REQUEST TO CREATE NEW CENTER AT IOWA STATE UNIVERSITY:
IOWA NUTRIENT RESEARCH CENTER

Action Requested: Consider recommending approval of the request by Iowa State University to establish the Iowa Nutrient Research Center in the College of Agriculture and Life Sciences.

Executive Summary: The purpose of the proposed center is to respond to recently created legislation (SF 435). This proposal was reviewed by the Board Office and the Council of Provosts and is recommended for approval. Board of Regents Policy §6.08 requires that all centers and institutes be approved by the Board. This request addresses the Board of Regents Strategic Plan priorities to provide “educational excellence and impact” and “economic development and vitality,” Goal #7 - “Iowa’s public universities shall contribute to the expansion and diversification of the Iowa economy,” and Goal #8 - “Iowa’s public universities and special schools shall be increasingly efficient and productive.”

Background:

- Description of proposed center. The proposed center will pursue a science-based approach to nutrient management research that may include evaluating the performance of current and emerging nutrient management practices, using an adaptive management framework to provide recommendations for implementing nutrient management practices, and developing new nutrient management practices.

- Need for proposed center. The proposed center will support, through research, the Iowa statewide plan finalized in 2013 to reduce nutrients to waterways. The plan emphasizes the need for continued research and innovation to address the water quality needs of Iowa and the nation. Iowa’s plan was developed in response to the 2008 Gulf Hypoxia Action Plan that calls for the 12 states along the Mississippi River to address nutrient loading to the Gulf of Mexico. The plan will evolve as new information, data, and science are discovered and adopted, including results from the proposed Iowa Nutrient Research Center.

- Proposed center activities and objectives. The proposed center will develop science-based approaches to nutrient management research with input from the center’s advisory council. The center’s research activity will support the state’s water quality goals and objectives.

- Relationship of proposed center to University’s Strategic Plan. The work of the proposed center will connect directly to environmental and natural resources goals outlined in both Iowa State University’s and the College of Agriculture and Life Sciences; strategic plans. ISU’s strategic plan states that the university will “create, share, and apply knowledge to make Iowa and the world a better place,” including “developing more sustainable ways to produce and deliver safe and nutritious food, water, materials, and energy; integrating the protection of plant, animal, and human health and care for our environment.” The college’s strategic plan states that the college will be “known worldwide for addressing global challenges of the 21st century” including those related to environmental stewardship and to produce and disseminate basic and applied research results in areas that include natural resources.
Proposed center structure and organization. The proposed center will be administered by a director who will report to the dean of the College of Agriculture and Life Science. An advisory council will be established by the Board of Regents, as outlined in Senate File 435. The advisory council will be managed by Iowa State University through the center director. The advisory council will include the following members, as directed by state legislation:

- Dean of the College of Agriculture and Life Sciences or the dean’s designee.
- Director of the ISU Extension Service or the director’s designee.
- A representative of the Iowa Institute of Hydraulic Research – hydrosience and engineering from the College of Engineering of the University of Iowa appointed by the president.
- A person knowledgeable in an area related to nutrient research appointed by the president of the University of Northern Iowa.
- A person knowledgeable in an area related to nutrient research appointed by the state association of private colleges and universities.
- The secretary of agriculture or the secretary’s designee.
- The administrative director of the soil conservation division of the Department of Agriculture and Land Stewardship or the administrative director’s designee.
- The director of the Department of Natural Resources or the director’s designee.

Relationship of proposed center to existing centers/institutes. As appropriate, the proposed center will coordinate efforts with existing programs at the university and within the College of Agriculture and Life Sciences. It is anticipated that the proposed center will use its state-appropriate funds to support and enhance science-based nutrient management research conducted by scientists in several departments, centers, or programs. The proposed center will facilitate collaboration among the other Regent universities, including other institutes, departments, and centers, as appropriate.

Existence of proposed center at other Iowa institutions. The proposed center does not exist elsewhere in the state.

Unique features of the University of Iowa to support the proposed center. Iowa State University has a long history of research and extension to improve water quality and soil conservation. The state of Iowa finalized plans in 2013 to address nutrients in the state’s waterways; the plan was developed through leadership of the Iowa Department of Agriculture and Land Stewardship, Iowa Department of Natural Resources, and Iowa State University. The scientific foundation of the statewide plan was based on the work of a Science Assessment Team led by ISU (and including expertise from the U.S. Department of Agriculture, Iowa Department of Agriculture and Land Stewardship, Iowa Department of Natural Resources, and Environmental Protection Agency). The state’s approach is a science and technology-based framework to assess and reduce nutrients to Iowa waters and the Gulf of Mexico, and is designed to direct efforts to reduce nutrients in surface water from both point and nonpoint sources in a scientific, reasonable, and cost-effective manner.
Inter-institutional and collaborative efforts with other entities. Inter-institutional cooperation and collaboration will be strongly encouraged by the proposed center leadership. The proposed center was created by state legislation which specifies that “the center shall facilitate collaboration among appropriate institutions of higher education governed by the state board of regents, including but not limited to institutes, departments and center.”

Resources. The proposed center will be administered by a director appointed by the dean of the College of Agriculture and Life Sciences. A part-time staff person will be required. Available facilities and equipment at Iowa State University will be used to establish the proposed center. Research projects initiated by the center may require equipment specified by project leaders.

Expected need. The proposed center will exist as long as state funding is provided and as required by Iowa Code.

Communication with existing campus structures. The deans of the Colleges Engineering and Liberal Arts and Sciences and the Vice President for Extension and Outreach have been briefed on the intent of the legislation to establish the center. The directors of the Iowa Water Center and the Leopold Center for Sustainable Agriculture have also been briefed.

Costs and funding sources. The total cost to operate the proposed institute will be $1.5 million in Years One and Two. It is anticipated that the majority of the funding will be allocated to research projects which may result in hiring additional staff to complete the specific work.

<table>
<thead>
<tr>
<th>PROPOSED CENTER COSTS AND FUNDING SOURCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOURCES OF FUNDS</td>
</tr>
<tr>
<td>Year 1</td>
</tr>
<tr>
<td>Year 2</td>
</tr>
<tr>
<td>Year 3</td>
</tr>
<tr>
<td>Year 4</td>
</tr>
<tr>
<td>Year 5</td>
</tr>
<tr>
<td>Year 6</td>
</tr>
<tr>
<td>Year 7</td>
</tr>
</tbody>
</table>

Implementation. After obtaining Board approval, the College of Agriculture and Life Sciences will recommend membership in the Advisory Council to the Board of Regents and will be prepared to implement the Iowa Nutrient Research Center in Fall 2013.