The Co-production of Sustainable Future Scenarios

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Why future scenarios?
The Sustainable Future Scenarios (SFS) engagement process creates space to question the limits of what is normally considered possible, desirable, or inevitable in the face of future challenges.

Scenarios are an important tool for assessing potential socio-ecological change across a region, city, or neighborhood.

Through a collaboration of practitioner and academic stakeholders, this research integrates participatory scenario development, modeling, and qualitative scenario assessments.

Comparative analyses among the future scenarios demonstrate trade-offs among regional and microscale temperature, water use, land-use change, and co-developed resilience and sustainability indices.

The SFS approach emphasizes the co-development of positive and long-term alternative future visions. Scenario approaches vary based on diverse planning and decision support needs and objectives. CAP LTER uses 3 distinct scenarios.

CAP Scenarios: Seven Regional Futures

Adaptive Flood 2060: Desert Wetland
- Multi-scale floodplains, parks, & transportation system

Adaptive Drought 2060: True Cost of Water
- Long-term water security with banking & conservation

Adaptive Heat 2060: Cool or Lose It
- Heat equity addressed with green & gray infrastructure

Transformative 2060: Healthy Harvest Hub
- Re-envisioned urban form, food & energy system

Transformative 2060: Emerald City
- Balancing targets for flood, drought, & heat

Transformative 2060: Almost Zero Waste
- Reckless water, material, & energy waste

Strategic 2060:
- Aspirational future scenario based on existing governance strategies

CAP Scenarios: Five Neighborhood Futures

Scenario themes
1. Just green enough (avoiding green gentrification)
2. Equity district (achieving social and environmental justice)
3. Mountain to river (ecohydrological connectivity)
4. Some like it hot (dealing with extreme heat)
5. Connected and mobile (improving all forms of transit)

CAP Scenarios: Cross-scale Comparisons

How well does the scenario do relative to BAU? (3 much worse) to 10 (much better)

CAP Scenarios: Cross-scale Comparisons

Workshop participants constructed five positive visions of the future of South Phoenix along the themes of:
1. Just green enough (avoiding green gentrification)
2. Equity district (achieving social and environmental justice)
3. Mountain to river (ecohydrological connectivity)
4. Some like it hot (dealing with extreme heat)
5. Connected and mobile (improving all forms of transit)

See Bérbes-Blázquez poster #22

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