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Vision

URI Cooperative Extension responds to the needs of Rhode Islanders, facilitating the creation of solutions to current and emerging challenges. We envision a future with locally-produced, safe, plentiful food; healthy people; resilient landscapes; clean, abundant water resources; and a vibrant, sustainable energy sector.

Mission

URI Cooperative Extension’s mission is to provide information, programs, and tools to improve Rhode Islanders’ quality of life, their livelihoods, and the health of our natural environment. We do this by translating research results into science-based information people can use to create positive change, responding to critical needs of Rhode Islanders and the state.

Our key mission areas include food and agriculture, water, land, energy, and health. We address those mission areas through collaboration and engagement with our stakeholders and partners, including volunteers, students, federal and state agencies, businesses, community organizations, and colleagues at other land-grant universities.

Message from the Dean and Director

Cooperative Extension represents one of three historic missions—teaching, research, and extension—of a land-grant university. Established by the Morrill Acts of 1862 and 1890, land-grant universities were created to provide education, especially practical and technical education, to segments of the public that did not have access to higher education. Subsequent legislation created agricultural experiment stations (Hatch Act, 1887) and Cooperative Extension (Smith-Lever Act, 1914).

This strategic plan, the first for URI Cooperative Extension in nearly 20 years, was developed in consultation with URI faculty, staff, and administrators; key stakeholders and partners; and Cooperative Extension volunteers. We held numerous meetings, conducted one-on-one interviews with nearly 20 key informants, and collected input from all interested Rhode Islanders during a public meeting and through an online survey. We thank everyone who participated in this process. Your engagement strengthened this plan immeasurably.

The five strategic areas of focus described in this plan reflect the thoughtful input we received from those involved in the planning process. The established goals, sub-goals and objectives communicate our intent to address each of those five broad areas in meaningful ways, recognizing that limited resources are a real constraint to doing all that could be done. We see this plan as a roadmap for the next five years of work, but remain open to making modifications as circumstances and needs evolve.

We also received important recommendations for improving URI Cooperative Extension during the strategic planning process. Although not included in this document, those recommendations will be used to strengthen our organizational effectiveness as we work toward the goals and sub-goals described in the strategic plan. We are fortunate to have a cadre of talented, dedicated faculty, staff, and volunteers to develop and carry out Cooperative Extension programs in our state. Their creativity and entrepreneurial spirit will help to ensure that Cooperative Extension remains relevant and viable into the future.

John D. Kirby
Dean, URI College of the Environment and Life Sciences
Director, URI Agricultural Experiment Station
Director, URI Cooperative Extension
The URI Cooperative Extension Strategic Planning Committee identified five strategic areas in which to focus our work over the next five years:

- Food Systems and Agriculture
- Healthy Lifestyles
- Land Stewardship
- Water Resources
- Energy Literacy

We selected these focus areas based on a number of criteria, including needs of stakeholders, importance to the state, available expertise within the University of Rhode Island or sister institutions, and the role of public education in addressing the issue. We set goals and sub-goals to direct our work toward particular outcomes and identified objectives that we believe will contribute to the accomplishment of the stated goals. Availability of staff and financial resources will affect our ability to achieve these goals, and we will continue to seek external sources of funding to support Cooperative Extension programs.

In addition, several overarching themes, relevant to all strategic areas of focus, emerged from Strategic Planning Committee discussions. We recognized the importance of designing and implementing programs to achieve social and environmental justice, to promote resilience to climate change, to advance quality of life for Rhode Islanders, to develop our state’s workforce and our state’s leaders, to build resilient economies, and to ensure sustainable ecosystems. You will find elements of these overarching themes throughout this document, especially within our guiding principles.

This strategic plan supports the University of Rhode Island’s Academic Strategic Plan, which states that URI will “significantly expand opportunities for experiential learning within all majors” (Goal 1, Strategy 2). Cooperative Extension provides experiential learning opportunities and routinely involves students in public education programs, providing them with hands-on training in effective public engagement and education.

URI’s complete Academic Strategic Plan is available at uri.edu/academic-planning/files/academic_plan_handbook.pdf.
Food Systems and Agriculture

Demand for locally produced food has grown in recent years due to consumers’ interest in where and how their food is grown and raised. Food Solutions New England, a collaborative regional organization, set a goal for New England to produce at least 50% of our food by the year 2060 (50 by 60), using sustainable farming and fishing practices. Rhode Island Governor Gina Raimondo hired the state’s (and nation’s) first director of food strategy, who developed Rhode Island’s first-ever comprehensive food strategy, envisioning a sustainable, equitable, local food system and embracing the 50 by 60 goal.

