

sharing information for
water sharing arrangements

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{ UCOWR, Santa Fe, 2012



What are water sharing arrangements?

Information/data is needed

∞ Where?

∞ What type?

∞ Who?

Progress

What's next?

questions

- 
- & Farmer to farmer
 - & Farmer to municipality
 - & Municipality to industry
 - & Farmer to environment

what are “water sharing”
arrangements?



Colorado River Basin



where . . . ?



Boundaries in the Colorado River Basin

- ∞ *Political* (Source: National Atlas)

 - ∞ Countries, States, Tribes, Counties

- ∞ *Hydrologic* (Source: USGS)

- ∞ **Ag Water Supply Organizations (Source: ?)**

 - ∞ Water conservancy districts, irrigation districts, etc.

Irrigated/ Agricultural lands

- ∞ by County (source: USDA)

- ∞ by State

- ∞ Remote Sensing (source: USGS)

what type?



- & Who is collecting the data?
- & Who is it about?
- & Who is the intended audience?
- & Who wants to “share” data?

who . . . ?

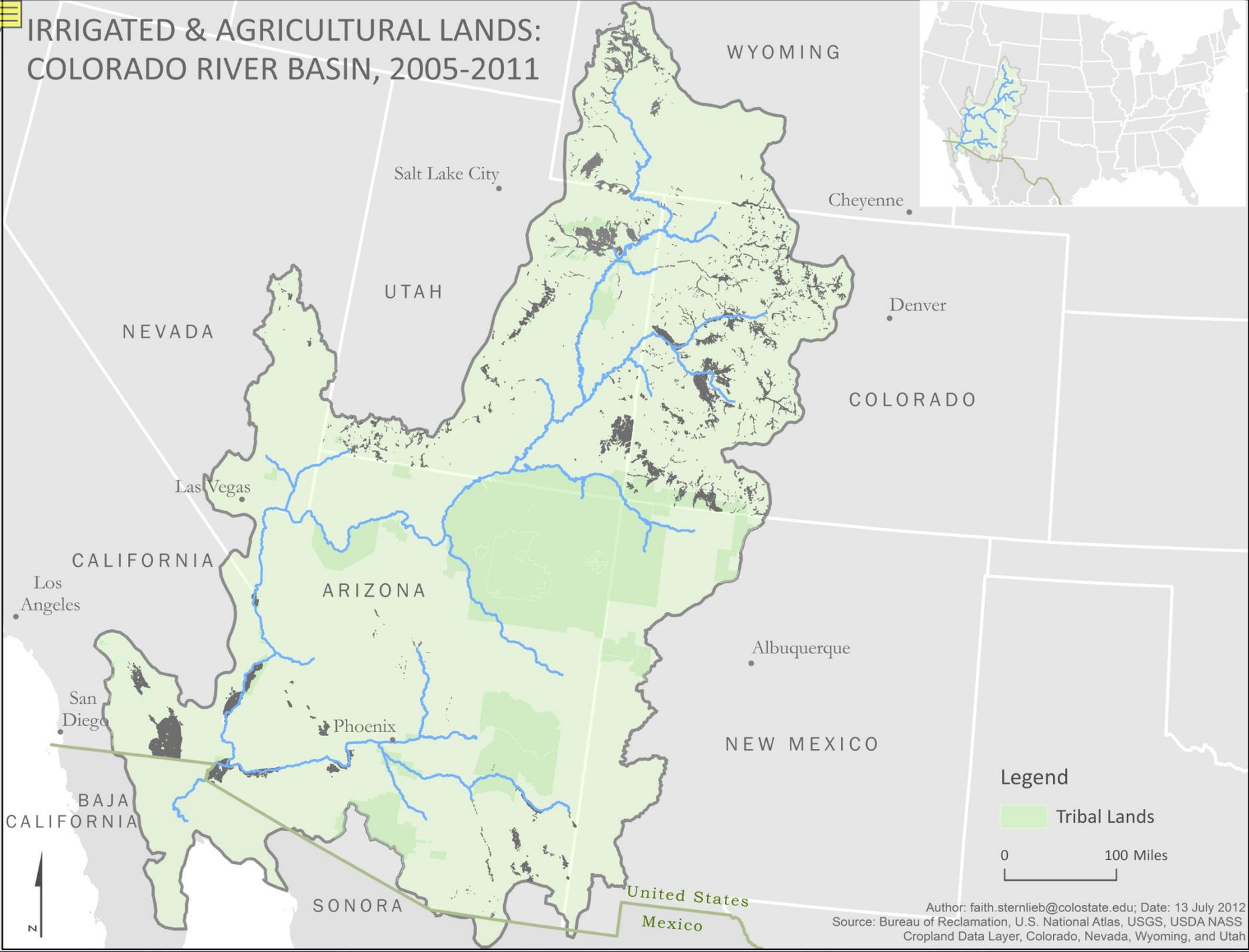
- & Challenges
- & Data collection to date
- & Database development
- & Examples
- & CRWUA meeting and discussion

