

2013 Louisiana State University Combined Research and Extension Plan of Work

Status: Accepted
Date Accepted: 06/18/2012

I. Plan Overview

1. Brief Summary about Plan Of Work

The mission of the LSU Agricultural Center (LSU AgCenter) is to enhance the quality of life for the people of Louisiana through research and educational programs that develop the best use of natural resources, conserve and protect the environment, enhance the development of existing and new agricultural and related enterprises, and develop human and community resources. In order to accomplish this mission, Louisiana Agricultural Experiment Station (LAES) scientists will continue to serve stakeholders by conducting relevant research and Louisiana Cooperative Extension Service (LCES) faculty will continue to deliver high-quality research-based educational programs, all designed to address the issues of critical importance to the people of the state.

Limited resources continue to present challenges to sustaining vital LSU AgCenter programs. It is likely that there will continue to be funding constraints that challenge extension and research programs statewide. This limitation in funding will necessitate the constant review of programs for relevance and program impact so that scarce resources can be appropriately allocated to assure the maximum return on investment expected from funding partners and clientele. Any additional reduction in personnel and/or reduced operating and travel budgets will mean further consolidations and possible additional reductions in research and extension programs. As it stands for FY2013, programming in the areas of childhood obesity, nutrition and health will receive increased attention while programming in the Family Development (FD) and Family Resource Management (FRM) areas is being de-emphasized in adult programming but continued in youth targeted audiences. The faculty who are in FD and FRM will significantly shift their efforts to targeting the childhood obesity and nutrition and health challenges that are so prominent in the state. New ways of conducting business will become the norm to meet the ever-changing needs of our stakeholders. Increased reliance on new technologies and tools such as social media increased external funding and funding from local entities and even greater dependence on trained volunteers will become increasingly important as attempts to deliver high quality programs continue.

Estimated Number of Professional FTEs/SYs total in the State.

Year	Extension		Research	
	1862	1890	1862	1890
2013	231.0	0.0	138.0	0.0
2014	231.0	0.0	135.0	0.0
2015	231.0	0.0	130.0	0.0
2016	231.0	0.0	130.0	0.0
2017	231.0	0.0	130.0	0.0

II. Merit Review Process

1. The Merit Review Process that will be Employed during the 5-Year POW Cycle

- Internal University Panel
- Combined External and Internal University Panel
- Expert Peer Review

2. Brief Explanation

During the next five years rigorous reviews of all programs will be critical as the LSU AgCenter continues to make every effort to ensure it is conducting business in the most effective and efficient way possible. With the National Institute of Food and Agriculture (NIFA) no longer supporting the comprehensive departmental reviews, an alternative means of accomplishing this task will need to be explored. Peer reviews of proposed research activities of individual scientists will continue according to NIFA guidelines. Review comments will be solicited from peer scientists and state extension specialists. The comments and a synthesis of recommendations will be provided to the originating scientists or team of faculty by the administration. State-level commodity groups meet at least annually, and LAES and LCES faculty will continue to make presentations and receive comments/suggestions regarding future research and educational programming needs from these key groups. External extension advisory councils continue to validate LCES programs. Internal LSU AgCenter Exchange (ACE) groups made up of multi-disciplinary faculty provide review and focusing of statewide research and extension efforts. Internal program reviews will continue to assess program effectiveness and establish program priorities. Feedback from the 2012 LSU AgCenter Listens Initiative will continue to be used to support decisions regarding future programming.

III. Evaluation of Multis & Joint Activities

1. How will the planned programs address the critical issues of strategic importance, including those identified by the stakeholders?

The LSU AgCenter Business Plan is the basic document that provides strategic guidance for addressing critical needs of the stakeholders in Louisiana with regards to agriculture, environment and natural resources, youth, nutrition and health, families and community development. Further input from stakeholders participating in the LSU AgCenter Listens Initiative will provide additional strategies for the implementation of the business plan.

