

JULY 2022



WestFAST News

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Chair – Roger Gorke; Federal Liaison Officer – Heather Hofman

June 2022 was Earth's 6th-warmest on record

NOAA 7/14/22

Antarctic sea ice shrank to a record low for the month



An arched iceberg along the Antarctic Peninsula, taken June 17, 2022. Last month Antarctic sea ice extent reached a record low for June, at 4.68 million square miles — or about 471,000 square miles below average. (Dan Costa/National Science Foundation/Creative Commons: <https://creativecommons.org/licenses/by-nc-nd/4.0/>)

June's average global temperature continued 2022's remarkably warm trend, as both the month and the year so far ranked sixth warmest on record. In addition, global sea ice reached near-record lows last month, with Antarctica seeing its lowest June ice coverage on record, according to scientists from NOAA's National Centers for Environmental Information (NCEI).

Here's a closer look into NOAA's latest monthly global climate report: **Climate by the numbers**

June 2022

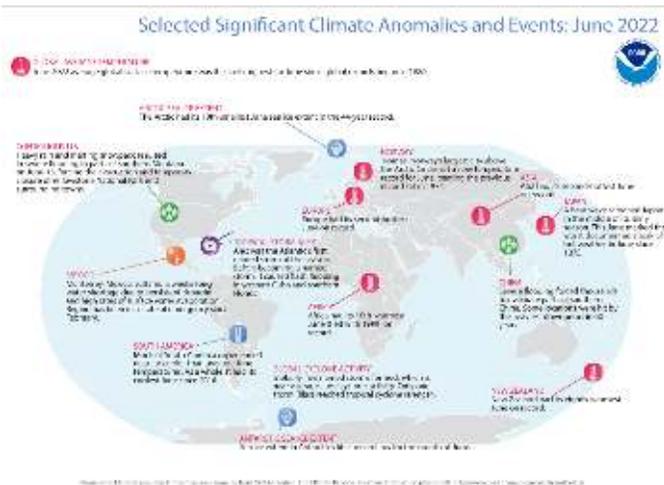
The average global surface (land and ocean) temperature in June was 1.57 degrees F (0.87 of a degree C) above the 20th-century average of 59.9 degrees F (15.5 degrees C), making June the sixth warmest in the 143-year record.

June 2022 marked the 46th consecutive June and the 450th consecutive month with temperatures above the 20th-century average. The ten-warmest Junes on record have all occurred since 2010. Looking at just land temperature, June 2022 was the Northern Hemisphere's second-warmest June on record — 2.81 degrees F (1.56 degrees C) above average — behind June 2021's record high land temperature. Europe and Asia also had their second-warmest June land temperature on record.

The year to date | January through June

The first half of 2022 ranked sixth warmest on record, with a global temperature of 1.53 degrees F (0.85 of a degree C) above the 20th-century average of 56.3 degrees F (13.5 degrees C).

According to [NCEI's Global Annual Temperature Outlook](#), there is a greater than 99% chance that 2022 will rank among the 10-warmest years on record, but only an 11% chance that it will rank among the top five warmest.



A map of the world plotted with some of the most significant climate events that occurred during June 2022. Please see the story below as well as more details in the report summary from NOAA NCEI at <http://bit.ly/Global202206offsite link>. (NOAA/NCEI)

Other notable climate events for June

Polar ice coverage hit near-record low: Globally, June 2022 saw the second-lowest June sea ice coverage (extent) on record. Only June 2019 had a smaller sea ice extent. Antarctic sea ice extent for June was a record low at 4.68 million square miles, or about 471,000 square miles below average. Arctic sea ice extent last month was 347,000 square miles below the 1981-2010 average — roughly the size of Sweden, Norway and Denmark combined — and the 10th-smallest June extent in the 44-year record.

Tropical cyclone activity was about average: June 2022 produced five named storms across the globe, which is near-normal activity for June. Only one of those, Hurricane Blas in the Eastern Pacific, reached tropical cyclone strength (74 mph). Although June’s Tropical Storm Alex was only a tropical storm for approximately 30 hours, it was the Atlantic’s first named storm of the season.