progress

- 
- & Public vs. private
 - & Availability
 - & Accessibility
 - & Compatibility
 - & Aggregation/compilation

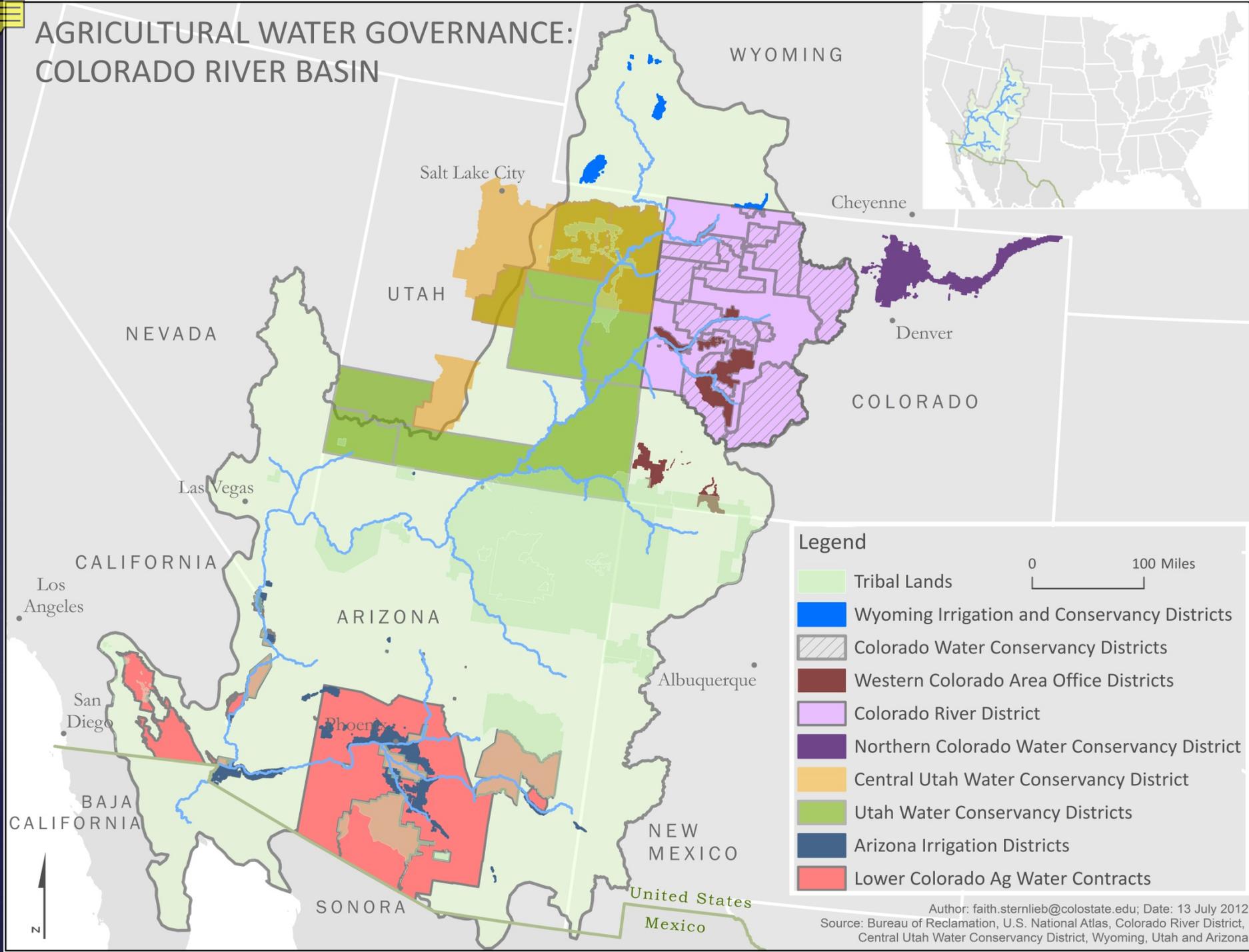
data challenges?

