Evaluating Tools for Integrating Land Use and Water Management

A Request for Proposals from the Babbitt Center for Land and Water Policy Issued April 15, 2021

Summary

The Babbitt Center for Land and Water Policy, a center of the Lincoln Institute of Land Policy, invites proposals for original research that evaluates the suite of tools, practices, and processes the Babbitt Center has identified as key to connecting land use and water management. This evaluation may assess the overall suite of tools and identify priorities for further research and development; evaluate a category of tools; or rigorously evaluate a specific form of the tool.

Context

The Babbitt Center is interested in expanding the evaluation of tools for integrating land use and water management. Integrated land use and water management—through planning, policy, or community programs—is of increasing interest to communities across the country that struggle with a variety of land- and water-related challenges.

Recent work has addressed the benefits of integrating land use and water management. However, more rigorous research is needed to quantify the costs and benefits and identify the most effective tools. A partial list of practices potentially worth additional evaluation includes: incorporating assured water supply requirements into the development approval process; meaningfully incorporating water elements into general/comprehensive plans; and building multipurpose green infrastructure projects.

Building on previous work by a variety of researchers and NGOs, the Babbitt Center recently solicited expert input to compile <u>a toolbox matrix</u> that identifies the numerous ways to connect land and water in practice as well as criteria to evaluate these practices. We are seeking proposals for research that will assess and prioritize integration practices for evaluation, test and refine criteria to gauge the efficacy of integration practices, or quantify the effectiveness of these integration practices in local implementation. The toolbox matrix and associated evaluation criteria are included at the end of this document for reference.

Research proposals should build upon at least one of these subjects:

- Create a framework for defining the effectiveness of integration practice(s)
- Assess the various integration practices listed in the matrix and prioritize them for evaluative work
- Scope the need for and potential use of an online tool for practitioners to use for evaluating water in comprehensive plans, based on Babbitt Center's work on the subject
- Test and refine the evaluation criteria identified in Appendix A of the working paper "Integrating Land and Water: Tools, Practices, Processes, and Evaluation Criteria"
- Evaluation of integration practices, such as:
 - Positive or negative impacts on community equity or vulnerable communities resulting from the integration practice(s)

- Assessment of the efficacy of integration practice(s) relative to the reasons why they were adopted
- Factors that facilitate or predict successful implementation of integration practice(s)
- Analysis of integration practice(s) in communities of different sizes, growth rates, institutional structures for water service, or primary industries
- o In-depth cost/benefit analyses of integration practice(s), potentially including life cycle assessments
- Water-savings evaluations of integration practice(s) beyond water conservation and efficiency improvements
- Analysis of incentive programs for integration practice(s), such as the efficacy of developer incentives

Proposal Evaluation

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

- Relevance of the project to the RFP's theme of evaluating tools for land and water integration.
- 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 practitioners integrating land and water management.
- Potential for results to transfer to a wide variety of contexts, even if the proposal focuses on one community.

Deliverable Types

Selected projects will build on the Babbitt Center's existing body of work and produce valuable research and tools for academics and 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 project forms include but are not limited to:

- academic working papers;
- descriptive case studies;
- how-to guides;
- analyses and prioritizations of future additional research;
- needs analyses for developing tools or resources that aid in the implementation of an integration practice and initial design of such tools or resources; and
- research that can be developed into a Lincoln Institute Policy Focus Report at a later date.

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.

Award recipients will receive between one-third and one-half of their award, depending on the proposed project length and budget upon signing an agreement with the Lincoln Institute in June 2021.

The projects produced from the selected proposals will be considered for inclusion on the Lincoln Institute's website. Individuals selected through the RFP may also be invited to present completed projects through webinars, conferences, and other Lincoln Institute events.

RFP Schedule

- Prior to May 16: Applicants are strongly encouraged to complete a pre-bid informal consultation (contact Erin Rugland at 480-323-0778 or erugland@lincolninst.edu)
- May 16, 2021: RFP submission due at 11:59 p.m. PDT through this form
- May 26, 2021: Selected applicants notified of award
- November 1, 2021: Intermediate summary/progress report due*
- May 1, 2022: 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 to expand its knowledge and resources on 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 convey 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 methods of the proposed topic. It should describe 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); and
- 6) **Budget**: Provide a detailed estimate of funding needed to complete the project.

