

# Estimating the cost, quality, and price margins of water by location

2015 Esri Users Conference

*Tuesday, July 21 at 3:15pm*

Room 29 A/B

Serene Ong and Jess Chen



# Background

- Water supply system is very complicated

- Sources (surface water, groundwater)
- Rights and contracts
- Uses (agriculture, industrial, residential)
- Pricing schemes (base, volumetric)

# The Problem

- Cost to provide water varies by location
- Price of water varies by location and end user

What happens when price  $\neq$  cost?

- Overuse and rationing in drought
- Economic distortions

# Economic Approach

Step 1: Estimate cost of water provision by location

Step 2: Find data on price of water by location

Step 3: Estimate economic distortions created when price does not equal cost

# Thank you!

Web: <http://isea.redlands.edu>

Email: [serene\\_ong@redlands.edu](mailto:serene_ong@redlands.edu)

[jess\\_chen@redlands.edu](mailto:jess_chen@redlands.edu)

