2022 Irrigation Innovation Consortium (IIC) Request for Proposals (RFP)

Summary. The Irrigation Innovation Consortium (IIC) seeks collaborative research proposals focused on the development, integration, and adoption of advanced irrigation management technologies, tools, and practices. Project teams should be led by industry and/or irrigation sector stakeholder group representatives and academic partners. The proposal process has two steps:

- Step 1 - Preproposal submission, evaluation and team interviews
- Step 2 - Selected project team invitations to submit a full proposal.

Details for both steps are provided below.

About the IIC. The IIC supports collaborative, pre-competitively oriented research to accelerate the development, integration, and adoption of advanced, water-efficient irrigation technologies and practices. The consortium is comprised of leading academic institutions, private sector technology providers, and other irrigation sector stakeholders working together to identify and help fill key research and knowledge gaps in both agriculture and landscape irrigation. Through competitive research calls, IIC encourages public and private entities to combine their expertise to advance science and technologies and accelerate the application of new knowledge to benefit the irrigation sector and society.

Overview of this research call. The IIC has approximately $500,000 available to support research projects through this call. The IIC anticipates funding 3-5 projects, to be completed over an 8–20 month period.

IIC seeks projects that:

- Involve a highly collaborative, approach to working on the co-development, testing, evaluation, improvement, and/or integration of equipment, technology, and information systems
- Demonstrate creativity, innovation and potential to be transformative for the irrigation industry, irrigation end users, and/or society
- Address practical, biophysical, technical, and/or social factors or constraints currently limiting advances in irrigation management including improvements in water use efficiency
- Include activities to share knowledge gained through the research -- through trainings, demonstrations, presentations, or programming -- and encouraging the adoption and correct use of advanced irrigation tools, technologies, and/or management strategies
- Are pre-competitively oriented

About pre-competitive research. IIC’s research funding is provided by the Foundation for Food and Agriculture Research (FFAR). As envisioned by FFAR and IIC, pre-competitive research encourages the pooling of resources, data, and expertise for public benefit. Data and resulting publications from this research will be open and accessible. Commercial endeavors resulting from the application of these data and research results can be proprietary.
**About project teams.** Key collaborators on project teams must involve one or more irrigation sector partners, whether from industry, other private entities, or other institutions such as non-profits. Project teams must also include research and/or Extension staff from one or more IIC member universities (Colorado State, Kansas State, University of Nebraska-Lincoln, Fresno State, Texas A&M). Teams can also include team members from additional universities. Teams are to designate one Principal Investigator (PI) who may be affiliated with a university, with industry, or another organization.

**Financial Policy.** A project team’s PI is ultimately responsible for their IIC-funded project, matching commitment, and budget. If the budget is overspent or expenditures are improperly charged, the PI and his/her organization is responsible for providing funds to cover the unauthorized spending. Failure to provide required deliverables will disqualify PIs or team members from receiving additional project funding.

**Proposal requirements.** Projects must:
1. Have scientific merit and fill a clearly defined research gap
2. Have an integrated team that includes at least one industry partner and one IIC university partner
3. Clearly describe the anticipated value and potential impact of the project for the irrigation sector and/or society
4. Accelerate the application or transfer of research insights, through training, demonstration, and/or other outreach
5. Address one or more of the IIC’s priority research themes:
   - Evaluating and improving technologies and recommendations
   - Improving integration of tools and strategies
   - Data synthesis to inform decision making
   - Clarifying water use benchmarks, targets, and protocols
   - Quantifying potential benefits (biophysical, practical, economic) of advanced irrigation management

**Matching requirements.** IIC funding requests, inclusive of allowable indirect costs, must be accompanied by a total non-federal match of 1.25x, where x is the amount of IIC funding requested. Project teams are responsible for identifying and providing supporting letters of match commitment (see documentation requirements for Step 2 Full Proposals below). Matching support can be comprised of cash and in-kind resources. Cash match must represent at least 50% of the IIC funding requested (0.5x). See the definition of “cash” and other IIC matching requirement guidelines in Appendix A below.

**Project selection process.** IIC will use a competitive selection process led by the IIC’s Research Steering Committee (RSC). The RSC reviews proposals for their fit with required components as described above, and makes recommendations to the IIC’s Executive Committee, which is responsible for selecting projects.