IRRIGATED & AGRICULTURAL LANDS: COLORADO RIVER BASIN, 2005-2011



Author: faith.sternlieb@colostate.edu; Date: 13 July 2012
Source: Bureau of Reclamation, U.S. National Atlas, USGS, USDA NASS
Cropland Data Layer, Colorado, Nevada, Wyoming, and Utah

AGRICULTURAL WATER GOVERNANCE: COLORADO RIVER BASIN



Legend

- Tribal Lands
- Wyoming Irrigation and Conservancy Districts
- Colorado Water Conservancy Districts
- Western Colorado Area Office Districts
- Colorado River District
- Northern Colorado Water Conservancy District
- Central Utah Water Conservancy District
- Utah Water Conservancy Districts
- Arizona Irrigation Districts
- Lower Colorado Ag Water Contracts

0 100 Miles

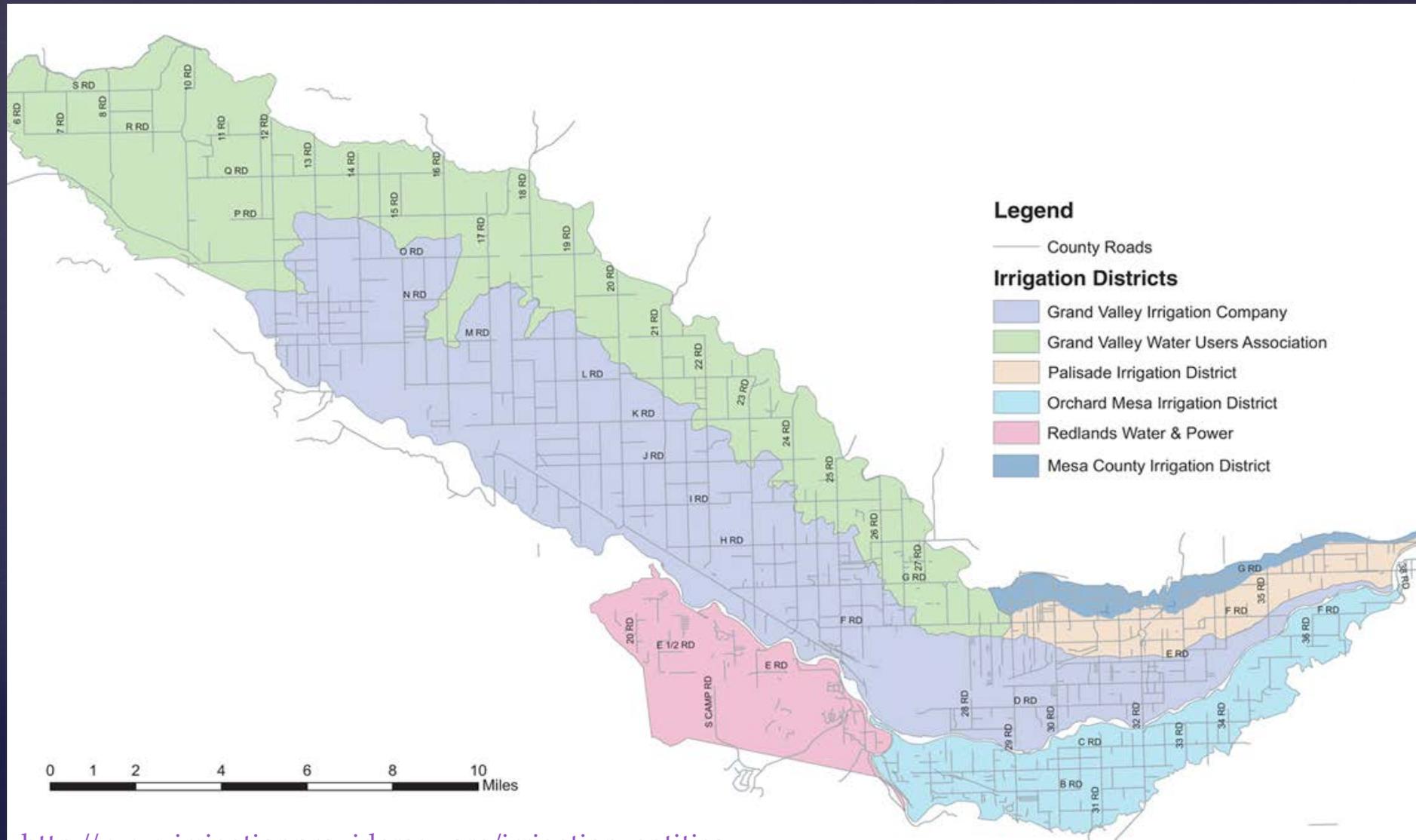
Author: faith.sternlieb@colostate.edu; Date: 13 July 2012
 Source: Bureau of Reclamation, U.S. National Atlas, Colorado River District, Central Utah Water Conservancy District, Wyoming, Utah and Arizona



