NCRAC

North Central Regional Aquaculture Center

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Request for

Regional Research and Outreach Project Pre-Proposals Funding Year 2026

Request for the North Central Regional Aquaculture Center

Regional Research and Outreach Pre-Proposals for Funding Year 2026 (FY2027)

Dr. Thomas Detmer, Executive Director, 515-294-1348,
tdetmer@iastate.edu

Pre-proposals are due by 5 p.m. (CDST)
Friday, May 8, 2026

North Central Regional Aquaculture Center

Request for Regional Research and Outreach Project Pre-Proposals for Funding Year 2026

Proposed Research Areas

The North Central Regional Aquaculture Center (NCRAC) is seeking pre-proposals for the aquaculture projects in three primary theme areas (Themes A to C – see below) that were developed with input from aquaculture industry, extension and research representatives throughout the region. There is approximately $771,187 available from NCRAC yearly grants to fund relevant and selected projects. The Center typically funds projects for up to two years.

Project Submission & Review Schedule

Pre-proposals are due by 5 p.m. (CDST)	8 May 2026
IAC/TC pre-proposal review	May/June 2026
Notification of pre-proposal review outcome	Late June 2026
Full proposals due by 5:00 p.m. (CDST)	19 September 2026
External, IAC/TC Reviews due	Early October 2026
NCRAC Board Review	Mid-October 2026
Notification of Funding Decisions	Late October 2026
Projects scheduled to begin (*dependent on release of funds*)	January 2027

Specific Criteria for Regional Projects

The following criteria are used to prioritize cooperative regional research and Extension/outreach projects for receiving NCRAC funding:

- Targets research, education or extension topics listed as priorities that have been outlined by industry (see Research Priorities for 2026 listed below).
- Involves at least two institutions and activities within two states depending on the nature of the problem and the most effective use of resources within the North Central Region (NCR).
- Includes three Letters of Support from Industry members who are not directly involved in the proposed project are required.
- Is likely to attract additional support for research and/or outreach on the problem that will not otherwise be addressed using other resources.
- Is sufficiently specific to promise significant accomplishment within four or fewer years.
- Is effectively organized and conducted on a regional level, ensuring coordinated and complementary contributions by all participants.
- Includes onsite or farm locations to provide proof of concept or real time economic analysis.
- Produces results that can provide the solution to a problem of fundamental importance or fill an information-gap in knowledge from the standpoint of present and future aquaculture in the North Central Region.
- Contains an outreach component with defined objectives and deliverables.
- Research on the problem requires more scientific labor, equipment, and facilities than are generally available at individual research institutions (the resources of two or more research institutions are required).
- Is adaptable and particularly suitable for inter-institutional cooperation, resulting in better use of limited resources and research funds.
- Complements and enhances ongoing research by participating research institutions.

Pre-Proposal Review

The Industry Advisory Council (IAC), and Technical committees (TC-E, TC-R) will conduct electronic reviews of RFAs.

Conflict of Interest

Any member of the IAC or TC who desires involvement in any capacity with proposed and funded projects may remain on the IAC or TC. However, any member who is funded by a NCRAC project or potentially may be funded by a proposal under consideration at the IAC/TC annual meeting must be excused during any final deliberation or review leading to a vote related to said project or proposal. He/she is also excluded from any vote related to said project or proposal during any breakout sessions of the IAC and Research and Extension Subcommittees of the TC. The chair of the session announces when final deliberation or review leading to a vote is to commence and excuses those with a conflict of interest. Further, an individual who has been identified as having a Conflict of Interest may still provide objective input into other projects under consideration. Receipt of individual input implies no conflicting affiliations or interests of that individual.

Other Information

Guidelines for development of pre-proposals and the pre-proposal format are enclosed for your information. Please note that the NCRAC pre-proposal and full proposal review processes are highly competitive, and the proposed budget is an important criterion used in assessment of pre-proposals and full proposals.

Pre-proposals Submission and Deadline

See Guidelines section (attached) for specific instructions.
Send the Pre-proposal by email. Send both a PDF and a WORD versions to:

ejn@iastate.edu.

Deadline for submission of pre-proposals is Friday, May 8, 2026.

NCRAC encourages early submission of pre-proposals. If a pre-proposal is received at least two weeks prior to the final deadline, this will allow time for the Administrative Office to review the pre-proposal using the checklist and inform the authors what requirements are not met, thereby providing the authors time to adjust and re-submit before the final deadline.

