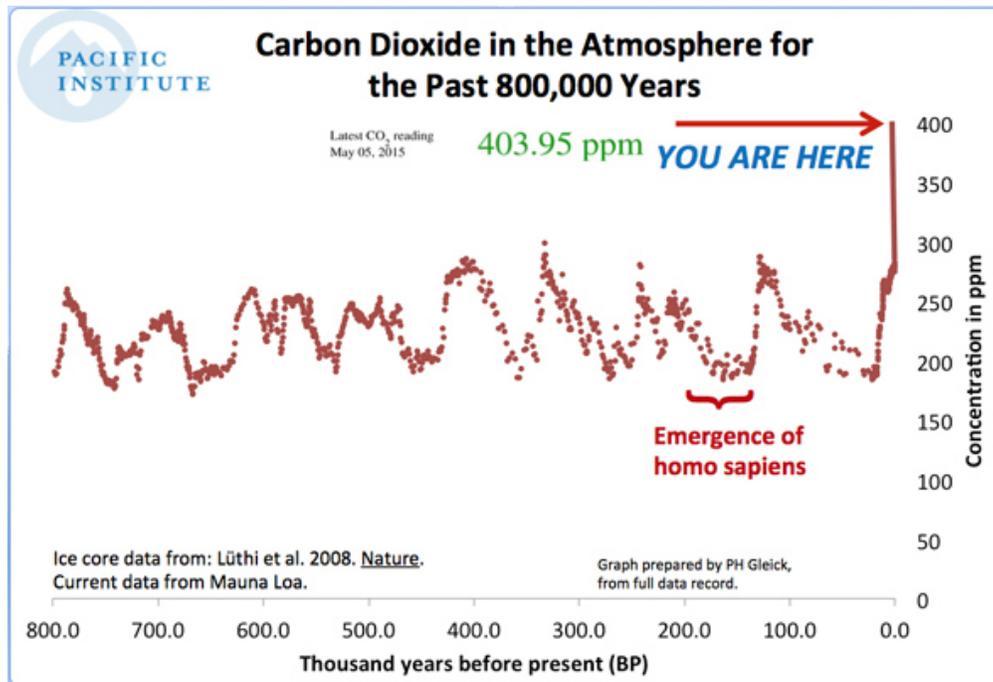


Image credit:

http://www.slate.com/blogs/bad_astronomy/2015/12/08/global_warming_co2_emission_dropped_globally_in_2015.html?wpisrc=burger_bar

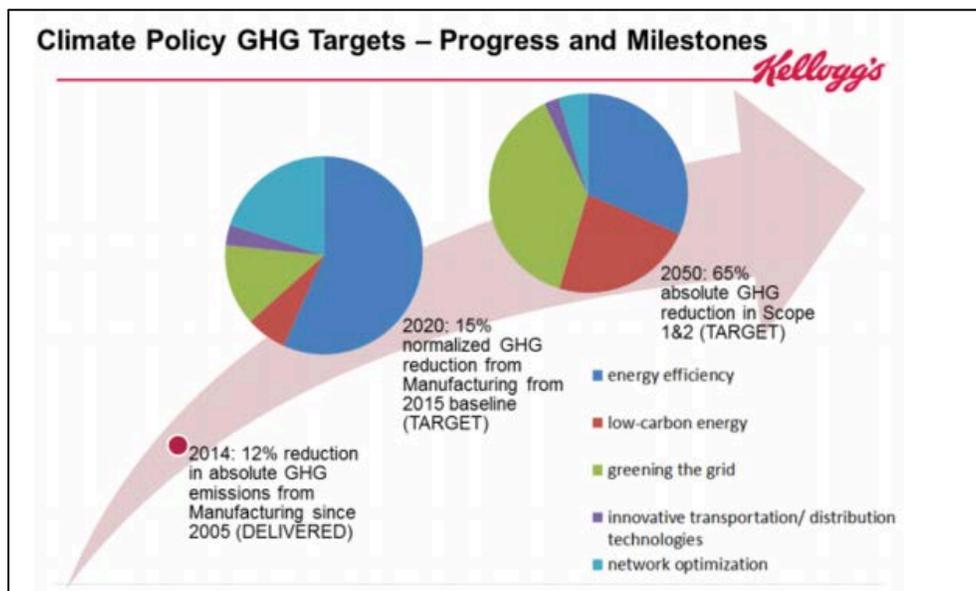


Image credit: http://www.huffingtonpost.com/entry/kellogg-climate-change_56673eabe4b08e945ff178f7

Current and past editions of the DWR Climate News Digest can be viewed and downloaded at: <http://www.water.ca.gov/climatechange/news.cfm>. Please email questions, comments, or listserv subscription requests to: climatechange@water.ca.gov.