- ⌘ Relational geodatabase
- ⌘ Overlaying governance boundaries and ag lands data

database development

Grand Valley Irrigators, CO



http://www.irrigationprovidersgv.org/irrigation_entities.php

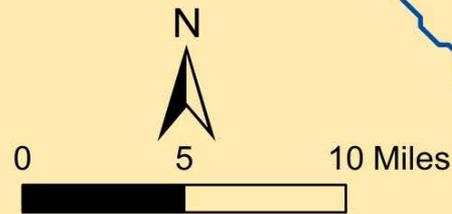
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Agricultural Water Governance in Grand Valley Mesa County, Colorado



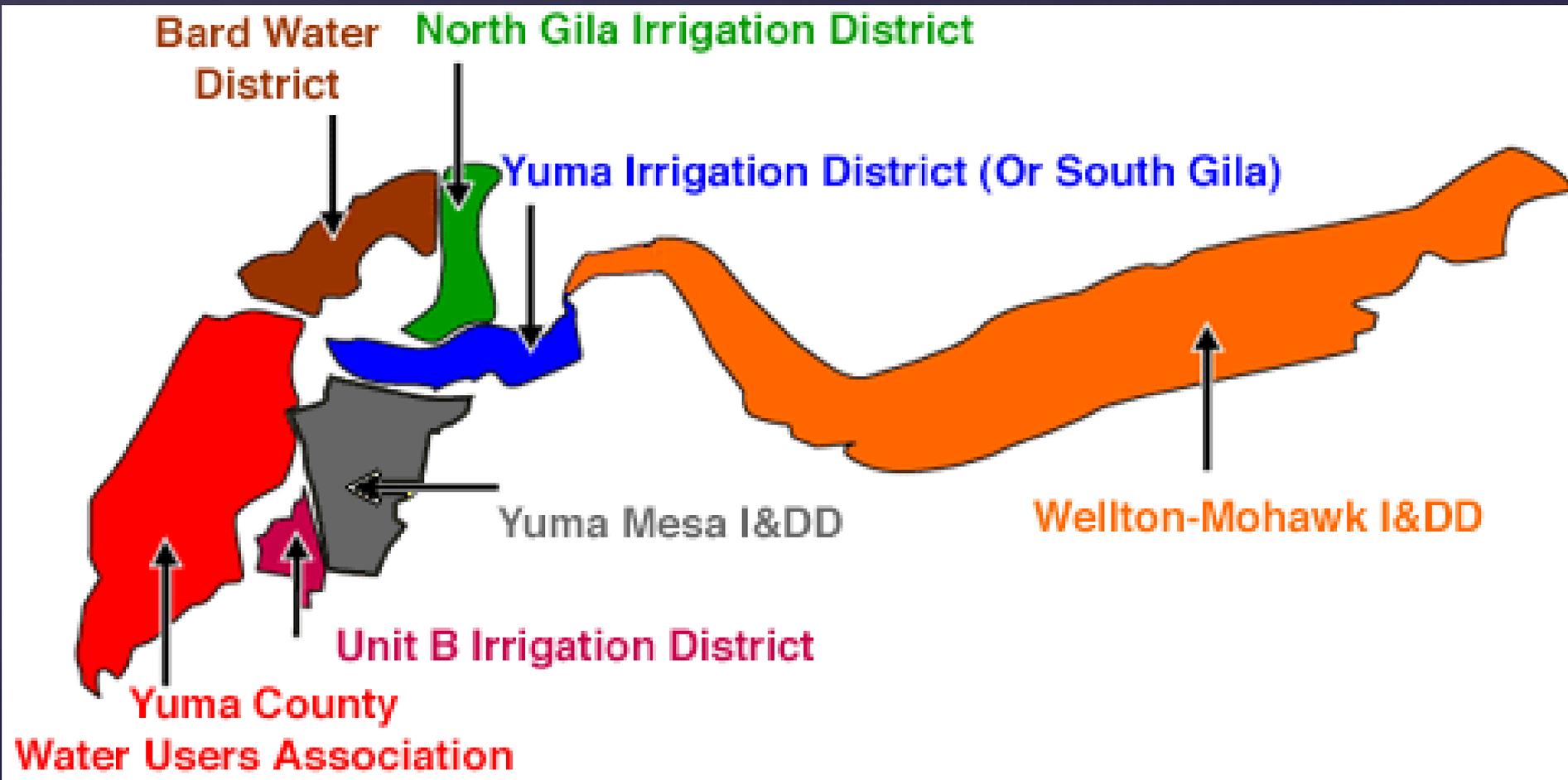
Legend

- Grand Valley Project - WCAO
- Colorado River & Major Tributaries
- ▭ Ute Water Conservancy District - CRD
- Irrigated Land - 2005
- Redlands Water & Power Company - WCAO
- Orchard Mesa Irrigation District - WCAO
- Palisade Irrigation District
- Mesa County Irrigation District - WCAO
- Grand Valley Water Users Association - WCAO
- Grand Valley Irrigation Company - WCAO



