




# Mapping water stress with WRI's Aqueduct atlas

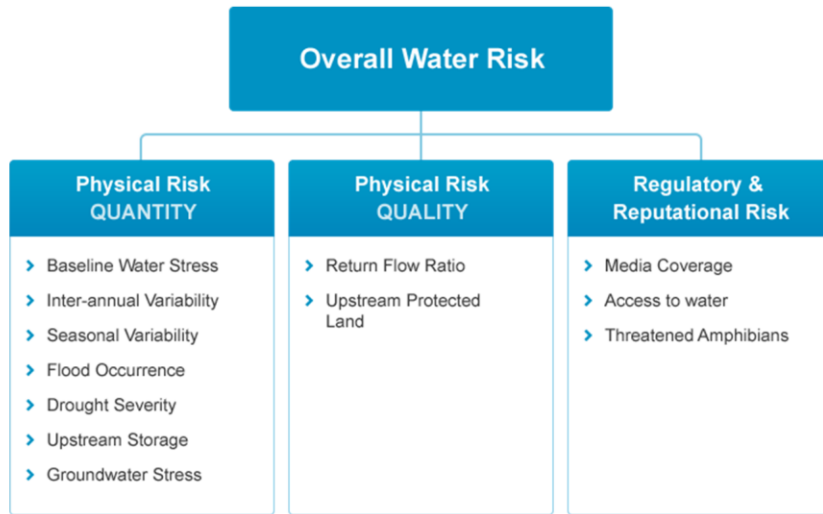


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7/23/2013 

Narrative: In this presentation, we discuss the World Resource Institute's Aqueduct atlas, which maps water risk, stress, and scarcity.

## WRI Aqueduct's framework for mapping water risk



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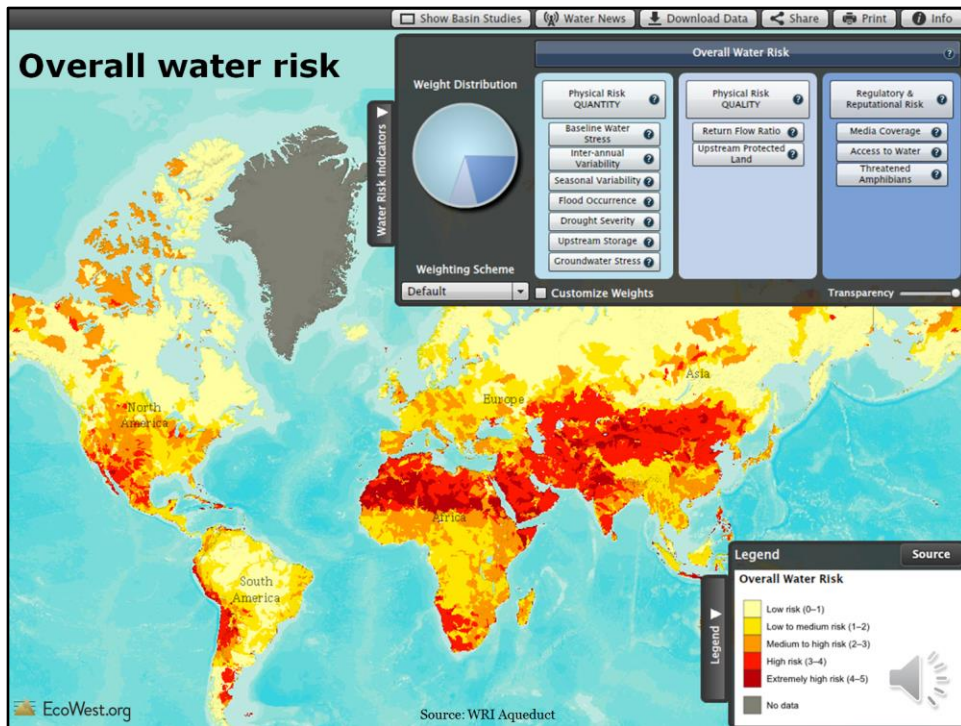
Source: WRI Aqueduct



**Narrative:** WRI's tool maps overall water risk by examining a dozen factors in three categories. The system is meant to help businesses, investors, governments, and communities better understand vulnerabilities to water-related risks.

