

Climate Data and Tools Initiative

Food resilience

Coastal flooding

Water resilience

Ecosystems

Energy

Transportation

Human health

Thursday Oct 9 2014- ACWI Climate Change Adaptation Workgroup

The White House

Office of the Press Secretary



For Immediate Release

May 09, 2013

Executive Order -- Making Open and Machine Readable the New Default for Government Information

EXECUTIVE ORDER

MAKING OPEN AND MACHINE READABLE THE NEW DEFAULT FOR GOVERNMENT INFORMATION

By the authority vested in me as President by the Constitution and the laws of the United States of America, it is hereby ordered as follows:

Section 1. General Principles. Openness in government strengthens our democracy, promotes the delivery of efficient and effective services to the public, and contributes to economic growth. As one vital benefit of open government, making information resources easy to find, accessible, and usable can fuel entrepreneurship, innovation, and scientific discovery that improves Americans' lives and contributes significantly to job creation.

Decades ago, the U.S. Government made both weather data and the Global Positioning System freely available. Since that time, American entrepreneurs and innovators have utilized these resources to create navigation systems, weather newscasts and warning systems, location-based applications, precision farming tools, and much more, improving Americans' lives in countless ways and leading to economic growth and job creation. In recent years, thousands of Government data resources across fields such as health and medicine, education, energy, public safety, global development, and finance have been posted in machine-readable form for free public use on

WHITE HOUSE SHAREABLES
VIEW OUR MOST SHAREABLE CONTENT IN ONE EASY-TO-NAVIGATE PAGE.
START SHARING

LATEST BLOG POSTS

August 07, 2014 10:40 PM EDT

President Obama Makes a Statement on the Crisis in Iraq

In a statement addressing the current crisis in Iraq, President Obama announced that he authorized two operations in the country -- "targeted airstrikes to protect our American personnel, and a humanitarian effort to help save thousands of Iraqi civilians who are trapped on a mountain without food and water and facing almost certain death."

August 07, 2014 1:44 PM EDT

President Obama Signs Bill to Give the VA the Resources It Needs

President Obama travels to Fort Belvoir, Virginia to

The White House Blog

Subscribe

Our Top Stories



President Obama Signs Bill to Give the VA the Resources It Needs



President Obama Engages with African Leaders on Final Day of the U.S.-Africa Leaders Summit



Remembering James Brady: "A Legend at the White House"



Weekly Address: It's Time for Congress to Help the Middle Class

What Climate Change Means for Regions Across America

John P. Holdren,
Kathryn D. Sullivan
May 06, 2014
10:30 AM EDT

Share This Post

- E-Mail
- Tweet
- Share
- +

Today, the Obama Administration unveiled the **Third U.S. National Climate Assessment (NCA)**—the most comprehensive, authoritative scientific report ever generated about climate changes that are happening now in the United States and further changes that we can expect to see throughout this century. The report—a key deliverable of **President Obama's Climate Action Plan**—confirms that climate change is affecting Americans in every region of the United States and key sectors of the national economy.

This NCA embodies the concept of "actionable science" called for in the President's Climate Action Plan. It communicates the impacts of climate change according to geographic region of the United States, and by economic and societal sector—including agriculture, energy, and health. These tailored findings help translate scientific insights into practical, useable knowledge that can help decision-makers and citizens anticipate

Subscribe to the White House Blog

WHITEHOUSE.GOV IN YOUR INBOX

Sign up for energy and environment updates

Your Email Address

Submit

PHOTOS OF THE DAY

Home • Briefing Room • Statements & Releases

Search WhiteHouse.gov Search

The White House

Office of the Press Secretary



For Immediate Release

March 19, 2014

FACT SHEET: The President's Climate Data Initiative: Empowering America's Communities to Prepare for the Effects of Climate Change

"Climate change is a fact. And when our children's children look us in the eye and ask if we did all we could to leave them a safer, more stable world, with new sources of energy, I want us to be able to say yes, we did."
President Barack Obama, State of the Union Address, January 28, 2014

Last June, President Obama launched a Climate Action Plan to cut carbon pollution, prepare communities for the impacts of climate change, and lead international efforts to address this global challenge. The plan recognizes that even as we act to curb the carbon pollution that is driving climate change, we must also prepare our citizens and communities for the climate impacts that are already underway across the country.