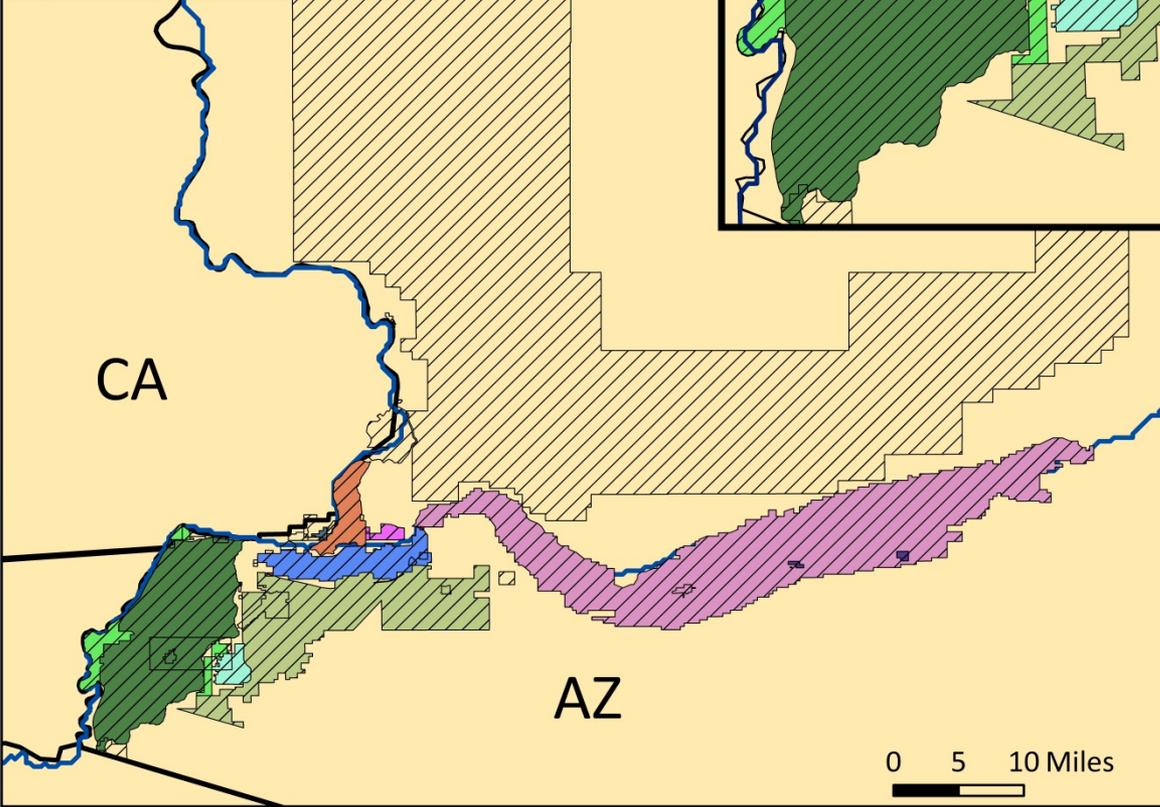
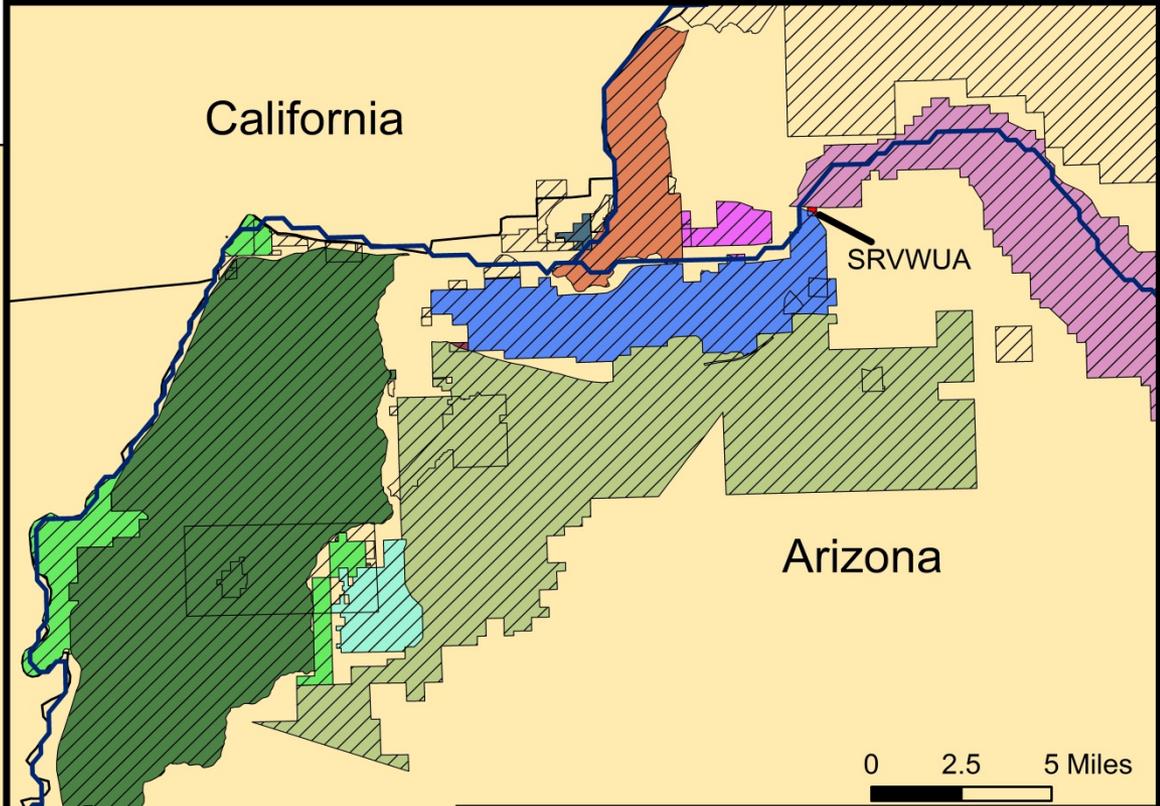
Author: Faith Sternlieb
Date: 8 December 2011
Sources: Bureau of Reclamation,
Colorado River District,
Colorado Decision Support System