**Source:** World Resources Institute's Aqueduct tool

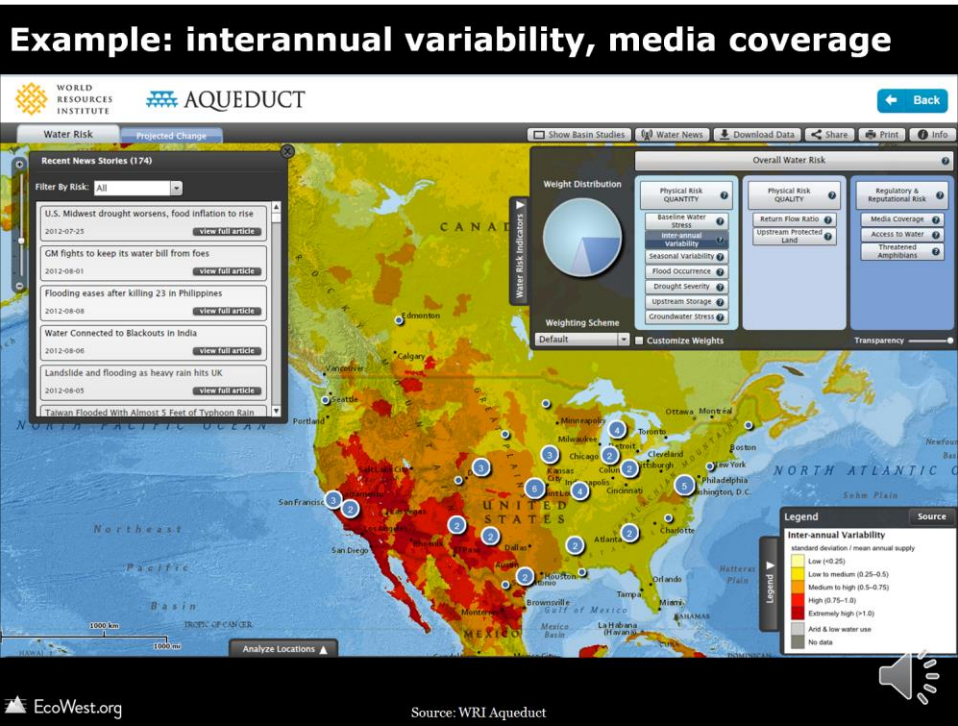
**URL:** <http://aqueduct.wri.org/>



Narrative: This screen shot shows how overall risk compares worldwide. You can also view individual components and select from weighting schemes that vary by industry.

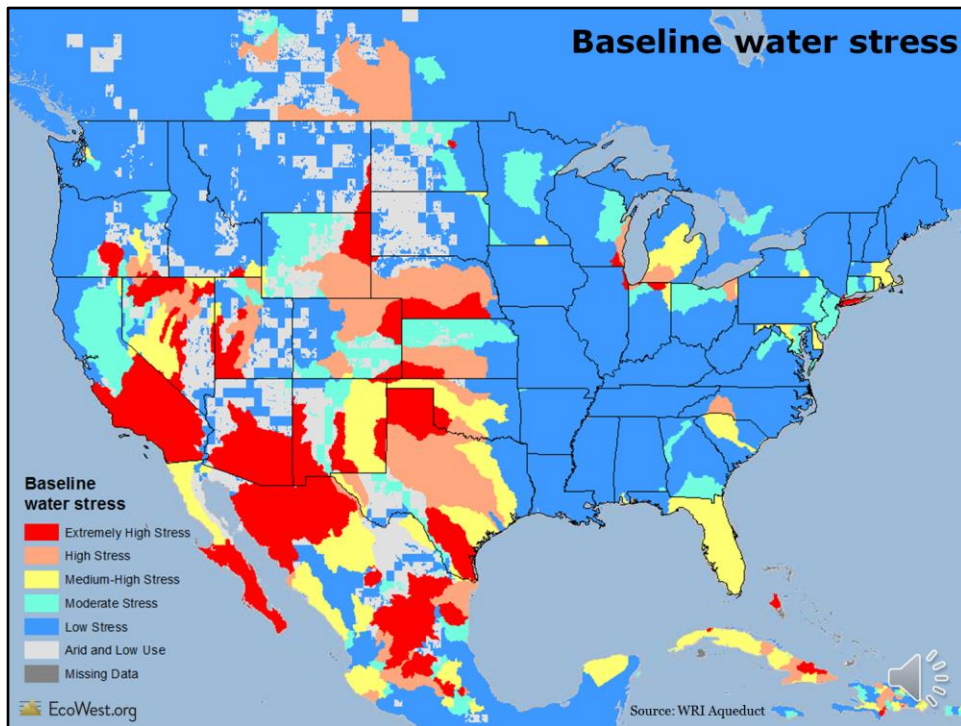
Source: World Resources Institute's Aqueduct tool