URI Cooperative Extension programs support the production of safe, abundant food. Demonstration of locally-relevant techniques effectively transfers knowledge and encourages the adoption of best practices by commercial producers. Season-extension techniques allow for greater productivity and improved farm economics, while sustainable aquaculture increases seafood production and protects natural fisheries.

Ensuring the safety of food is essential to a successful food system. One in six Americans is affected by foodborne illness each year, resulting in unnecessary medical costs, lost productivity and, in some cases, death. Outbreaks due to issues with produce, seafood, meat and poultry, and other processed food commodities have led to increased regulatory oversight by the U.S. Food and Drug Administration and the U.S. Department of Agriculture. In 2011, the Food Safety Modernization Act (FSMA) resulted in the enactment of new FDA rules that included expansion of food safety requirements for produce and processed food products that had not previously been under FDA oversight. URI Cooperative Extension will continue to work with Rhode Island state agencies to offer training and assistance for Rhode Island food producers, processors, and entrepreneurs.

Introducing young people to sustainable agriculture raises awareness of its importance to human well-being. Home gardens and school gardens teach families and children to grow their own food, leading to increased consumption of fresh fruits and vegetables and improvements in food security. Gardens serve as outdoor classrooms, connecting people of all ages to nature and the experience of watching a plant grow.

Sub-Goal 1
Increase the capacity of Rhode Island producers to adopt innovative techniques for agriculture and aquaculture to achieve commercial viability and environmental sustainability.

OBJECTIVES:
1. Design, demonstrate, and evaluate techniques for agriculture and aquaculture on University farms and in University facilities to support environmentally sustainable and profitable food production practices.
2. Conduct training on best practices for food production in developed environments, including urban farms, and on producing novelty and specialty crops, such as vegetables and fruits that target immigrant and ethnic producers.
3. Deliver educational programming for current and prospective growers utilizing controlled environments such as hydroponic, aquaponic, or aeroponic systems.
4. Provide information and technical assistance on diversification and specialization of the Rhode Island food industry and provide training in the regulation affecting the livestock industry and provide training in the regulation affecting the livestock industry and their interactions on agricultural production practices and the needs of food processors and producers regarding federal and state food safety regulations and food entrepreneurs about federal and state food safety regulatory compliance.
5. Develop a livestock extension program to educate producers about on-farm food safety strategies and the Rhode Island Good Agricultural Practices voluntary program.
6. Educate Rhode Island producers and food entrepreneurs about federal and state food safety regulations to support them in successful creation of value-added products.
7. Develop a program to educate livestock producers on current regulations affecting the livestock industry and provide training in the engineering and design of compliant facilities.

Sub-Goal 2
Increase the capacity of Rhode Island food producers, processors, and service sectors to improve food safety practices and to meet federal and state regulatory expectations.

OBJECTIVES:
1. Engage in and expand state and regional food safety training to meet the needs of food processors and producers regarding federal and state food safety regulatory compliance.
2. Train producers about on-farm food safety strategies and the Rhode Island Good Agricultural Practices voluntary program.
3. Educate Rhode Island producers and food entrepreneurs about federal and state food safety regulations to support them in successful creation of value-added products.
4. Develop a program to educate livestock producers on current regulations affecting the livestock industry and provide training in the engineering and design of compliant facilities.

Sub-Goal 3
Educate Rhode Island’s youth population and consumers about food production, safe food handling, gardening, and ecosystem value.

OBJECTIVES:
1. Expand partnerships with schools, public libraries, youth-serving agencies, and community organizations to provide relevant resources and information.
2. Provide experiential learning opportunities for URI undergraduates to serve as educators and mentors for in-school, after-school, summer camps, and community education programs, as well as leaders of educational programming at URI demonstration sites and facilities.
3. Create a youth exchange program wherein young people can experience agricultural opportunities in geographic environments different from the one in which they live.
4. Deliver educational programs to teach young people about animal science, plant science, and food production. Students will learn about current issues and trends in agriculture to enhance understanding of food production and encourage innovation in food production methods.
5. Strengthen food safety education for Rhode Island consumers by expanding existing home preservation workshops to include fermentation processes, and by exploration of alternative Cooperative Extension communication platforms.
Healthy Lifestyles

URI Cooperative Extension’s efforts to promote healthy lifestyles for Rhode Islanders are focused on reducing obesity, preventing Lyme disease, and improving the well-being of our state’s youth population.

