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## Impact

# More than half of world's fresh water supply warming rapidly

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**NSF-funded study finds world's lakes are warming on average 0.61 degrees Fahrenheit each decade**



Ice-covered lakes warm faster than those with open water.

[Credit and Larger Version \(/impacts/impact\\_images.jsp?cntn\\_id=243627&org=NSF\)](/impacts/impact_images.jsp?cntn_id=243627&org=NSF)

**November 7, 2017**

More than half of the world's fresh water supply is warming rapidly, according to an NSF- and NASA-funded study.

Using satellite data and ground measurements collected from 235 lakes on six continents over a period of 25 years, scientists determined the world's lakes are warming on average 0.61 degrees Fahrenheit each decade, with potential impacts ranging from drinking water to crop production.

Toxic algal blooms are also projected to increase by 5 percent and methane emissions by 4 percent over the next decade. Some species face possible extinction, as the rapid temperature increase disrupts aquatic ecosystems.

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### **NSF Directorate(s):**

Directorate for Biological Sciences

**Locations**

Nebraska

**Related Awards**


[#1147666 Global patterns and long-term trends in lake temperature: A collaborative workshop to synthesize in situ and remote sensing data and analyze controlling factors \(/awardsearch/showAward.do?AwardNumber=1147666\)](#)

**Related Websites**

Lakes around the world rapidly warming: [https://www.nsf.gov/news/news\\_summ.jsp?cntn\\_id=137121](https://www.nsf.gov/news/news_summ.jsp?cntn_id=137121)  
<[https://www.nsf.gov/news/news\\_summ.jsp?cntn\\_id=137121](https://www.nsf.gov/news/news_summ.jsp?cntn_id=137121)>

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