A Pre-Proposal must meet the following requirements or it will not be accepted:

- Received by the announced deadline. Electronic submission by the due date qualifies as meeting the deadline – printed copies must be received within a day of the deadline.
- Three letters of support from individuals not directly involved in the project
- Each element is addressed in the order presented on the Checklist.
- Include checked and signed Checklist by the lead Principal Investigator (PI).
- NCRAC also strongly encourages investigators who are submitting a pre-proposal for the first time to consult with the NCRAC Director, Dr. Thomas Detmer (tdetmer@iastate.edu) and the Business Manager, Ellen Nystrom (ejn@iastate.edu) for questions regarding the pre-proposal submission process.
- To meet the deadline of Friday, May 8, 2026, please plan accordingly to ensure inclusion of all necessary components and signatures.

Targeted Research for Pre-Proposals to NCRAC for FY2026

Listening Sessions occurred during the North Central Regional Aquaculture Conference in Des Moines, Iowa in 2026. Our goals of the listening session were two-fold. One was to develop effective communication between research, extension, and industry. Second, was to provide an opportunity for industry guided conversations to optimize and clarify the direction of proposals by the research and extension communities.

All qualified proposals developed through industry-research-extension collaborations will be considered. However, the themes below highlight areas of particularly high industry need. To encompass all that was discussed in the 2026 listening session and to point out the priorities identified in 2026, the following includes:
A) top priorities identified at the 2026 listening session,
B) additional priority topics at the 2026 listening session and,
C) the priorities identified at the 2025 session as many still resonated strongly and remain unresolved.

The three themes that were identified in a survey by industry in early 2026 were 1. Fish Performance and Health, 2. People Knowledge and Delivery, and 3. Growth & New Directions, and the following two priority sets will be framed accordingly.

THEME A: FISH PERFORMANCE AND HEALTH

Top priorities

1. Water quality tools-
    a. Uses of hydrogen peroxide
    b. Effective ways to manage cyanobacteria were highlighted.
2. Vaccine Delivery-
    a. Improve producer familiarity with process and outcomes as well as procedures.
    b. High interest in characterization of field trials and implementation and high interest in opportunities beyond salmonids.
3. Feed-understanding consistency and impacts on water quality.

Additional Priority Topics

1. Water quality monitoring and fish performance, including water quality interactions with fish health and growth.
2. Genetic work related to health, growth and behavior.

THEME B: PEOPLE KNOWLEDGE AND DELIVERY

Top Priorities

1. Aquaculture literacy-including general public's general understanding.
2. Aquaculture workforce development.

Additional Priority Topics

1. Producer navigation for regulations and health services-
    a. Moving fish
    b. Value and access to fish farm veterinarians.
2 Knowledge sharing-identify ways to improve value of previously conducted research.
3. Education and Outreach design considerations-leveraging existing programs/partners, supporting educators, and materials that improve industry awareness broadly and for training for future growth.

THEME C: GROWTH AND NEW DIRECTION

Top Priorities

1. Added value products-products directly related to fish.
2. Waste to value opportunities.

Additional Priority Topics

1. RAS supplementation-feasibility for juvenile production was emphasized
2. Feed-Small batch feed distribution constraints and costs.
3. Alternative species opportunities & market pathways.
4. Disaster response & relief navigation-clarify how producers should access support and what support is available.

FY 2025 Themes/Priorities in 2025 RFP

FY 2025 Funded Projects Starting January 1, 2026

Guidelines: Pre-Proposal Format

Pre-proposal shall not exceed four (4) pages not including the title page, data management plan, references, budget and the 2-page vita for all project participants.

Project Title

Targeted Research/Industry Development/Extension Area or Emerging Opportunities/Issues being addressed.

Investigator(s):

Name: Phone:
Affiliation: Fax:
Street Address: E-mail:
City, State, Zip Code

Project Summary:
Text limited to 200 words (approximately half a page) that describes the project in everyday language without the use of scientific or technical jargon. State the problem, challenge or issue your project is addressing and how it fits into the NCRAC Research Priorities (Themes) identified by industry. Include dollar estimates if it's an economic issue (e.g., a potential decrease in feed costs). Briefly, tell how this project will address or solve the problem or challenge. Answer the "Who cares?" or "So what?" question: Why is this worth the attention of people? How does this impact the lives of real people? What difference will it make, and to whom?
What is the benefit or potential benefit of a successful project?

Objective(s):
State objectives clearly and concisely in a logical sequence. Include only those objectives on which significant progress can be made during the life of the project with the facilities, and human and financial resources committed in the Pre-proposal. Objectives should be related to a coordinated effort of individuals involved, and should relate to a problem of regional scope.

Approach:
Procedures should correspond with each numbered objective and described in sufficient detail to clearly delineate the methodology to be followed. Descriptions should be adequate enough to allow a reviewer familiar with the subject to evaluate the approach. The responsibilities, work assignments, and budgets for each participating institution must be stated in the procedure for each objective.

