

# Sustainable Agricultural Water Futures in the Colorado River Basin

A Request for Proposals from the Babbitt Center for Land and Water Policy February 1, 2022

## **Summary**

The Babbitt Center for Land and Water Policy, a center of the Lincoln Institute of Land Policy, invites proposals for research related to the future of agriculture in the Colorado River Basin. Proposals should explore approaches to preserve the most productive agricultural lands; increase agricultural revenues and outside funding for water efficiency improvements; maximize ecosystem and economic benefits from both lands remaining in agriculture and lands going out of production; enhance the economic viability of agricultural communities despite a hotter, drier future; or facilitate mutually beneficial water sharing arrangements. **Proposals should study impacts within the seven U.S. and two Mexican Colorado River Basin states.** 

#### Context

Water sustainability in the southwestern United States and northwestern Mexico is inextricably connected to the future of agriculture in the region. Irrigated agriculture uses nearly 75 percent of the water supply in the Colorado River Basin, occupies more than four million acres of land, and provides food for over 40 million people. However, irrigated agriculture throughout the Basin faces a future with less water, more expensive water, and less reliable supplies. Impending reductions in available water of 20 percent or more due to projected climate change, ongoing cycles of drought and wetter periods, and continued increases in water demand because of urban growth, ecosystem needs, energy generation, and new water users competing for water supplies will significantly impact agricultural economies and communities.

Recognizing these challenges, the Babbitt Center is initiating a sustainable agricultural water futures research effort. Research should learn from and work with agricultural regions in the Colorado River Basin (and similar areas elsewhere in the Basin states) that are facing threats to their water supplies, pressures related to urban development, and opportunities to advance conservation and climate change mitigation and adaptation. The goal of this effort is to envision long-term sustainable agricultural water futures and identify feasible paths toward achieving them.

#### **Research Themes**

Research proposals should build upon at least one of the subjects below.

 Agricultural—urban—tribal partnerships that implement mutually beneficial opportunities for agricultural water efficiency improvements, water sharing, and water shortage mitigation

- Preservation of agricultural economies, local food networks, and productive agricultural lands
- Complementary and/or alternative uses, such as energy production, for currently irrigated agricultural lands
- Opportunities and constraints for integrating rural economic development with sustainable agricultural futures and regional water management strategies
- Maximization of ecosystem services from both continued agricultural production and alternative uses of less-productive agricultural lands, including improving water quality, water recharge, and soil conservation; climate change mitigation and adaptation opportunities; improving biological diversity and wildlife habitat; supporting cultural values; etc.
- Ensuring socially just (e.g., equitable, inclusionary) transitions within agricultural economies
- Impacts on vulnerable and marginalized populations engaged in agricultural economies
- Case studies of innovative concepts or ongoing efforts to advance sustainable agricultural water futures
- Federal, state, and local policy and management contexts that impact agricultural futures and transitions, including relevant statutes and programs
- Factors impacting, driving, and shifting the future of agriculture and rural economies, such as:
  - Economic drivers impacting agricultural land use trends, water demand, and supply for agriculture
    - Potential role of land value arbitrage approaches
    - Threats and opportunities from water marketing and speculative investors and needs for regulatory protections
    - How non-agricultural markets for land and water impact agricultural communities and regions
    - Various risks faced by different kinds of agricultural communities (e.g., remote rural areas vs. urbanizing areas, mutual ditch companies and irrigation districts vs. groundwater-reliant regions, etc.)
    - Impacts of land fallowing programs on agriculture markets and agriculture-dependent communities
    - Potential for impact investing or land trusts to assist with securing sustainable agricultural futures and other objectives identified above
- Tools for incorporating external costs related to mitigating the negative externalities of water and agricultural land transactions, e.g., loss of habitat and local food production, loss of local tax base, and other indirect effects not reflected in the price of agricultural goods
- Typology of agricultural transition approaches and contexts
- Geospatial change analysis of water use on agricultural lands

## **Proposal Evaluation**

The Babbitt Center will evaluate proposals based on five equally weighted criteria:

- Relevance of the project to the RFP's theme of innovation for agricultural futures
- Rigor of research methodology
- Capacity and expertise of the team and relevant analytical and/or practice-based experience
- Potential impact and usefulness of the project for agricultural producers, land managers, and/or agricultural communities
- Potential for results to transfer to a variety of contexts, even if the proposal focuses on one region

# **Deliverable Types**

Selected proposals will build on the Babbitt Center's existing body of work and produce valuable research and tools for researchers, policy makers, agricultural producers, and other practitioners interested in land and water integration. Proposals may include more than one deliverable and applicants may propose the form(s) of the final deliverable. Possible deliverable forms include, but are not limited to:

- academic working papers and literature reviews;
- descriptive case studies;
- how-to guides; and
- analyses and prioritizations of future additional research.

Projects and associated deliverables can be used to develop larger research proposals for submission to other funding opportunities. Award recipients are encouraged to participate in a research and practitioner network to further the state of research about agricultural water futures. Additionally, award recipients may be invited to present completed projects through webinars, conferences, and other Lincoln Institute events.

#### **Award Amount**

Awards for selected working papers and how-to guides will be \$5,000–\$10,000. Awards for selected case studies will be \$2,500–\$5,000. Other deliverable types will be evaluated on a case-by-case basis. Award recipients are required to complete the proposed project within one year of selection, although projects may be completed in less time.

We expect to have several cycles of funding, so proposals made in earlier rounds can, with approval of the submitters, be considered in future funding cycles.

### **RFP Schedule**

- February 1–March 1, 2022: Applicants are strongly encouraged to complete an informal, pre-bid consultation (contact Erin Rugland, <a href="mailto:erugland@lincolninst.edu">erugland@lincolninst.edu</a>, to schedule)
- March 1, 2022: RFP submission due at 11:59 p.m. MST through this form
- April 12, 2022: Selected applicants notified of award
- October 3, 2022: Intermediate summary/progress report due\*
- April 12, 2023: Final deliverable due\* \*flexible and can operate on a shorter timeline

# **Submission Requirements**

This RFP is open to any individual, agency, practitioner, or researcher interested in helping the Babbitt Center and our partners expand knowledge and resources related to this topic. Proposals should include the following:

- 1) **Cover Page**: Include the title of the project and the contact information of applicant(s), including affiliation, address, phone number, and email.
- 2) **Project Abstract**: Convey the core topic and proposed contribution of the research or tool. It should clearly express the context, purpose, relevance, and methods of the proposed research topic (300 words maximum).
- 3) **Project Description**: Describe the research or project objective(s), purpose, relevance, and methodology. Explain how the proposed work will build off existing research and identify any new contributions (2,000 words maximum).
- 4) **Scope of Work**: Define the specific tasks and deliverables with an estimated schedule for completing the project.
- 5) **Biography**: Include a brief biography and resume/CV for the primary researcher and any other team members (3 pages maximum per team member).
- 6) **Budget**: Provide a detailed estimate of funding needed to complete the project.

The proposal must be written in English and submitted as a Microsoft Word document. Format the application for printing on 8.5x11-inch (letter-size) paper. The application may be single- or double-spaced, but each section must not exceed the maximum word count, as described above. Submit the entire application as a single document using this Formstack link by March 1, 2022, at 11:59 p.m. Pacific Time.

## **Questions about this RFP**

For questions regarding this request for proposals, please contact Erin Rugland, <a href="mailto:erugland@lincolninst.edu">erugland@lincolninst.edu</a>. Please note that no submissions sent to this email address will be considered; submissions must be sent through the Formstack link above.

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# **About the Babbitt Center and Lincoln Institute**

The Babbitt Center for Land and Water Policy, a center of the Lincoln Institute of Land Policy, seeks to advance the integration of land and water management to meet the current and future water needs of Colorado River Basin communities, economies, and the environment. We develop tools and best practices to guide decisions through research, training, and partnerships for sustainable management of land and water resources in the Basin and beyond. The Lincoln Institute of Land Policy seeks to improve quality of life through the effective use, taxation, and stewardship of land. A nonprofit private operating foundation whose origins date to 1946, the Lincoln Institute researches and recommends creative approaches to land as a solution to economic, social, and environmental challenges.