Delivering on a commitment in the President's Climate Action Plan, the Obama Administration is today launching the Climate Data Initiative—a broad effort to leverage the Federal Government's extensive, freely-available climate-relevant data resources to stimulate innovation and private-sector entrepreneurship in support of national climate-change preparedness.

President Obama is committed to ensuring that communities across America have access to the information and tools they need to protect themselves from harm today and potential damage in the future. This means connecting regional and city planners, resource managers, farmers, hospitals, and businesses with data-driven tools to help them better understand, manage, and prepare for the real-world impacts associated with climate change. Maps of future sea-level rise, for instance, can help builders decide where to break ground out of harm's way, while other online tools can help water utility operators identify potential threats to the local water supply.

WHITE HOUSE SHAREABLES
VIEW OUR MOST SHAREABLE CONTENT IN ONE EASY-TO-NAVIGATE PAGE.
START SHARING

LATEST BLOG POSTS

August 07, 2014 10:40 PM EDT

President Obama Makes a Statement on the Crisis in Iraq

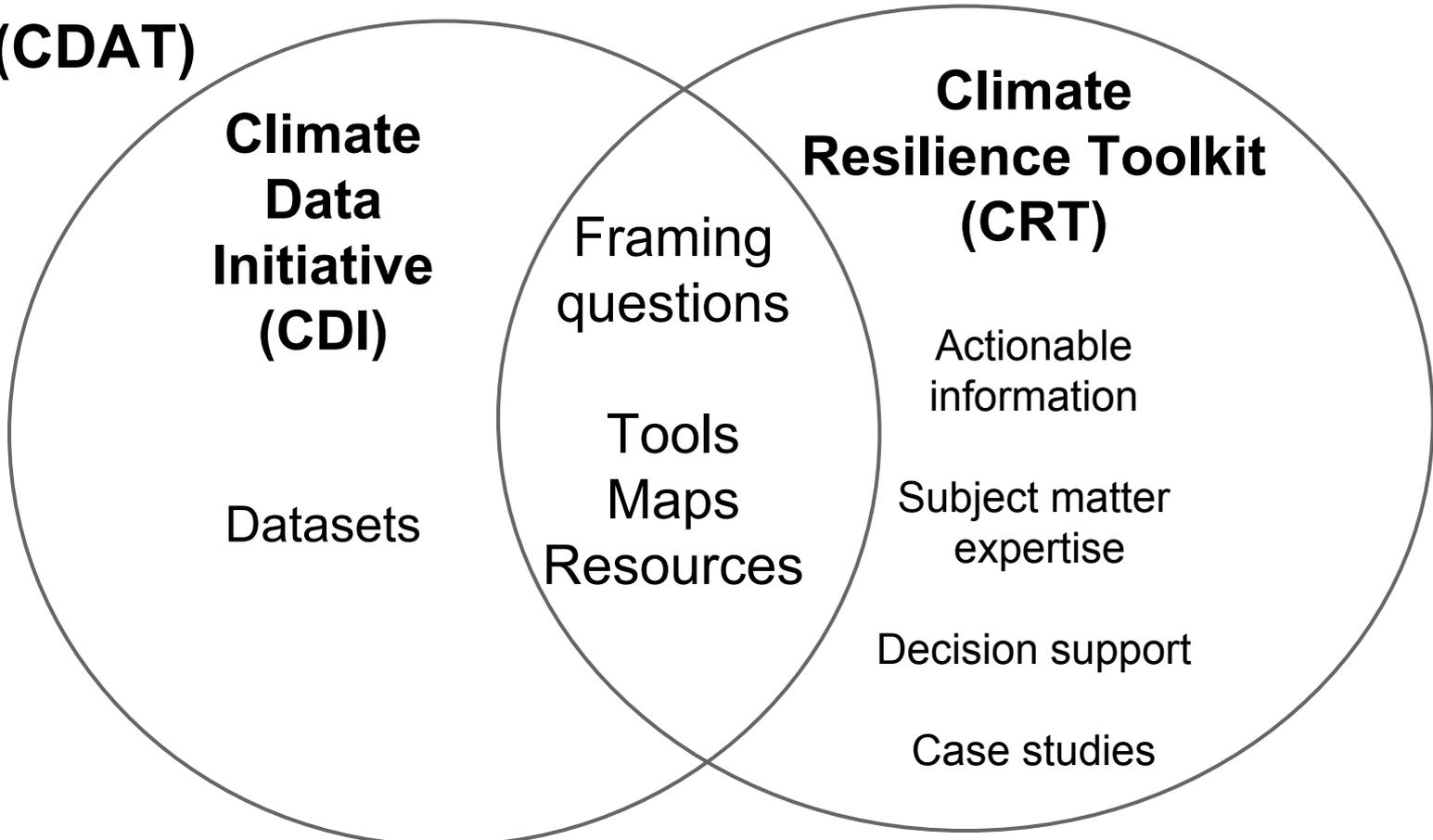
In a statement addressing the current crisis in Iraq, President Obama announced that he authorized two operations in the country -- "targeted airstrikes to protect our American personnel, and a humanitarian effort to help save thousands of Iraqi civilians who are trapped on a mountain without food and water and facing almost certain death."