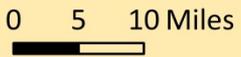


Bureau Ag Water Contracts

Yuma County

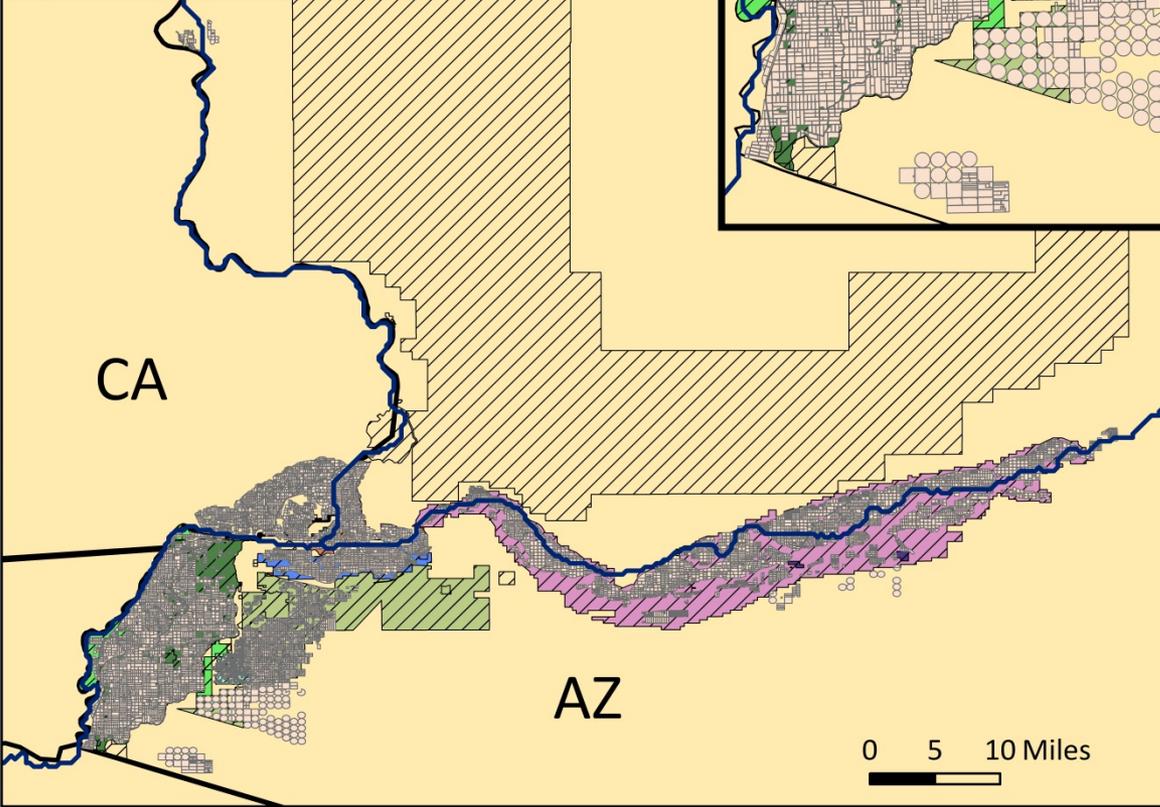
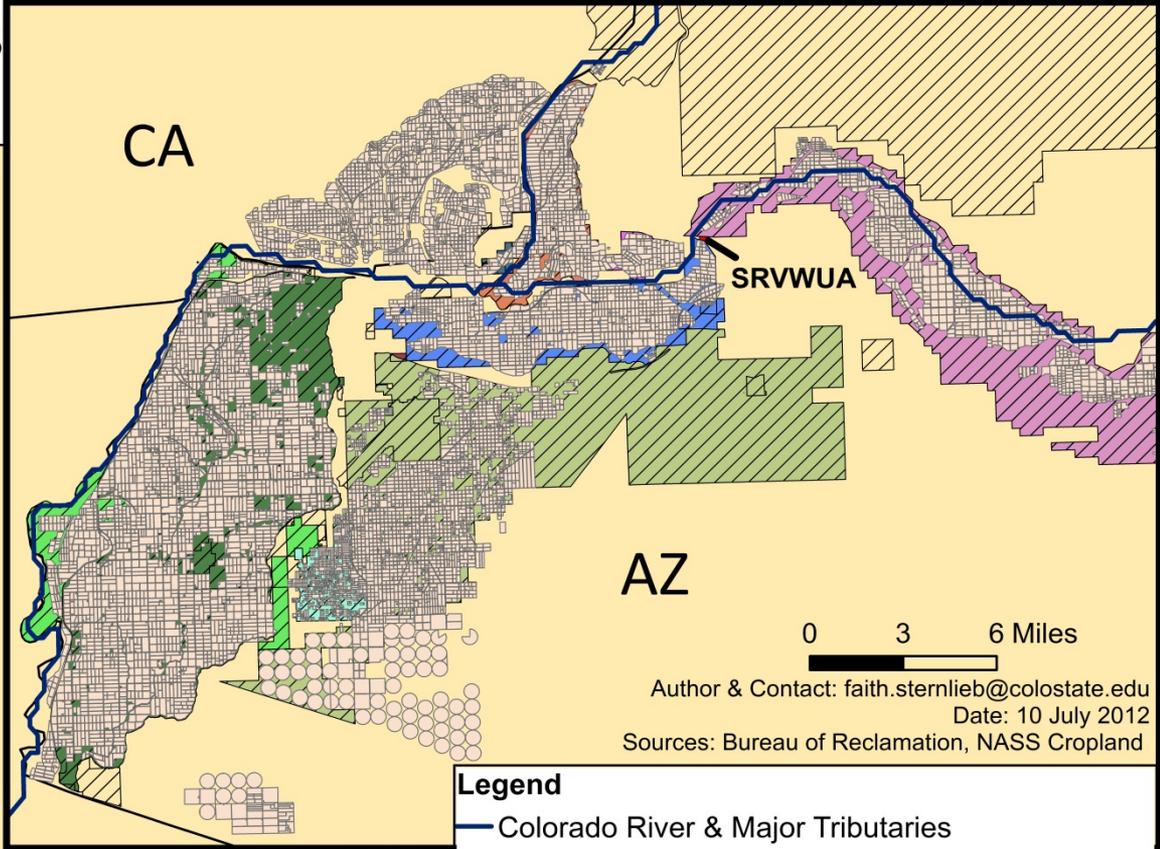