Facilities Available:
Describe the facilities available, the location of each facility and specific procedure(s) to be conducted at the location. Sufficient information should be included to enable the reviewer to assess the suitability of facilities and to evaluate the joint planning and coordination by the Work Group.

Outreach and Evaluation Plan:
A well-considered and appropriate outreach component is an essential part of any NCRAC project. Increasing attention to the quality of outreach has been emphasized by USDA-NIFA, and has received considerable emphasis from NCRAC's Board of Directors. To ensure the necessary Extension/Outreach components are included in the full proposal investigators should review https://www.ncrac.org/presentation/logic-model-and-impact-statements-ncrac for needed details and include text that addresses program development and delivery. A complete Logic Model will be required for all full proposal submissions.

Data Management Plan:
All applicants are required to include a Data Management Plan (DMP) as part of their proposal. The DMP should detail how data generated from this project will be managed, preserved, and disseminated to align with NIFA's requirements. Please see the Data Management Plan for Research, Education, and Extension (link

below) document for further guidance.
https://www.nifa.usda.gov/sites/default/files/resource/data-management-plan-for-research-education-extension-projects-20190926.pdf

Pathogen Testing Requirements:

For projects involving surveillance or animal health testing, investigators must include a statement confirming that any detection of a reportable disease will be reported in compliance with USDA policies. For reference, investigators should consult the APHIS list of reportable diseases:
https://www.aphis.usda.gov/livestock-poultry-disease/surveillance/reportable-diseases

Proposed Summary Budget for Year _____
For All Participating Institutions (additional budget pages should be prepared for each year of proposed budget)

	NCRAC Funds				
	Objective #	Institution (PI Name)	Institution (PI Name)	Institution (PI Name)	Project Total
Salaries, Wages, and Fringe Benefits					
Nonexpendable Equipment					
Materials and Supplies					
Travel					
All Other Direct Costs					
Total					

Budget Justification

(PI Name)

Objectives: #

A. Salary, Wages and Fringe Benefits ($ and reason)
B. Nonexpendable Equipment
C. Materials and Supplies
D. Travel
E. All Other Direct Costs

VITA

Name
Address

Phone:
Fax:
E-mail:

EDUCATION

B.S. (Institution, Year, Major/Field of Study)
M.S. (Institution, Year, Major/Field of Study)
Ph.D. (Institution, Year, Major/Field of Study)

POSITIONS

List each position on a separate line from newest to oldest

SCIENTIFIC AND PROFESSIONAL ORGANIZATIONS

List alphabetically each organization on a separate line

SELECTED PUBLICATIONS

List from newest to oldest relevant publications. Follow format of the American Fisheries Society which is as follows, including spelling out journal titles:

(1) ARTICLES IN JOURNALS AND OTHER PERIODICALS listed in *BIOSIS Serial Sources* (BIOSIS, Philadelphia): author(s); year; title; serial; volume; issue (if needed); inclusive pages. Include the issue number only when each issue starts with page 1.

Crawshaw, L. I., D. E. Lemons, M. Palmer, and J. M. Messing. 1982. Behavioral and metabolic aspects of low temperature dormancy in the brown bullhead, Ictalurus nebulosus. Journal of Comparative Physiology B 148:41–47.

Hochachka, P. W. 1990. Scope for survival: a conceptual "mirror" to Fry's scope for activity. Transactions of the American Fisheries Society 119:622–628.

Kennedy, V. S. 1990. Anticipated effects of climate change on estuarine and coastal fisheries. Fisheries 15(6):16–24.

Kent, M. L., G. S. Traxler, D. Kieser, J. Richard, S. C. Dawe, R. W. Shaw, G. Propseri-Portia, J. Ketcheson, and T. P. T. Evelyn. 1998. Survey of salmonid pathogens in ocean-caught fishes in British Columbia, Canada. Journal of Aquatic Animal Health 10:211–219.

(2) BOOK: author(s); year; title; edition (other than 1st) or volume (if part of a series); publisher; city; state, province, or country (only if needed to locate city). Omit the number of pages.

APHA (American Public Health Association), American Water Works Association, and Water Environment Federation. 1992. Standard methods for the examination of water and wastewater, 18th edition. APHA, Washington, D.C.

Hoar, W. S., and D. J. Randall, editors. 1988 Fish physiology, volume 11, part B. Academic Press, New York.

Rheinheimer, G. 1985. Aquatic microbiology, 3rd edition. Wiley, New York.

Waters, T. F. 1995. Sediment in streams: sources, biological effects, and control. American Fisheries Society, Monograph 7, Bethesda, Maryland.