The number of obese adults, along with obesity-related diseases and health care costs, are projected to increase dramatically in Rhode Island, with half of adults being obese by 2030. Currently, one-third of RI’s youth population is overweight or obese. On average, Americans are eating less than half of the daily intake of fruits and vegetables recommended by the U.S. Department of Agriculture (USDA) Dietary Guidelines and are not meeting the physical activity guidelines set forth by the U.S. Department of Health and Human Services.

The incidence of Lyme disease in Rhode Island is more than eight times the national average. According to informal surveys, almost no citizens regularly practice behaviors that could prevent disease. Nationally, Lyme disease costs Americans over $3 billion annually.

Only a third of children are active every day. Americans, in general, eat too much refined grain, salt, and other processed foods while eating too few vegetables and fruits. Young people often experience poor self-image and obesity, as well as emotional trauma, peer pressure, and exposure to unhealthy situations. The 4-H Healthy Living mandate helps Rhode Island’s youth population achieve optimal physical, social, and emotional well-being. Research has shown that young people involved in 4-H are more likely to be physically active and are less likely to use drugs or alcohol.

GOAL: By 2022, URI Cooperative Extension will have strengthened the ability of Rhode Islanders to take actions that promote healthy lifestyles and result in improved nutrition and physical activity, reduced risk of vector-borne diseases, and improved physical, social, and emotional health.

Sub-Goal 1
Contribute to reduction of obesity-related disease in Rhode Island by teaching behavior-change techniques that increase intake of nutrient-dense foods and increase physical activity.

OBJECTIVES:
1. Develop, implement, and evaluate interactive community-based activities addressing specific nutrient needs for children, parents, and adults/seniors residing in high-risk population areas of the state.
2. Develop a social media campaign that targets obesity-related adult behaviors, using platforms such as text messaging, Facebook, Twitter, and Pinterest.

Sub-Goal 2
Increase tick literacy among Rhode Island residents to promote behaviors for disease prevention, using education and technical assistance programs targeted especially to community members of high-risk towns, outdoor workers, health professionals, children, and pest managers.

OBJECTIVES:
1. Develop user-friendly train-the-trainer modules for basic disease prevention actions.
2. Partner with health insurers and employers to develop incentive programs offering premium incentives to their insured individuals for implementing disease prevention behaviors at home or while working outdoors.

Sub-Goal 3
Improve the physical, social, and emotional well-being of Rhode Island’s youth population by expanding activities, events, and educational experiences related to healthy living, especially those supporting the 4-H Healthy Living mission mandate.

OBJECTIVES:
1. Conduct training sessions for 4-H club leaders and Special Interest (SPIN) Club leaders that emphasize healthy lifestyles curricula and tools, and the incorporation of health and physical activity into their programs.
2. Offer statewide activities, events, and competitions focused on, or incorporating, the 4-H Healthy Living mandate.
3. Partner with other youth and community organizations, jointly with 4-H, to offer programs in nutrition, health, and related topics.
Land Stewardship

Land use decisions made by private landowners, towns, and the state collectively affect water quality and quantity, ecosystem health, economic vitality, and quality of life. Research identifies management practices that improve productivity of farmlands and maintain ecosystem services of our forests and other natural landscapes. Communicating and demonstrating management practices and research results to agricultural producers and forest owners is an effective method to encourage implementation. Opportunities exist at URI to implement and showcase best management practices. Behind every land use management decision are geospatial data that identify the resources, threats to the resources, and social, physical, and biological dimensions of the ecosystem. These data are dynamic and require regular updating. The technologies available to deliver data to decision makers are forever evolving.

Urban parks and open spaces help provide green infrastructure to protect cities from sea level rise and flooding. They can break up the effects of heat islands, improve energy efficiency, and improve groundwater recharge. Urban parks and open spaces can, additionally, demonstrate how to enhance wildlife habitats with the use of native plants and pollinator species.

