Introduction to Land and Water Economics

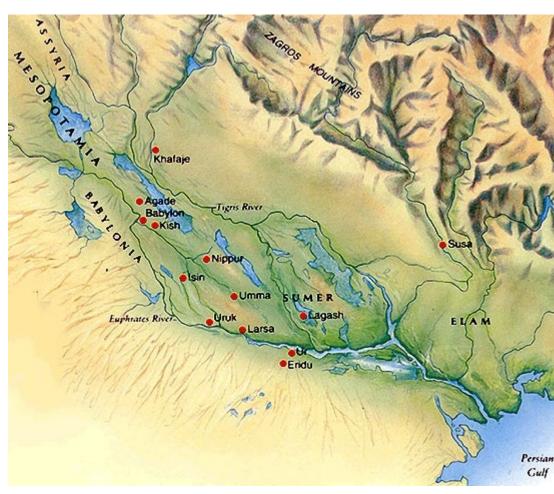
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Land and Water Economics Interact

- Water increases (and decreases) land values
 - Water Supply (reliability, quality, cost) direct use, firefighting, etc.
 - Proximity value (recreation, aesthetics, etc.)
 - Floods (potential damage and danger)

. History

- Location of cities and irrigation: water supply, navigation, floods
- Early Roman land and wetland development BCA
- Economic value of semi-arid agricultural land with irrigation
- Groundwater in regional economic development (Ramon Llamas)
- Water quality, ecosystems, and land values

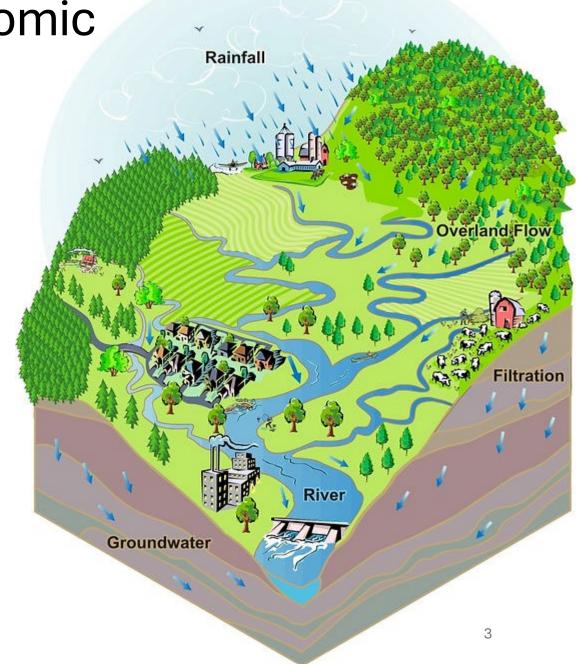


Ancient Mesopotamia

Current Water and Land Economic

Issues

- . Current issues:
 - Management for droughts
 - Groundwater over-draft
 - Contamination of aquifers nitrate, salts
 - Contamination of rivers pesticides, nitrate, nutrients
 - Water allocations among users
 - Managing with greater variability
- Decentralized management
 - State water laws and regulation
 - Federal, local, and state water projects
- . Makes available water (and land with water) more valuable
- . Higher quality has higher value



Western North America Examples

Aridity challenges:

- . Long seasonal droughts every year
- . Multi-year droughts
- Salination
- Water and land competition (users and ecosystems)
- . Floods too!

. Solutions:

- Extensive infrastructure to store and move water + groundwater development
- Water demand management
- Local and extensive water markets, transfer agreements, and contracts

. Successes:

- California (CVP, SWP, local projects)
- Colorado River cities and agriculture
- Many smaller local projects
- Every solution brings new problems, particularly for environment and sustainability



Conclusions

- 1. Water, land, money, and values interact
- 2. Water usually enhances land values
- 3. Water regulation and management affects land economics
- 4. Interactions have supported and ended civilizations for millennia
- 5. Western US has a colorful history of examples, challenges, and solutions

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Next speaker is Steve Suau on Integrated Watershed Management