Both extension and research programs regarding critical issues of strategic importance are addressed after identification and prioritization by stakeholder groups and consideration by state-level extension specialists and research scientists. Following identification of the issue/problem, LSU AgCenter personnel coordinate efforts in a systematic way to address the need. At this stage, parish-level extension agents then become the frontline educators, working through their parish stakeholder groups to plan, implement, and evaluate strategies for addressing the problems. Logic models are developed and constantly refined for all major program areas to insure that critical issues of strategic importance are appropriately addressed.

2. How will the planned programs address the needs of under-served and under-represented populations of the State(s)?

Extension and research faculty serve all of the people of Louisiana. Major emphasis is placed on publicizing all educational opportunities. On the parish level, stakeholders are reached through direct mail, telephone, electronic mail, radio, newspaper, and other mass media as well as through social media outlets such as Facebook, Twitter and blogs. Also, stakeholder advisory groups assist with pre-program publicity. Minority stakeholders are well-represented on advisory committees, and will continue to be important representatives of the community in all programming initiatives. A major effort is underway to address the particular needs of minority youth in the 4-H program, diversify youth development outreach and address issues regarding equity in access to extension programs. The LSU AgCenter has also been involved in the SERA 37 project to be in a better position to address the needs of the growing Hispanic population in the state. Community nutrition programs continue to target low income and underserved residents of the state. Programs like Smart Bodies which are typically conducted through schools reach the under-served and under-represented populations of the state by bringing nutrition education to the place where all children and youth can be exposed to healthy eating concepts that can greatly impact their adult lives.

3. How will the planned programs describe the expected outcomes and impacts?

Planned programs will describe short term learning outcomes, medium term behavior changes and longer term environmental, policy and societal outcomes based on the issue prompting the planned program. Additionally the benefit to the public, beyond program participants, will be communicated as an impact of key programs. Descriptions of these outcomes and impacts by both extension and research may be expressed in terms of economic benefits, change in quality of life and/or public value in addition to the basic knowledge gained, attitudes changed, skills acquired or behavior changed.

4. How will the planned programs result in improved program effectiveness and/or

With limited resources, planned programs must be cost-effective and efficient. Scaling back on program efforts by focusing on key issues identified by stakeholders for which the LSU AgCenter has resources, will help to ensure that only the most critical programs are developed and implemented. These programs are clearly delineated in the LSU AgCenter's Business Plan.

Using a logic model to guide the development and evaluation of program efforts, it is more likely that program effectiveness and efficiency will be achieved. By beginning the program planning process with the focus on the end result in mind, one is forced to "think backwards" to the various steps needed to accomplish this final goal. As one is required to "think backwards," one is much more deliberate about determining the requirements for reaching the goal, or solving the problem. This approach to programming invariably results in improved program effectiveness and/or efficiency. Programming in this manner by extension and research results in better use of time for both faculty and volunteers, and also serves as a blueprint for repeating the program. A concerted effort will be made to strengthen the evaluation elements of each program and the effective use of well-developed logic models dictates constant process evaluation to improve and expand program effectiveness and efficiency.

IV. Stakeholder Input

1. Actions taken to seek stakeholder input that encourages their participation

- Use of media to announce public meetings and listening sessions
- Targeted invitation to traditional stakeholder groups
- Targeted invitation to non-traditional stakeholder groups
- Targeted invitation to traditional stakeholder individuals
- Targeted invitation to non-traditional stakeholder individuals
- Targeted invitation to selected individuals from general public
- Survey of traditional stakeholder groups
- Survey of traditional stakeholder individuals

Brief explanation.

Stakeholder input for the most part is accomplished through advisory committees, formal commodity groups and most recently through the LSU AgCenter Listens Initiative thus making the issue-identification process virtually stakeholder-driven. To encourage stakeholder recruitment, extension and research faculty often use targeted invitations to both traditional and non-traditional stakeholder groups and individuals. Mass media also is often employed to seek additional advisory committee members. In some cases faculty conduct a survey of advisory committee members to better understand their needs from a recruitment standpoint. To encourage participation in the advisory committee meeting, faculty often have the committee elect officers, and allow them to conduct the committee meeting. In addition, extension and research faculty maintain very close working relationships with commodity groups and other community groups in an effort to engage them in this process. Stakeholders are engaged in not only the planning, but also the implementation and evaluation of program efforts. There will be a continued increase in the use of technology as well as internal and external media resources for communicating with stakeholders and engaging them in learning. Tools such as email and social media strategies such as Facebook, Twitter, YouTube and blogs will be used.

