United States Department of Agriculture
National Institute of Food and Agriculture
www.nifa.usda.gov
@USDA_NIFA

NIFA Works to Ensure Safe and Abundant Water Supplies

From irrigation, to drinking, to manufacturing processes, sustainable sources of water are vital to life, industry, and energy production. USDA's National Institute of Food and Agriculture is focused on sound water and watershed management practices — such as modern conservation technologies, appropriate crop choices, and drought preparedness — to help farmers enhance water use efficiency, conserve water resources, and maximize production while minimizing environmental degradation.

NIFA INVESTS IN WATER-RELATED EFFORTS

Since FY2009, NIFA has awarded:

13,332 PROJECTS

$581.8 MILLION

These projects integrate research, education, and extension to:

- **IMPROVE** the quality of the nation's surface water and groundwater resources
- **INVESTIGATE** the effectiveness of watershed conservation practices and their effects on both cropland and grazing lands
- **DEVELOP** mobile tools for improved water and watershed management
- **HELP** consumers understand the environmental impacts of water use
- **DEVELOP** water management solutions that link food, water, climate, energy, and environmental issues

80% The amount of America's water consumed by agriculture to grow food, feed, fiber, and fuel

How many gallons of water does it take to produce a pound of tomatoes, milk, eggs, cheese, and steak?

29 90 478 896 2464

AQUAPONICS: WHERE FISH AND PLANT FARMING FORM A WIN-WIN RELATIONSHIP

Virginia State University's Sustainable and Urban Agriculture Program is teaching students and the community how to use aquaponics to grow both vegetables and fish. Water enters the hydroponic system 1 and supports plants such as lettuce to grow 2. Water then passes through a filtration system 3 and enters a tank containing fish such as tilapia 4. Water containing fish waste that has been broken down by snails and rocks exits the fish habitat 5 and is filtered 6 and recycled back to feed and fertilize the vegetation. This system serves a dual-farming purpose and conserves water.