As sea levels rise on U.S. coasts, saline wetlands are expected to displace freshwater wetlands, croplands, forests and pastures

USGS 7/14/22

With accelerated sea-level rise, landward migration of coastal wetlands will not fully compensate for seaward losses

LAFAYETTE, La. — A new study of 166 estuaries on all three U.S. continental coastlines, led by the U.S. Geological Survey, is the first to quantify and compare how rapid sea-level rise will drive landward migration of coastal wetlands on the Pacific, Atlantic, and Gulf coasts in the coming decades.

The findings illustrate how the movement of coastal wetlands – which are among the world’s most valued ecosystems – will drive ecological shifts under accelerated sea-level rise. The seaward edges of coastal saline or brackish marshes and mangrove forests are expected to transform to open water while their landward edges encroach upon freshwater wetlands and a variety of valuable landscapes farther upland. Understanding the transformative impacts of coastal wetland migration into adjacent ecosystems can help coastal managers sustain biodiversity and the ecological and societal benefits provided by coastal ecosystems in the face of rising sea levels.

“The potential landward migration of our saline coastal wetlands is expected to occur at the expense of valuable freshwater wetlands and upland ecosystems,” says **Michael Osland, a USGS research ecologist** with the Wetland and Aquatic Research Center. “Our findings provide awareness of the impacts and ecological threats we are up against and allow us to help land managers better anticipate and prepare for ecological losses and transformations due to rising seas and migrating wetlands.”



Sources/Usage: Public Domain.

To adapt to rising sea levels, coastal wetlands can migrate landward at the expense of adjacent freshwater wetlands and upland ecosystems, but migration can be hindered by natural and anthropogenic barriers. This photo shows marsh migration into an upland forest in Maryland.

The study integrated data from 166 estuaries across the conterminous United States, including Washington D.C. and 22 coastal states along the Pacific, Atlantic and Gulf coasts. The study found that coastal wetlands will migrate landward, transforming coastlines but not compensating for the area expected to be lost on the seaward side.

The study found that:

- Two-thirds of potential migration is expected to occur at the expense of coastal freshwater wetlands.
- One-third of the potential migration is expected to occur at the expense of valuable uplands, including croplands, forests, pastures, and grasslands.
- The risk of landscape-scale wetland loss is high along the Gulf of Mexico and south Atlantic coasts, with hotspots on the Mississippi River Delta, Everglades, Albemarle-Pamlico and Chesapeake Bay estuaries.
- Of the total potential wetland loss, 79% is expected to occur along the coasts of Louisiana, Florida, North Carolina, Texas and South Carolina.
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By providing a look at the ecological shifts and transformative impacts of coastal wetland migration, the findings provide insights that decision-makers can use to help sustain and preserve coastal ecosystems.

The full study, [“Migration and transformation of coastal wetlands in response to rising seas,”](#) is available in the journal *Science Advances*.

Biden Administration targets funding for salmon recovery and restoration in U.S. West

NOAA 7/14/22

Bipartisan Infrastructure Law investments will enhance critical recovery efforts



An endangered Chinook Salmon jumps in the California Sacramento River. (Getty images)

Today, NOAA Fisheries announced funding to boost the [Pacific Coastal Salmon Recovery Fund \(PCSRF\) program](#) and target salmon recovery efforts across the West Coast and Alaska. NOAA recommends \$95 million in funding, including \$34 million in Bipartisan Infrastructure Law funds, for 19 new and continuing salmon recovery activities. Programs and projects recommended for funding will benefit three NOAA Fisheries Species in the Spotlight: Central California Coast coho salmon, Sacramento River winter-run chinook salmon and Southern resident killer whales. In addition, programs and projects recommended for funding will aid in the recovery of 28 Endangered Species Act (ESA) listed salmon and steelhead species as well as non-listed ESA salmon and steelhead that are necessary for native subsistence or tribal treaty fishing rights.

“This funding, including critical investments from the Bipartisan Infrastructure Law, will enable NOAA Fisheries to deliver measurable, lasting benefits to both the environment and local economies on a scale like never before,” said Secretary of Commerce Gina Raimondo. “Working with states and tribes to restore these iconic species illustrates the Administration’s commitment to supporting collaborative conservation and building a Climate-Ready Nation.”