- Legend**
-  LCRO Yuma County Water Contracts
 - Ag Water Districts - LCRO Contracts**
 -  Beattie Farms Southwest
 -  Cocopah Indian Reservation
 -  Gila Monster Farms
 -  North Gila Valley Irrigation District
 -  Salt River Valley Water Users Association
 -  Unit B Irrigation and Drainage District
 -  Wellton Mohawk Irrigation & Drainage District
 -  Wellton-Mohawk Irrigation & Drainage District
 -  Yuma County Water Users Association
 -  Yuma Irrigation District
 -  Yuma Mesa Fruit Growers Association
 -  Yuma Mesa Grapefruit Company
 -  Yuma Mesa Irrigation and Drainage District



Ag Water Contracts & Lands

Yuma County



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- ⌘ What is “water sharing” and who is involved?
- ⌘ Who is the information for?
- ⌘ Why collect this information?
- ⌘ What arrangements and where?

crwua discussion

- ⌘ Senior/ Junior Ag water rights holders
- ⌘ Upper/Lower Basin Ag water users
- ⌘ Federal/ State/ Private projects
- ⌘ Local climatic variability

findings?

- & Collect Ag water data for Mexico
- & Consider Water Rights data for Ag water supply organizations
- & Interviews with ag water users
- & Serve it up

what's next?



Thank you!