

Discussion Results: Where Does Your Water Come From & What Do You Want to Do with It?

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Part 1: Where does your water come from? LCR Water supply, demands and value

- What is a spring?
- How is a seep different from a spring?
- What determines the boundaries of a water basin?
- Additional information available: Spheres of Discharge paper
- How were supply/demand values determined?
- What is the WRDC?

Part 2: Envisioning LCR's Future—what could be done with regional water resources?

The comments and discussion results recorded below are the opinions of LCR presentation participants and are not intended for scientific use.

Ideally/Realistically, 50 years from now the LCR economy will be driven by

- Quantified responses not available, all categories selected by one or more participants:
 - Farming, Local Businesses, Mining, Outdoor Recreation, Population Growth, Power Generation, Ranching, Other
 - Should add industry, forestry, and government to list of potential economic forces
- Difference between ideal and realistic?
 - Will have to adapt over time (i.e. effluent reuse)
 - Population growth is occurring, though slower than other areas and there will be an increase in municipal demands
 - Natural resources are consistent in this area, historically, while other regions vary
 - Other regions of the world, as well as in the LCR, are seeing movement toward urban centers over rural areas and technology is being developed to overcome
 - When populations growth continues, economics follow
 - Power generation adaptations will have to occur

What is the LCR's greatest water management challenge in the next 10 years?

- Quantified responses not available, all categories selected by one or more participants:
 - If we accept past cycles can repeat, climate will drive all other areas
 - Concern over potential for valley raiding LCR water supply
 - Hopi/Navajo mining shut down and decreased water use, but not seeing recharge is resulting in slow recovery accompanied by increasing demands and drought
 - Increase in public regulation of water use
 - Largest challenge to Navajo water resources department is legal challenges because it drives water supplies and what will be available before considering management options

What is the LCR's greatest water management challenge in the next 50 years?

- In order of responses: Demands exceeding available supplies (29%), Legal challenges (25%), Changes in climate (21%), Diminishing groundwater supplies (8%), Expense of water (4%), Lack of renewable supplies (4%), water quality (4%), water supply infrastructure (4%), Other (0%)
 - Legal challenges will dominate for 10 and 50 years because that is the basis for everything else
 - Decreasing groundwater will not be a problem until it declines to a point where people "get scared"
 - Difficult to select only one item because they are interconnected
 - On vs. off reservation population growth presenting a challenge because of trend in outmigration and then returning as a retiree
 - All voting is based on our current understanding, but does not consider new technology or changing situations in the future

What solutions would work best to meet the water management challenges associated with...

Changes in Climate

- In order of responses: Increased conservation (19%), Conduct regional water management (15%), Create water resources plans (14%), Increase education (14%), Improve infrastructure (14%), Augment water supply (8%), Modify existing regulations (8%), Increase data on water resources (5%), Increase funding (3%), Other (0%)

Demands exceeding available supplies/Lack of renewable supplies

- In order of responses: Increased conservation (19%), Create water resources plans (16%), Conduct regional water management (15%), Improve infrastructure (15%), Increased education (13%), Augment water supply (8%), Increased data on water resources (6%), Increased funding (4%), Modify existing regulations (4%), Other (0%)
- Change land use from agricultural to municipal/industrial is the simplest way to augment supply

Diminishing groundwater/surface water supplies

- In order of responses: Increased conservation (21%), Conduct regional water management (16%), Improve infrastructure (16%), Create water resources plans (12%), Increased education (12%), Augment water supply (6%), Modify existing regulations (6%), Increased data on water resources (5%), Increased funding (5%), Other (0%)

Expense of water

- In order of responses: Increased conservation (24%), Modify existing regulations (19%), Improve infrastructure (14%), Augment water supply (10%), Conduct regional water management (10%), Increased education (10%), Create water resources plans (7%), Increased funding (7%), Increased data on water resources (0%), Other (0%)

Water supply infrastructure

- In order of responses: Improve infrastructure (20%), Increased conservation (16%), Increase education (16%), Create water resources plans (11%), Increased funding (11%), Conduct regional water management (9%), Increased data on water resources (8%), Modify existing regulations (8%), Augment water supply (3%), Other (0%)

- Growth in major cities is simpler to accommodate because they are able to expand their infrastructure much easier than in the LCR (in LCR, the population and water needs are sporadic and have long distances between connections creating issues in northern parts of the state)

Legal challenges

- In order of responses: Create water resources plans (15%), Increase education (14%), Modify existing regulations (14%), Conduct regional water management (11%), Increased conservation (11%), Increased data on water resources (10%), Increased funding (10%), Other (8%), Improve infrastructure (5%), Augment water supply (2%)

Water quality

- In order of responses: Improve infrastructure (17%), Create water resources plans (15%), Increased data on water resources (13%), Increase education (13%), Conduct regional water management (12%), Modify existing regulations (10%), Increased funding (9%), Increased conservation (7%), Augment water supply (2%), Other (1%)

Discussion questions

If there is a difference between your ideal economy and realistic economy, how can water management play a role? Does that management need to be watershed wide? Which solutions to water management problems take us closer your ideal economy? Which put you further away?

- We are always fixing infrastructure (water lines, etc.) and the cost to update the system is too high and therefore limiting
- Region is looking to grow the economy, but without a guarantee of water, new residents and businesses will not come
- “We need a plan for up here”
- Concerned over increased regulations—want to be able to manage regional water “on our own and without legislative force”
- Region has a 70% complete water management plan by RC&D, looking for funding to complete

What assistance would be most useful to the LCR?

- In order of responses: Identifying threats to water resources (28%), Facilitating communication between water users (19%), Assessing ecosystem services/economic values (19%), Developing scenarios for future water supply/demand (17%), Facilitating discussions on priorities for water for the environment (11%), Other (6%)