August 07, 2014 1:44 PM EDT

President Obama Signs Bill to Give the VA the Resources It Needs

President Obama travels to Fort Belvoir, Virginia to

Climate Data and Tools Initiative (CDAT)



**Climate
Data
Initiative
(CDI)**

Datasets

Framing
questions

Tools
Maps
Resources

**Climate
Resilience Toolkit
(CRT)**

Actionable
information

Subject matter
expertise

Decision support

Case studies

climate.data.gov

toolkit.climate.gov

Here you can find data related to climate change that can help inform and prepare America's communities, businesses, and citizens. Initially, in this pilot phase, you can find data and resources related to [coastal flooding](#) and [food resilience](#). Over time, you will be able to find additional data and tools relevant to other important climate-related impacts, including risks to human health, ecosystems, and energy infrastructure. Please share your [feedback](#).

HIGHLIGHTS

NASA launches Earth Science Challenges

Through the Open NASA Earth Exchange, NASA is challenging innovators to use data from Earth's satellites in new and creative ways, including for applications that help people understand climate change. [Learn more](#).



[Home](#) • [Briefing Room](#) • [Statements & Releases](#)

The White House

Office of the Press Secretary



E-Mail



Tweet



Share



For Immediate Release

July 29, 2014

FACT SHEET: Empowering America's Agricultural Sector and Strengthening Food Resilience through the President's Climate Data Initiative

"My administration will work with tech innovators and launch new challenges under our Climate Data Initiative, focused initially on rising sea levels and their impact on the coasts, but ultimately focused on how all these changes in weather patterns are going to have an impact up and down the United States...and how do we start preparing for that." – President Obama, remarks on the California Drought, February 14, 2014.

In March 2014, the Obama Administration unveiled the [Climate Data Initiative](#)—a key deliverable of the President's Climate Action Plan to cut carbon pollution in America, prepare communities for the impacts of climate change, and lead international efforts to address this global challenge. The Climate Data Initiative leverages the Federal Government's vast and open data resources to stimulate the kinds of innovation and entrepreneurship that can empower America's communities and businesses to take action against climate change and prepare for the future.

Today, building on the Climate Data Initiative's initial focus on coastal resilience, the Obama Administration is unveiling the Initiative's "Food Resilience" theme, aimed at empowering America's agricultural sector and strengthening the resilience of the global food system in a changing climate.

The [National Climate Assessment](#), released in May, 2014, confirms that climate disruptions to agriculture have been increasing, are projected to become more severe over this century, and that climate-change effects on agriculture will have consequences for food security, both nationally and globally, through changes in crop yields and food prices, as well as effects on food processing, storage, transportation, and retailing.

Private-Sector Commitments:

- **Principles for Responsible Investment.** The United-Nations-supported Principles for Responsible Investment (PRI) has formed an investor group made up of Rockefeller & Co. and five European-based institutional investors (PGGM, Aberdeen Asset Management, Hermes, MN, and Nordea) to address the risks from climate change to companies with agricultural supply chains – including in the food, beverage, and apparel sectors. Using data from the World Wildlife Fund’s (WWF) Water Risk Filter mapping tool and Pricewaterhouse Coopers’ (PwC) ESCHER model, the investor group will engage approximately 50 major companies in constructive dialogue to increase resilience to water risks and foster more informed investment decision-making. PRI and the investor group are launching an Investor Guidance Document and issuing a call to action to support the effort to PRI’s 1260 global signatories representing more than \$45 trillion USD in assets.
- **Microsoft.** In support of the President’s Climate Data Initiative’s, Microsoft and USDA will co-host a series of workshops, webinars, and an app-athon aimed at demonstrating the value of open-data and data-driven tools to boost climate preparedness and resilience in the agricultural sector. Microsoft and USDA will also jointly launch a climate-change-focused Innovation Challenge to inspire the development of new tools and services that harness data available via data.gov, as well as an initial collection of USDA datasets that will be made available through Microsoft’s Azure Marketplace. Microsoft Research will issue a special request for proposals focused on food resilience and climate change and grant 12 months of free cloud-computing resources to 20 awardees whose proposals are submitted by Sept. 15, 2014 through the Azure for Research program.
- **Innovation Center for U.S. Dairy.** Through the Innovation Center for U.S. Dairy, the U.S. dairy industry is today committing to advance a series of science-based efforts, including additional research to understand and optimize dairy’s role in a resilient, efficient, and sustainable food system, as well as testing and piloting four new Farm Smart modules—energy, feed, nutrient, and herd management—by the end of 2014. Farm Smart is a data-driven online tool that helps dairy farmers assess their farm’s environmental footprint; explore the potential environmental value and cost-effectiveness of on-farm innovations; and communicate progress.
- **The U.S. Water Partnership.** Recognizing that open data can help inform actions to meet the growing water crisis in regions at home and abroad, the U.S. Water Partnership (USWP) will deploy a web-based portal called “H2Info” during World Water Week on September 2, 2014, to increase access to high quality US-based water- and drought- information resources. In addition, the U.S. Water Partnership will develop a virtual community of practice to share data, experiences, lessons, and best practices and will convene an in-person technical dialogue for community members and other key public and private stakeholders to create a two-way exchange of expertise on drought preparedness and water resilience.

tweet f Share +

July 29, 2014

ral Sector President’s

te Data Initiative,
how all these changes
we start preparing for

ible of the President’s
of climate change, and
is the Federal
neurship that can
prepare for the future.

administration is
I sector and

griculture have been
ffects on agriculture
p yields and food

Private-Sector Commitments:

- **Principles for Responsible Investment.** The United-Nations-supported Principles for Responsible Investment (PRI) has formed an investor group made up of Rockefeller & Co. and five European-based

Administration Commitments:

- **Convening Agriculture and Technology Leaders at the White House.** Today, Senior Obama Administration officials are meeting at the White House with representatives of leading food, agriculture and technology businesses to discuss ways these companies are leveraging open government data, related information tools, and other innovations to improve the resilience of the U.S. and global food system and reduce the contributions of food production to climate change.
- **New Features on climate.data.gov.** The Obama Administration is today unveiling an expanded climate.data.gov to include new pages and features that make data about the risks of climate change to food production, supply, nutrition, and security more open and accessible to innovators, entrepreneurs, and researchers. Through a collaboration between the U.S. Department of Agriculture (USDA), the National Aeronautics and Space Administration (NASA), the National Oceanic and Atmospheric Administration (NOAA), and other Federal agency partners, hundreds of datasets, web services, and tools on these topics and more are being made accessible through climate.data.gov, including data from the Census of Agriculture, current and historical data on production, supply, and distribution of agricultural products, and data on climate-change-related risks such as storms, pests, and drought. The Administration is also expanding climate.data.gov to include datasets from climate models, projecting potential future climate impacts.
- **Hosting Agriculture-Innovation Workshops.** The Obama Administration will host and participate in a series of innovation workshops focused on data-driven innovation at the nexus of climate-change and agriculture, including:
 - On July 30, USDA will host two innovation workshops in Washington, DC, one with young and beginning farmers and another with food distributors, to spur the development of creative information-technology tools that can help farmers and those in the food supply chain to prepare for climate-change impacts.
 - On August 1, USDA and NYU's Governance Lab (GovLab) will host an Open Data event in Washington, DC, focused on food resilience and climate change, as well as preparedness for food emergencies. The event will encourage dialogue between government agencies and the businesses and organizations that

to address the risks
average, and
ing tool and
nately 50 major
formed investment
rt and issuing a
\$45 trillion USD in

to co-host a series of
id data-driven
USDA will also
f new tools and
atasets that will be
acial request for
d-computing
zure for Research

dairy industry is
:th to understand
sting and piloting
l of 2014. Farm
al footprint; explore
nunicate progress.
the growing water
b-based portal
jh quality
ip will develop a
will convene an
holders to create

Private Sector President's

*the Data Initiative,
how all these changes
we start preparing for*

able of the President's
of climate change, and
is the Federal
neurship that can
prepare for the future.