**Project duration.** Projects should be completed within 8 to 20 months; projects must be completed with final report submitted by December 31, 2023.

**Funding disbursement.** On behalf of the IIC, Colorado State University will establish subawards with research team institutions. Research teams will be reimbursed for project-related expenditures invoiced on a regular (monthly or quarterly) basis, depending on the rate of spending activity.
**Deliverables.** Projects will be required to submit brief interim progress reports. For projects with more than one-year duration, teams must submit all requested interim reports for IIC’s review and approval for project spending to continue into the second year. Teams must submit a final project report within 30 days of the project’s end date. Interim and final reports will ask teams to describe main findings and accomplishments, impacts and outcomes, how knowledge was transferred or its application accelerated through trainings, demonstrations, or other kinds of outreach and engagement, publications and presentations, aspects pertaining to team collaboration and justification for any changes to a project’s scope of work. PIs or teams will also provide at least one presentation, virtually or in-person, to the IIC extended community that summarizes and showcases completed project results and outcomes. As appropriate, project team members may be encouraged to support IIC’s outreach goals and mission by contributing to or editing written content, serving on panels, and/or participating in recorded interviews about their IIC-supported work.

**Timeline – Updated March 9, deadlines have been extended; see below.**

<table>
<thead>
<tr>
<th>Original Date</th>
<th>Extended Date</th>
<th>Application Step</th>
<th>Related info</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 18, 2022</td>
<td>N/A</td>
<td>Call for proposals announced</td>
<td>View or download RFP and related materials at: <a href="http://irrigationinnovation.org/proposals/">http://irrigationinnovation.org/proposals/</a></td>
</tr>
<tr>
<td>March 11, 2022</td>
<td>March 16, 2022</td>
<td>Deadline: Step 1 Pre-proposals due</td>
<td>Please follow instructions for Step 1 Pre-proposals carefully</td>
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<tr>
<td>March 18, 2022</td>
<td>March 30, 2022</td>
<td>Teams notified by email on whether their pre-proposal has been selected for a team interview or that their pre-proposal will not advance further for this call.</td>
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<tr>
<td>March 21-31, 2022</td>
<td>April 5,6, &amp; 7, 2022</td>
<td>Interviews conducted for Step 1 Pre-proposals</td>
<td>Teams invited to interview will be emailed detailed information about the interview format, audience, what to prepare, etc.</td>
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<tr>
<td>April 1, 2022</td>
<td>Mid-April, 2022</td>
<td>Teams notified by email on whether they have been invited to submit a Step 2 Full Proposal or if their pre-proposal will not advance further for this call.</td>
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<tr>
<td>April 15, 2022</td>
<td>Early May, 2022</td>
<td>Deadline: Step 2 Full Proposals due</td>
<td>See documentation required for Step 2 Full Proposal (below)</td>
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<tr>
<td>April 30, 2022</td>
<td>End of May, 2022</td>
<td>Successful projects announced</td>
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Instructions for Step 1 Pre-proposal (IIC’s 2022 RFP)

Due date: March 16, 2022 at midnight Mountain Time.

How to submit: Please email your Step 1 Pre-proposal to IIC Executive Director Timothy Martin (timothy.martin@colostate.edu), copying IIC Project Manager Amy Kremen (amy.kremen@colostate.edu).

Formatting guidelines

• Font size must be at least 12 point
• Margins must be at least one inch in all directions
• Line spacing must not exceed six lines of text per vertical inch
• Page size must be letter (i.e., 8.5 inches × 11 inches)

Pre-proposals should provide the following information (maximum four pages):

A. Short, descriptive title

B. Project team. Principal investigator (PI), co-investigators, and other key team members: name, title, institution/organization and department, email, and phone number

C. Priority research theme(s). Identify and briefly describe which of the following the proposed project addresses:
   • Evaluating and improving technologies and recommendations
   • Improving integration of tools and strategies
   • Data synthesis to inform decision making
   • Clarifying water use benchmarks, targets, and protocols
   • Quantifying potential benefits (biophysical, practical, economic) of advanced irrigation management