Many Rhode Island residents have become disconnected from the land and the current challenges we face in an urbanized state. To overcome barriers to desired behaviors, people need to understand the potential impact of their individual land use decisions. This requires empowering and educating Rhode Islanders so that they become active stewards of the land, regardless of age or where they live in the state.

Sub-Goal 1
Increase implementation of best management practices to support sustainable agriculture and forestry by developing and delivering demonstration programs on URI farms and properties.

OBJECTIVES:
1. Demonstrate agriculture and forestry techniques to increase productivity, maintain ecosystem services, and improve wildlife habitat.

Sub-Goal 2
Increase the capacity of public and private landowners and conservation organizations to apply best stewardship practices to achieve coastal resilience, ecosystem resilience, and increased use of effective green infrastructure.

OBJECTIVES:
1. Assist in the development of baseline documentation and management plan reports for land trust-owned properties.
2. Participate in the delivery of technical sessions in best stewardship practices at the annual Rhode Island Land and Water Summit.
3. Demonstrate best stewardship practices for private landowners at URI Master Gardener Program demonstrations and school gardens.
4. Educate private landowners in best stewardship practices through public workshops held in partnership with local municipal governments, nonprofit organizations, and other groups.

Sub-Goal 3
Ensure ready access to essential geospatial information for decision makers and landowners to support resource management decisions.

OBJECTIVES:
1. Add new or updated data sets to the RI Geographic Information System (RIGIS) library.
2. Add new mapping services to the RIGIS web-mapping server.
3. Develop and implement a plan to expand the portfolio of Cooperative Extension services to include the use of UAV (drone) technology to support natural resource management.

Sub-Goal 4
Increase public awareness of how land-use decision-making affects economic viability, quality of life, environmental health, and food security.

OBJECTIVES:
1. Develop and pilot new 4-H Special Interest (SPIN) kits focused on teaching young people how to become active stewards of the land.
2. Train 4-H volunteers and agency staff to use the land stewardship curriculum and the learning activities contained in the SPIN kits.
3. Deliver train-the-trainer workshops for URI Master Gardener volunteers focused on land use topics.
4. Develop new educational materials designed to increase public awareness of best practices for land-use decision-making and disbursement by URI Master Gardener volunteers.

Land Stewardship GOAL: By 2022, URI Cooperative Extension will have provided leadership, information, and guidance on the stewardship of land including urban, suburban, rural, and coastal landscapes to achieve ecosystem resilience, water resource protection, forest management, and economic and agricultural viability.

1. Provide training to urban planners on the use of green infrastructure to increase environmental quality in the built environment.
2. Develop strategic partnerships with local organizations to assist land managers in using green solutions to address problems such as storm water run-off and urban heat island challenges.

5. Deliver professional development sessions related to land stewardship and school gardens to teachers, infusing standards-based lessons into the elementary and secondary school curricula.
Water Resources

Water resources are valued for drinking, irrigation, recreation, shell fishing, fishing, and aquaculture. In a densely developed state like Rhode Island, careful management is needed to protect and restore our waters.

Watersheds, streams, rivers, lakes, ponds, and estuaries are vital to both environmental quality and the quality of life in Rhode Island. Long-term assessment and analysis of these water systems and the communication of results assists federal and state agencies and local communities in making informed decisions that improve water quality and lead to restoration and protection efforts.

Storm water is a major source of pollution in Rhode Island waters. New approaches in storm water management and green infrastructure practices can improve water resources and provide attractive open spaces that improve the look and feel of Rhode Island. Storm water management is a local problem that the state’s villages, suburban and urban areas, and rural lands must address.

Fifteen percent of Rhode Islanders depend on private wells for their drinking water. However, private wells are not protected under the Federal Safe Drinking Water Act. There are naturally-occurring and man-made contaminants in Rhode Island well water. In fact, many common contaminants are odorless, colorless, and tasteless, emphasizing the need for testing. In addition, changing property laws require well water testing.

Agricultural, forestry, and plant-based industries’ management practices can influence water quality and water quantity. Opportunities exist at URI to implement and showcase best management practices.

Antiquated, failed, poorly sited, and substandard septic systems degrade groundwater and surface water quality, and pose risks to public health. Older onsite wastewater treatment systems in at-risk coastal zones are particularly susceptible to sea level rise due to climate change. In addition, changing regulations often require cesspool phaseout and septic system upgrades.