Administration is
l sector and

griculture have been
ffects on agriculture
p yields and food



July 29, 2014

Private-Sector Commitments:

- **Principles for Responsible Investment.** The United-Nations-supported Principles for Responsible Investment (PRI) has formed an investor group made up of Rockefeller & Co. and five European-based

Administration Commitments:

- **Convening Agriculture and Technology Leaders at the White House Today.** Senior Obama



DATA TOPICS ▾ IMPACT APPLICATIONS DEVELOPERS CONTACT



Themes ▾ Data Resources Challenges FAQ Feedback

Here you can find data related to climate change that can help inform and prepare America's communities, businesses, and citizens. Initially, in this pilot phase, you can find data and resources related to [coastal flooding](#) and [food resilience](#). Over time, you will be able to find additional data and tools relevant to other important climate-related impacts, including risks to human health, ecosystems, and energy infrastructure. Please share your [feedback](#).

HIGHLIGHTS

co-host a series of
id data-driven
USDA will also
f new tools and
atasets that will be
acial request for
d-computing
zure for Research

dairy industry is
:th to understand
iting and piloting
l of 2014. Farm
al footprint; explore
nunicate progress.
the growing water
b-based portal
jh quality
ip will develop a
will convene an
holders to create

ral Sector President's

te Data Initiative,
how all these changes
we start preparing for

ible of the President's
f climate change, and
is the Federal
neurship that can
repare for the future.

Administration is
l sector and

griculture have been
ffects on agriculture
p yields and food

July 29, 2014

tweet Share +

the ADMINISTRATION



USE

CDI Food theme

July 2014 rollout

How will crop yield and production of other food products be affected by changes in climate?

What types of food and locations will be most vulnerable to changes in climate?

How will changes in climate affect the types of food that can be grown in a location?

CDAT Water theme

Goal: To gather the relevant data, tools, maps, resources from agency partners and stakeholders; make resources available through CDI and CRT

Stakeholders and data providers: US GCRP, Bureau of Rec, BLM, F&WS, NOAA CPO & NWS, USGS, USDA, USDA FS, IWRSS, CSCs, LCCs, WUCA, EPA, ACWI WRACC, NCA Net, Carpe Diem West Academy, utility managers, environmental consultants, scientists, ...

Additional work we're building on: Resilient Communities for America Federal Policy Initiative, ACWI Water Resources Adaptation to Climate Change, Highlights of the National Action Plan for Freshwater Resources, National Climate Assessment, IWRSS Stakeholder Engagement Reports

Timeline: CDI release (late 2014) / CRT release (TBD)

CDAT Water theme

Framing questions

- How are human and natural components of the hydrologic cycle changing?
- How can communities and water managers plan for uncertain future conditions?
- How will changing water resources interact with food, energy, ecosystems, and human health?
- What water resources data are of high value to society and are they easily accessible?

CDAT Water theme

Data, tools, maps and resources

Provisional, subject to revision, and not to be distributed

Please refer to

Framing questions: Doc1.CDATWaterTheme-questions.docx

Datasets: Doc2.CDI_DataSubmissionForm_forReview.xlsx

Tools and Maps: Doc3.CDATWaterThemeResources.xlsx

Do you see your agency's datasets here?

Notice an important resource that is missing from this list?

Let us know!

Emily Read: eread@usgs.gov

Dave Blodgett: dblodgett@usgs.gov

Nate Booth: nlbooth@usgs.gov

CDAT Water theme

Data and information needs

- Improved quantity, quality (reliability), and access to continuous water data (stream gage, meteorology, soil moisture, water quality, water use)
- Better coupling of historical/real-time/projections to watershed models
- Current conditions and projections for water use and demand.
- Decision support tools to include downscaled projections and how-to guides
- Access to regional experts to translate climate knowledge

Stakeholder Engagement to Demonstrate Integrated Water Resources Science and Service (IWRSS)

for River Basin Commissions in the Mid-Atlantic



March 2014