RFP Submissions

The proposal must be written in English and submitted as a Microsoft Word document. Format the application for printing on 8.5 x 11-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 <u>Formstack link</u> by May 16, 2021, at 11:59 p.m. Pacific Time.

Ouestions about this RFP

For questions regarding this request for proposals, please contact Erin Rugland at 480-323-778 or erugland@lincolninst.edu.

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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.

Generalized Evaluation Matrix for High-Level Decision Making (see key at bottom of this table)

	Tool Usefulness for Addressing Certain Water Issues				Tool Contribution to Community Goals		Tool Feasibility	
	Water Adequacy	Flooding and Combined	Aging Infrastructure	Water Quality	Resilience	Equity	Magnitude of Integration	Ease of Implementation
	Tool reduces demand,	System Overflows	Tool funds, builds, and	Tool reduces pollution and	Tool has a low, medium, or	Tool improves inclusion	Cost	A general estimation on
	increases supply, or	Tool absorbs or conveys	replaces infrastructure	improve quality	high impact on community	and involvement of all	General estimate of	how feasible it is for a
	improves efficiency	excess water			capacity to prepare for,	populations in access,	operation and maintenance	community to adopt and
	•				respond to, and bounce	decision-making, and	costs if land and water are	implement the tool
					forward from a shock	benefits of land and water	integrated through the tool	•
Tools, Practices, and Processes						integration		
Collaborative Processes								
Remove Existing Barriers	•	•	•		•	•		•
Ongoing Communication	<u> </u>	Ĭ		Ĭ	<u> </u>		i	ě
Coordinated Data and Information							<u> </u>	
Education Programs					 	<u> </u>		
Public Engagement and Participation		Ŏ				••	0	
Scenario Planning								
Pilots, Demonstrations, and Models								
	0			0			•	0
Coordinated Pre-Application Meetings	•	0		0	0		•	•
Closed Approval Loop Between Land/Water	••		_	0	•	_	•	•
Monitoring and Program Evaluation	•	•		•	•	•	0	
Planning								
Comprehensive and Master Plans	••	•	•	•	••			
Water Resources Plans	••	•	•		•			
Capital Improvement Plans	•	••	••	••	•	••		0
Sustainability and Climate-Related Plans	•	••			••	•	0	
Hazard Mitigation, Response, and Recovery Plans	••	••		••	••		0	
Regulations: Codes and Ordinances								
Building Codes						0		
Plumbing Codes	<u> </u>				<u> </u>			
Landscape and Irrigation Codes	•••		0			0		
Zoning and Land Use Codes					Ŏ	0		
Subdivision Regulations				0	<u> </u>	0		
	<u> </u>						<u> </u>	
Annexation or Growth Policies	•••	•		0	<u> </u>			0
Water Restriction and Other Water Use Codes	•				•		•	0
Water Budget, Allocation, and Dedication	•••				0	0	•	0
Assured Water Supply	••					•		0
Water Demand Offsets/Water Neutral Code	•					•	•	O
Consistency Requirements and Formalized Collaboration	•				0			0
Development Review								
Development Agreements/PUDs					0			•
Site Planning	•	•	0			0	•	•
Connection Charges	••		•		0		•	
Developer Incentives	•	0	0	0	0	0	0	•
Water and Infrastructure								
Water Supply Infrastructure	•	0	•		•		0	
Wastewater Collection and Treatment					Ŏ		Ö	
Stormwater Management	0	••		••	Ĭ		Ŏ	0
Water Quality and Source Water Protection							0	
Water Reuse and Use of Impaired Supplies		0					Ö	
Water Reuse and Ose of Imparied Supplies					—		Ť	,
Water Recharge and Storage			0	_	•	0	0	0
Post-Occupancy Water Demand Management								
Rate Structure and Conservation Rate Structure	•••				0			0
Fixture, Appliance, or Landscaping Retrofits	•	0		0		•		0
Water Audits and Leak Detection	•		••		Key Very High	•	0	
	Key					Key	Key ■ Low cost ■ Medium cost O High cost	Key ● Easy ● Medium O Difficult