

Notes from "Future" group, Lake Cahuilla research planning meeting July 27, 2017
Discussants: Francesca Hopkins, Darrel Jenerette, and Christopher Swarth

There are 4 principal drivers affecting the future of the Lake Cahuilla Region:

1. Water
2. Land use: agriculture, energy
3. Climate change
4. Air quality concerns: UCR scientists should take advantage of monitoring datasets, including ARB AQ monitoring stations.

Interesting questions for the future:

1. Is Owens Valley "Lake" a model for future?
2. As Coachella Valley's population increases, what are the implications for human health with respect to dust?
3. Biofuel production in the Imperial Valley may become an important resource for the area. How will this impact the ecosystems?
4. Energy development: geothermal, biofuels, solar, natural gas, algal biofuels
5. What are the important interaction between energy and agriculture?
6. What is the appropriate balance between water and urban uses: environmental justice for Imperial Valley residents (air quality)
7. Biodiversity assessment was done ~15 years ago. What would be seen if we were to redo this today?

Potential funding sources:

1. NASA Health and Air Quality Program current call:
<https://nspires.nasaprs.com/external/viewrepositorydocument/cmdocumentid=553838/solicitationId=%7BD8C7A6B4-ABDC-C9DD-6EC7-09B41E02A5C7%7D/viewSolicitationDocument=1/A.39%20HAQ%20Amend%2018.pdf>
Notice of Intent are requested by September 1, 2017, and proposals are due November 3, 2017.
<https://appliedsciences.nasa.gov/programs/health-air-quality-program>
2. California Energy Commission current call: GFO-16-311-Advancing The Resilience and Environmental Performance of California's Electricity System-
<http://www.energy.ca.gov/contracts/GFO-16-311/>

Topics:

Group 1: Empirical Studies of Aerosols to Boost Precipitation Enhancement Programs of Investor Owned Utilities;

Group 2: Air Quality and Climate Benefits of Targeted Retrofit Buildings and Renewable Distributed Generation (DG) in Dense Urban Areas Including Disadvantaged Communities;

Group 3: Building on the Cal-Adapt Platform to Deliver Actionable Information in Support of Electricity Sector Resilience;