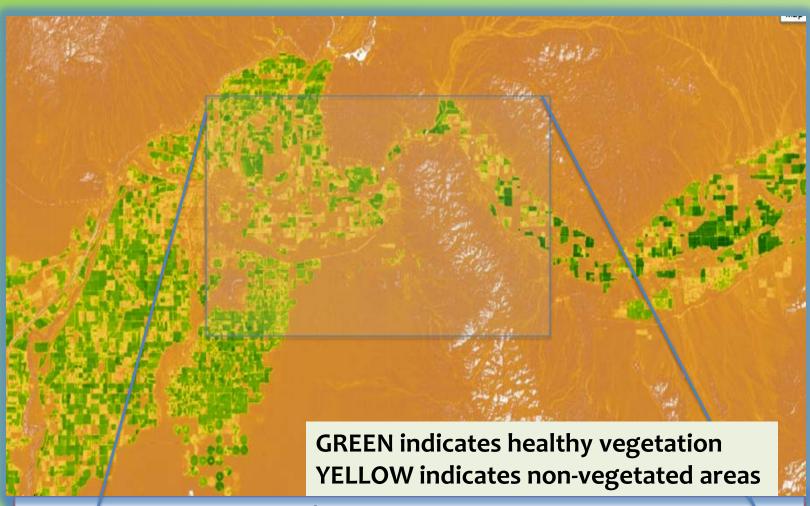
YUMA, ARIZONA Grow a city or grow America's winter vegetables? You choose...

Kevin Weatherbee, Mary A. Otondo Elementary School - Yuma, AZ Earth Camp for Educators 2013

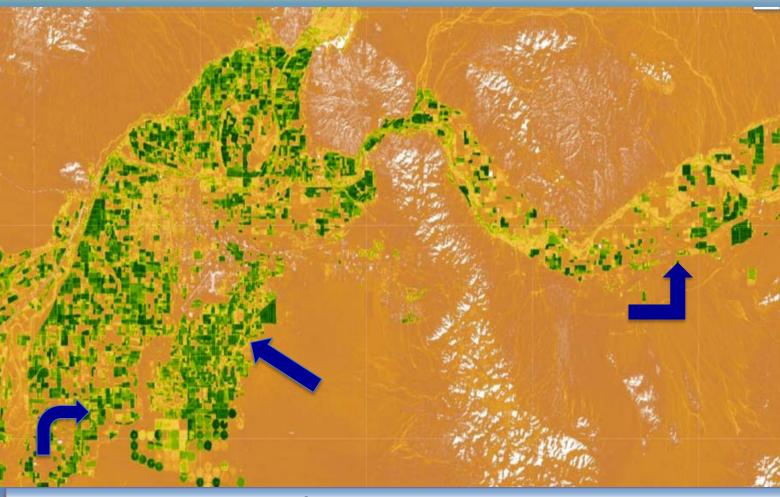


Artist's view of a U.S. Landsat satellite. Credits: NASA.

Yuma, known as America's winter lettuce capital, produces over 90% of the lettuce, as well as citrus, and many cruciferous vegetables for the United States every winter. However, due to increasing growth of industry, military presence and population, the availability of farmland and water is decreasing. There is also some temporary decrease in farmland on a seasonal basis due to farm subsidies from the US government. The blue arrows below show the areas of farmland that have disappeared, most noticeable in East Yuma County and also along the Colorado River.

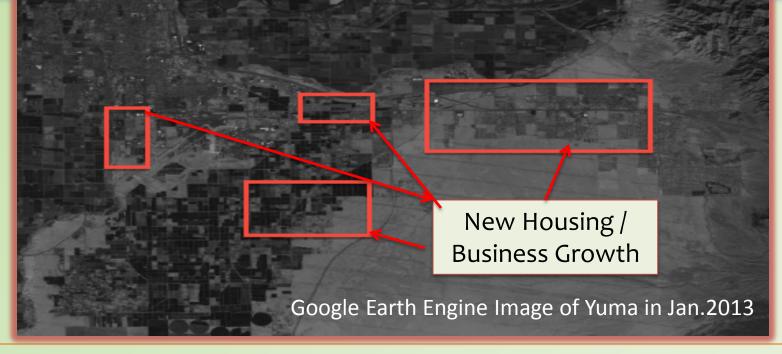


Google Earth Engine image of the Yuma Valley January 1993



Google Earth Engine image of the Yuma Valley January 2013





Reasons for loss of farmland:

- •Yuma's population has grown from 56,933 in 1990 to over 95,000 in 2012, a 66% increase in 22 years.
- •An increased military presence (Marine Corps Air Station Yuma and Yuma Proving Grounds) and growth of industry Are we losing the ability to feed America and the world?



Importance of Yuma's Agriculture:

- The agriculture industry in Yuma brings in an annual gross economic return of 3.2 billion, which is 1/3 of Arizona's economic return, and 40% of Yuma's income base.
- 90% of the Lettuce consumed in the US during winter is grown in Yuma.
- 230,00 acres of land utilized for agriculture, 100% are irrigated by the Colorado River
- 1st in state and 3rd in nation for winter vegetable production
- 18 million pounds of lettuce are processed a day during peak season
- More than 175 crops are grown in Yuma including citrus, cotton, dates and wheat during the winter growing season









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