

## Mapping Water Use: Landsat and America's Water Resources

"A vision  
to observe  
Earth for  
the benefit  
of all..."

Interior Secretary  
Stewart Udall, 1966

Water is one of our nation's most important natural resources, one that's long been considered inexhaustible. Yet changes in land use, climate, and population demographics are placing unprecedented demands on America's water supplies. As droughts rage and aquifers dwindle, people are wondering: ***Is there enough water to meet all our needs?***

Using Landsat satellite data, scientists with the U.S. Geological Survey (USGS) developed a technique to map water-use for agriculture. Landsat's vast archive of imagery also makes it possible to create maps that span decades revealing long-term trends in water use.

**Landsat and water-use maps help us be good stewards of our water resources.**

- Where is water being used, how much, and by whom.
- Which types of crops use the most, or least, water.
- Can water be used more efficiently without impacting crop yields.

**Landsat also plays a major role in:**

- Resolving disputes regarding water rights and allocations.
- Evaluating aquifer depletions and quantifying net ground water pumping.



A vision to observe Earth...  
50<sup>th</sup> Anniversary Celebration

September 21, 2016  
Washington, D.C.

Water • Agriculture • Forests • Climate • Hazards • Ecosystems • Energy

<http://eros.usgs.gov/Udall50thAnniversary>