(3) ARTICLE IN A BOOK: author(s); year; title; inclusive pages; editor(s); book title; publisher; series name (if appropriate); city; state, province or country (only if needed to locate city). Identify conference proceedings by year of publication, *not* by the year of the meeting, and give the publisher's name and location (i.e., where the proceedings may be obtained), *not* the location of the meeting.

Adams, S. M., and J. E. Breck. 1990. Bioenergetics. Pages 389–415 *in* C. B. Schreck and P. B. Moyle, editors. Methods for fish biology. American Fisheries Society, Bethesda, Maryland.

Campton, D. E. 1995. Genetic effects of hatchery fish on wild populations of Pacific salmon and steelhead: what do we really know? Pages 337–353 *in* H. L. Schramm, Jr., and R. G. Piper, editors. Uses and effects of cultured fishes in aquatic ecosystems. American Fisheries Society, Symposium 15, Bethesda, Maryland.

Livingstone, A. C., and C. F. Rabeni. 1991. Food-habitat relations of underyearling smallmouth bass in an Ozark stream. Pages 76–83 *in* D. C. Jackson, editor. The first international smallmouth bass symposium. Mississippi Agriculture and Forestry Experiment Station, Mississippi State University, Mississippi State.

(4) DISSERTATION OR THESIS: author; year; title; dissertation; university; city; state, province, or country (only if needed to locate city).

Chitwood, J. B. 1978. The effects of threadfin shad as a forage species for largemouth bass in combination with bluegill, redear, and other forage species. Master's thesis. Auburn University, Auburn, Alabama.

Hartman, K. J. 1993. Striped bass, bluefish, and weakfish in the Chesapeake Bay: energetic, trophic linkages, and bioenergetics model applications. Doctoral dissertation. University of Maryland, College Park.

(5) GOVERNMENT PUBLICATION: author(s) or agency; year; title; agency; type and number of publication; city; state, province, or country (only if needed to locate city).

EPA (U.S. Environmental Protection Agency). 1986. Quality criteria for water. EPA, Report 440/5–86–001, Washington, D.C.

Gimbarzevsky, P. 1988. Mass wasting on the Queen Charlotte Islands: a regional inventory. British Columbia Ministry of Forests and Lands, Land Management Report 29, Victoria.

(6) CONTACT REPORT: author(s); year; title; organizations that issued the report (if different from the author); organization that received the report; receiver's city; state, province, or country (only if needed to locate city).

Smith, A. B. 1986. Turbine-induced fish mortality at Highrise Dam, 1985. Report of Robertson Consultants to Prairie Utilities, Jonesville, Alberta.

(7) INTERNET CITATIONS: author(s) or agency; year; title; publisher; URL; month and year accessed.

Baldwin, N. A., R. W. Saalfield, M. R. Dochoda, H. J. Buettner, and R. L. Eshenroder. 2000. Commercial fish production in the Great Lakes 1867–1996. Great Lakes Fishery Commission. Available: www.glfc.org/databases/commercial/commerc.asp. (September 2000).

CHECKLIST FOR SUBMISSION OF PRE-PROPOSALS

___ Follow guidelines with the exception of the budget sheets

___ Format manuscripts for 22 x 28 cm (8½ x 11 inch).

___ Number *all* pages sequentially.

___ Use 10 font; Times New Roman. Do not justify right margins.

___ Format headings appropriately

___ Leave at least a 2.5-cm (1-inch) margin on all sides.

___ Use metric units of measurement with English units in parenthesis, e.g., 2.54 cm (1 inch).

___ Define all abbreviations the first time they are used.

___ Express ratios by using a slant line (e.g., mg/L).

___ Scientific names should accompany common names in the title and when they are first mentioned in the abstract and in the text. Authority for scientific names need not accompany the genus and species unless needed for clarity.

___ Spell out one to ten unless followed by a unit of measurement (e.g., four fish, 4 kg, 14 fish). Do not begin a sentence with a numeral. Use 1,000 instead of 1000; 0.13 instead of .13; and % instead of percent.

___ Use the 24-hour clock for dial time: 0830, not 8:30 a.m. Calendar date should be day month year (7 August 1990).

___ Assemble the manuscript in this order: Title Page, Project Summary, Objective(s), Approach, Facilities, Budget, and Curriculum Vitae for Principal Investigators (PIs).

_____ All identified co- PIs have been provided a final draft of the pre-proposal.

_____ Three Letters of Support from Industry are provided.

_____ Submit in Word format

If the NCRAC Administrative Office cannot verify inclusion of any element, the Pre-Proposal will not be accepted.

Principal Investigator Signature Date