D. Project description
1. Project goal(s): What is the major knowledge or research gap being addressed? How will the proposed project bring or generate value for specific irrigation sector groups or the sector at large? Be clear about how project results might potentially result in other beneficial impacts and outcomes for irrigation sector stakeholders, and/or society.
2. Project objectives: Be specific and concise, using bullets
3. Anticipated project duration (in months) based on an anticipated start date of June, 2022
4. Project approach. Clearly describe:
   a. The innovative, creative, and precompetitive nature of the proposed research
   b. Your team’s research plan and methods, noting how this work will be conducted over the anticipated project duration and describing how collaboration and communication among team members will be ensured
   c. Outreach, educational, or other knowledge sharing and/or technology transfer
component(s) of the proposed project

E. **Budget (presented as a simple list, this doesn’t have to be a formal budget)**
   1. Anticipated requested IIC funding amount ($)
   2. Anticipated total match (minimum 1.25 x IIC requested funding, above)
      a. Cash match amount, description, and anticipated source(s)
      b. In-kind match $ value, description and anticipated source(s)
      c. Per FFAR & IIC policy, Indirect costs are allowed up to 11.11% of the total project funds requested.

**Instructions for Step 2 Full Proposals (IIC 2022 RFP)**

Working with each of their project’s institutional partners that expect to receive IIC funds, project PIs will submit the following documentation to IIC:

- Final project description, approach, and methods
- A budget using an Excel budget template (to be provided by IIC)
- Budget justification as a .pdf or Word document
- A scope of work as a .pdf or Word document that describes the anticipated activities of each institutional partner/team member
- CVs or bios for PIs and co-PIs
- Signed letter(s) of support from any industry partner(s)
- Donor letter(s) that clearly describe(s) the amount and kind (cash or in-kind) of matching support committed to this project
- Signed certification of matching funds form (to be provided by IIC)
- Signed public reporting acknowledgment form (to be provided by IIC)

**Questions?** For additional details interested applicants can contact IIC Executive Director [Timothy.Martin@colostate.edu](mailto:Timothy.Martin@colostate.edu), IIC PI [Allan.Andales@colostate.edu](mailto:Allan.Andales@colostate.edu), or IIC Project Manager [Amy.Kremen@colostate.edu](mailto: Amy.Kremen@colostate.edu).
APPENDIX A: IIC Matching Funds Guidelines

IIC supported research projects require a 1 to 1.25 IIC-to-awardee match of non-federal sources of cash plus in-kind support. Matching funds must be applied to/used for specific project costs incurred during the project performance period.

This match ratio is approved by the Foundation for Food and Agriculture Research (FFAR), which provides the funding IIC uses to support competitively awarded research projects. This match ratio enables IIC to use additional FFAR funding (separate from funds used for research projects) to support project administration, engagement with project teams, and communications and other outreach efforts related to IIC-supported research projects.

“Cash” match is a contribution from the awardee’s cash outlay, including outlay from non-federal third-party organizations. Examples of acceptable “cash” match include:

- New equipment, salaries for project personnel effort on the proposed project, tuition remission, related project travel costs, and costs for supplies directly associated with and necessary for the proposed project, including purchased software licenses.

Please note: IIC requires that at least 50% of the IIC funding consists of cash match. For example, if a project request for IIC funding support is $100,000, the awardee must bring a minimum cash match of $50,000 as part of the total project 1:1.25 match value of $125,000.

In-kind match is the value of non-cash contributions of goods and services to a proposed project. Contributions offered as in-kind match must have a cash equivalent value, be reasonable and necessary, and directly benefit the proposed project. Examples of in-kind match include:

- Used equipment, donated software licenses, supplies, non-expendable property, volunteered professional time or service(s), donated use of facilities by a third party.

Note that if a software publisher provides a discount on a license to a grantee, the amount discounted is considered to be an in-kind contribution, and the remaining balance which is paid by the grantee would be considered to be cash match.

Please note: There is no upper limit on valid in-kind support once the minimum required cash match has been met as described in the “cash” match section above. For example, if a project request for IIC funding support is $100,000, in-kind support can be $75,000 or greater, meeting or exceeding the total project match of $125,000.

The PI and their team are responsible for securing committed match share for their proposed project as part of submitting a complete proposal. Once matching support is committed to a proposed IIC project, the same funds must not be offered as a match for another proposal or award. For more information, please read FFAR’s detailed matching requirement guidelines.