URL: <http://aqueduct.wri.org/>



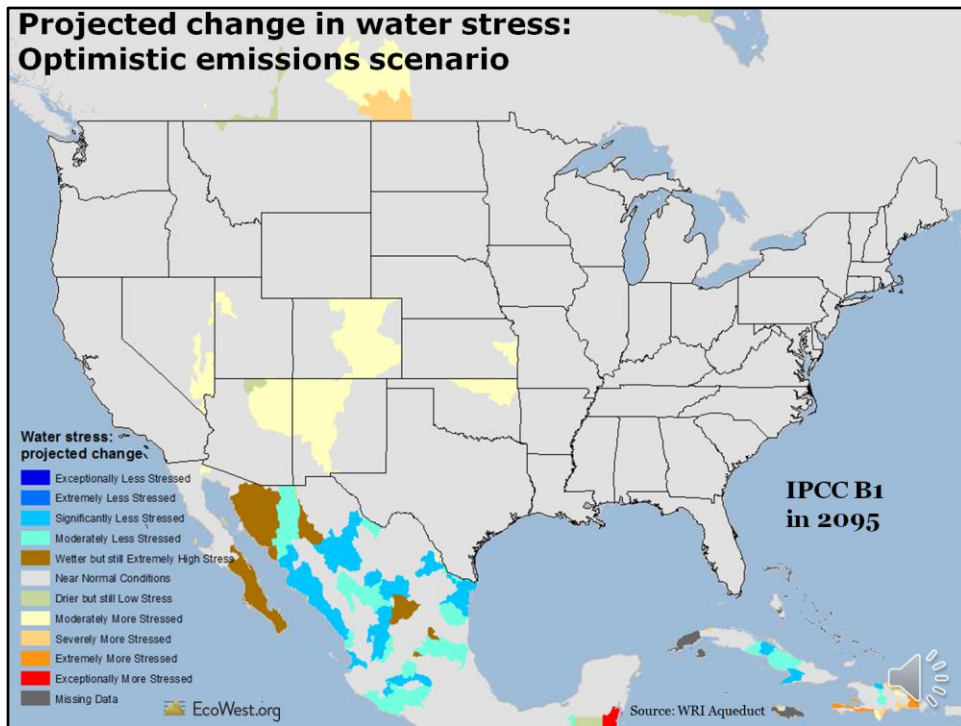
**Narrative:** Here’s a close-up of the United States, showing interannual variability of the water supply, which is especially high in the Southwest. The numbers in circles indicate how many water-related news stories are available for each location through the built-in feed.

**Source:** World Resources Institute’s Aqueduct tool  
**URL:** <http://aqueduct.wri.org/>



Narrative: You can download the underlying GIS data, which I used to create this map showing the baseline water stress in the United States. This is a measure of water use compared to the renewable supply. Red, for example, indicates that more than 80 percent of available freshwater is used and supply disruptions are likely to occur due to natural phenomena, competition among users, political pressure, or regulatory measures. You can see that the West is home to most of the highest stress areas.

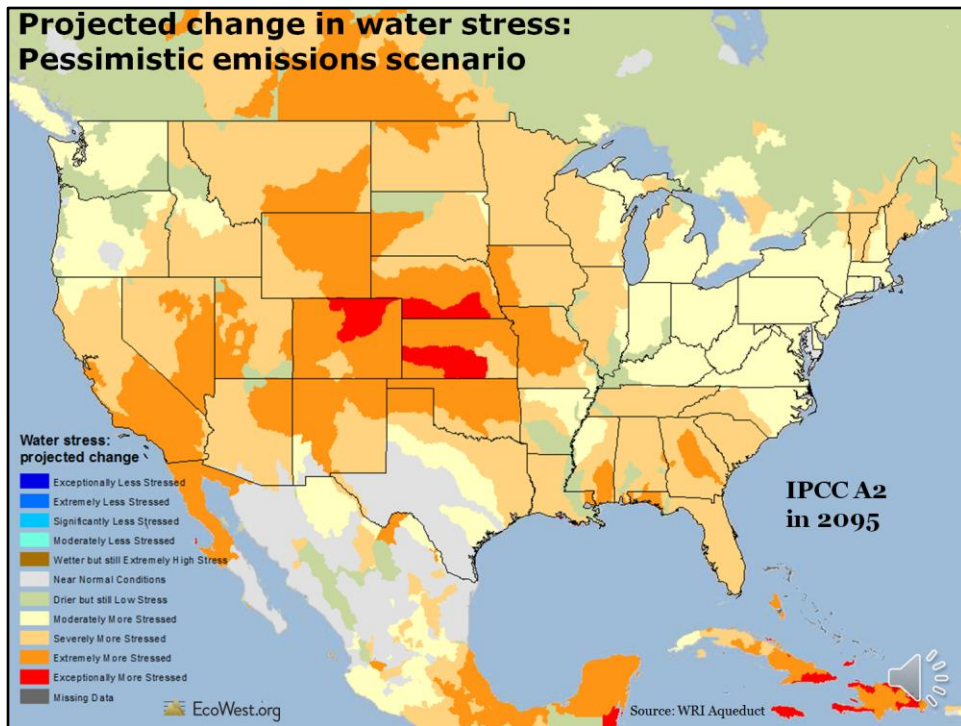
Source: World Resources Institute's Aqueduct tool  
 URL: <http://aqueduct.wri.org/>



Narrative: The Aqueduct tool also lets you show projections for the future, based on different greenhouse gas emissions models. This view shows the IPCC’s optimistic “B1” scenario. A few areas in the inland West are expected to become moderately more stressed by 2095, but otherwise the conditions are expected to be near baseline.

Source: World Resources Institute’s Aqueduct tool  
 URL: <http://aqueduct.wri.org/>





Narrative: But if you switch to the pessimistic A2 emissions scenario, which involves much warmer temperatures and, in many parts of the West, a drier climate, you can see that the stress levels are much higher. There's no place in the continental United States that has less water stress in 2095.

Source: World Resources Institute's Aqueduct tool  
 URL: <http://aqueduct.wri.org/>

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National Oceanic and Atmospheric Administration



Temperature  
Anomalies  
2012

2012 was hottest year on record for U.S.  
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