PCSRF funds will target salmon habitat protection and restoration, enhancing tribal treaty and trust resources, critical salmon research and monitoring and will complement state and tribal programs for salmon recovery. NOAA is recommending \$61 million in annual appropriation funding and \$34

million in Bipartisan Infrastructure Law funding to supplement state and tribal salmon recovery programs and projects. Of the 19 applicants recommended to receive funding, 14 are individual tribal and tribal commission/consortia proposals and of those, two have not previously received PCSRF funds.

“This is an unprecedented opportunity for NOAA to fund tribal applicants with \$17 million recommended in awards to Columbia River and Pacific Coast tribes,” said Janet Coit, assistant administrator for NOAA Fisheries and acting assistant secretary of commerce for oceans and atmosphere at NOAA. “The enhanced funding from the Bipartisan Infrastructure Law will help restore vital habitat for salmon and steelhead, adding significantly to the 1.2 million acres protected and conserved in the Pacific Northwest since 2000.”

Highlighted projects and programs recommended for funding include but are not limited to:

- Bering Sea Fishermen's Association: Arctic-Yukon-Kuskokwim Tribal Research and Restoration Program
- Coeur d'Alene Tribe: Phase 2 Feasibility Studies for Salmon Reintroduction: Evaluation of Downstream Movement and Survival of Juvenile Chinook Salmon in the Upper Columbia Basin
- Suquamish Tribe: Rose Point Embayment Restoration
- Confederated Tribes of the Umatilla Indian Reservation (CTUIR): Mill Creek Flow Restoration
- Confederated Tribes of the Coos, Lower Umpqua, and Siuslaw Indians (CTCLUSI): Waite Ranch Tidal Wetland Restoration
- Karuk Tribe: Upper Red Cap Creek Floodplain Restoration Project
- Tolowa Dee Ni' Nation" Rowdy and Dominie Creek Fish Passage Improvement Project

NOAA funding enables some projects to bring years of planning to execution by transitioning from design to construction, while other projects use NOAA funds to design projects that will result in multiple community and economic benefits.

NOAA's PCSRF program has provided assistance to partners across the West Coast and Alaska for

over 20 years. The program has a long history of successful habitat restoration projects that support threatened or endangered salmon and steelhead populations and help maintain populations necessary for exercising tribal treaty fishing rights and native subsistence fishing.

While application approvals and fund obligations are not yet final, each of these applications is being “recommended” for funding. This is not an authorization to start projects or guarantee of funding, and final decisions will be made no later than October 1, 2022. Explore how fiscal year 2021 PCSRF efforts are benefiting communities through an [interactive story map link](#).

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Upcoming Meetings and Webinars

WestFAST Webinars: WestFAST is hosting a [series of webinars](#) to discuss the importance of water resources and community engagement related to wildfire prevention, reduction, recovery, and rehabilitation

2022 WSWC Summer Meetings – Polson, MT – KwaTaqNuk Resort-Casino, Aug 02 - 05 2022

2022 National Water Use Data Workshop in Salt Lake City, Aug 16 - 18 2022

Other Federal News

DOI 7/5/22. [President Biden's Bipartisan Infrastructure Law to Help Safeguard Water Supplies in 12 States and Puerto Rico](#)

USFS 7/22/22. [Statement from Chief Randy Moore on interim policy changes for partnership and cooperator agreements](#)

USDA 7/26/22. [Biden-Harris Administration announces \\$1 Billion in Community Wildfire Defense Grants from Bipartisan Infrastructure Law](#)

EPA 7/29/22. [Biden-Harris Administration Announces \\$132 Million for EPA's National](#)

Estuary Program from the Bipartisan Infrastructure Law

NOAA 7/27/22. NOAA tool now brings disaster risk, vulnerability down to community level

USDA 7/28/22. USDA Releases Details on Partnerships for Climate-Smart Commodities Second Funding Pool Submissions

BOR 7/25/22. Reclamation announces Agricultural Water Conservation and Efficiency grants

People

NOAA 7/7/22. Sarah Kapnick named NOAA chief scientist

USDA 7/7/22. Biden-Harris Administration Announces Members to Wildfire Commission

NOAA 7/15/22. Michael C. Morgan confirmed as assistant secretary of commerce for environmental observation and prediction

The Western States Federal Agency Support Team (WestFAST) is a collaboration between 13 Federal agencies with water management responsibilities in the West. WestFAST was established to support the Western States Water Council (WSWC), and the Western Governors Association in coordinating Federal efforts regarding water resources.