Sub-Goal 1
Increase the capacity of citizen groups, the public, and private sector groups to understand, use, and contribute to the assessment of the status and trends of watersheds, streams, rivers, lakes, ponds, and estuaries.

OBJECTIVES:
1. Develop and conduct scientist-led volunteer watershed assessment efforts with local organizations.
2. Develop and communicate watershed scale analyses that use place-based data to foster watershed protection, restoration, and management.

Sub-Goal 2
Increase the capacity of public and private sector groups to implement storm water controls and green infrastructure practices to reduce risk of flooding and improve water quality.

OBJECTIVES:
1. Partner with Rhode Island communities to build and/or strengthen storm water programs through local protection measures, including ordinances, policies, implementation of green infrastructure, and/or other local practices.
2. Develop new tools and conduct training to assist state agencies, municipalities, and the private sector to reach residential audiences and conduct statewide storm water education.

Sub-Goal 3
Work with local officials, public water suppliers, households with private wells, and real estate, lending, and mortgage professionals to build their capacity to protect drinking water.

OBJECTIVES:
1. Develop, evaluate, refine, and distribute new drinking water protection educational materials that promote the adoption of best management practices for drinking water protection.
2. Conduct community workshops for private well owners and attend community events to promote best practices for managing and protecting wells and drinking water.
3. Develop and conduct Cooperative Extension educational activities and programs for professional audiences, encouraging and facilitating research-based best practices for managing, testing, and protecting well water.

Sub-Goal 4
Work with state and federal partners to increase targeted implementation of best management practices for agricultural, forestry, and other plant-based industries to enhance water resources while sustaining economic vitality and ecosystem services.

Sub-Goal 5
Enhance the capacity of the private sector to upgrade onsite wastewater treatment systems for water quality improvement and resiliency to climate variability.

OBJECTIVES:
1. Communicate the value and constraints of new wastewater treatment technologies to the private sector, local communities, and the public via classes, workshops, and training materials.
2. Partner with state agencies and communities to develop policies related to treatment verification and electronic reporting of performance data for advanced nitrogen-reducing onsite wastewater treatment systems.

GOAL: By 2022, URI Cooperative Extension will have expanded the capacity of Rhode Islanders to assess water resources and apply management practices to restore and protect water resources.
Energy Literacy

In accordance with the Resilient Rhode Island Act of 2014, URI will help Rhode Island meet statutory goals for reduction of greenhouse gas emissions. Energy use and energy production are major sources of emissions that need to be reduced. For effective action, communities and individuals must be informed about best practices related to energy consumption and innovations in energy production and distribution.

A low-carbon future requires a workforce with new knowledge and skills. Employment in Rhode Island’s clean energy firms is projected to increase exponentially in coming years. URI Cooperative Extension will provide experiential learning opportunities in numerous energy disciplines across various skill levels through the Energy Fellows Program. Student fellows will supplement their classroom learning with real-world experience through these fellowships, while bringing the resources of the land-grant university system to their host energy businesses and organizations, thereby increasing energy literacy in industry and organizations.

Energy Literacy

GOAL: By 2022, URI Cooperative Extension will have strengthened the capacity of Rhode Islanders to face current and future energy challenges related to sustainable energy consumption and production.

Sub-Goal 1
Increase Rhode Islanders’ awareness of contemporary energy challenges and bring about behavior change by promoting best practices that increase sustainable energy consumption and production.

OBJECTIVES:
1. Conduct public training sessions focused on best practices for reducing residential greenhouse gas emissions.
2. Conduct energy lessons for school-aged children in partnership with youth-serving agencies and educators.

Sub-Goal 2
Strengthen Rhode Island’s growing energy sector by providing workforce development to undergraduate and graduate students through the URI Energy Fellows Program.

OBJECTIVES:
1. Train students in professional and leadership skills, in-depth energy topics related to energy economics and management, and entrepreneurship.
2. Place students in experiential learning fellowships with energy economics and management practitioners, researchers, and/or policymakers as mentors.
3. Create networking opportunities for students by identifying and facilitating participation in regional and national conferences, trade shows, and job fairs attended by industry professionals and policymakers.
Acknowledgments

We thank the following individuals for their contributions to this strategic plan. We also thank the numerous people who attended the public meeting, completed the web-based survey, or participated in a key informant interview. We owe special thanks to the Henry P. Kendall Foundation, Main Street Resources, and the USDA National Institute of Food and Agriculture for financial support of this planning process.

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