2(A). A brief statement of the process that will be used by the recipient institution to identify individuals and groups stakeholders and to collect input from them

1. Method to identify individuals and groups

- Use Advisory Committees
- Use Internal Focus Groups
- Use External Focus Groups
- Open Listening Sessions
- Needs Assessments
- Use Surveys

Brief explanation.

Various methods are used to identify individuals and groups to have input into the programming process. One-on-one contact is an often-used method by which extension and research identify individuals and groups which have interest in guiding programming. Advisory committee members are a great help in identifying other

stakeholders. The key is ensuring that individual stakeholders represent a common subset of the total target population so that the needs of all can be identified and considered. A concerted effort will be made to allow various individuals to participate in the process by rotating advisory committee members while maintaining equal representation of the target audience on the stakeholder committees.

2(B). A brief statement of the process that will be used by the recipient institution to identify individuals and groups who are stakeholders and to collect input from them

1. Methods for collecting Stakeholder Input

- Meeting with traditional Stakeholder groups
- Survey of traditional Stakeholder groups
- Meeting with traditional Stakeholder individuals
- Survey of traditional Stakeholder individuals
- Meeting with the general public (open meeting advertised to all)
- Survey specifically with non-traditional individuals
- Meeting with invited selected individuals from the general public
- Survey of selected individuals from the general public

Brief explanation.

Input is collected from stakeholder groups and individuals through the advisory committee process for all key programs, through external focus groups on various issues and by using various needs assessments and surveys. Advisory committee meetings with traditional and non-traditional stakeholder groups continue to be used most frequently. Surveys of both traditional and non-traditional stakeholder groups are being used more frequently to gather such input. Most recently, the LSU AgCenter Listens Initiative provided an open community-type forum to gather input from stakeholders. It is anticipated that a similar process will occur about every four years to update the LSU AgCenter's strategic plan. Utilizing Web-based survey tools has become the method-of-choice to collect input from stakeholders who cannot always participate in meetings. Occasionally focus group meetings and meetings with key individuals in a community are used to garner input. The nominal group technique or some modified version thereof is typically used to identify and prioritize issues in advisory committee meetings.

3. A statement of how the input will be considered

- In the Budget Process
- To Identify Emerging Issues
- Redirect Extension Programs
- Redirect Research Programs
- In the Staff Hiring Process
- In the Action Plans
- To Set Priorities

Brief explanation.

The major means of utilizing stakeholder input is to assist faculty in identifying emerging issues and in helping to evaluate ongoing programs. Stakeholder advisory groups serve by helping to redirect extension programs and research projects when necessary. Prioritization of issues needing attention is a major role of advisory committees. Input from the parish (county) level is often directed to one or more state level faculty for their consideration. Also, state-level advisory groups provide input directly to state specialists, and this information then goes back to the parish groups for their consideration. In the current economic climate, stakeholder input is also being used to redirect program resources from programs having less impact to those with greater impact or impact potential. While stakeholders are not typically included directly in the hiring process, their input is considered in identifying the need to fill key positions. It is also important to note that legislative and regulatory action affecting the future of our stakeholders is an important variable in the LSU AgCenter's process of planning for future program focus.

V. Planned Program Table of Content

S. No.	PROGRAM NAME
1	Global Food Security and Hunger
2	Climate Change
3	Sustainable Energy
4	Childhood Obesity
5	Food Safety
6	Human Nutrition and Food (Adult)
7	Consumer Horticulture, Ornamentals & Turf
8	Forestry and Forest Products
9	Community Development
10	Youth Development

V(A). Planned Program (Summary)

Program # 1

1. Name of the Planned Program

Global Food Security and Hunger

2. Brief summary about Planned Program

Teaching agricultural producers in Louisiana to use emerging technologies to increase sustainability of production through increased efficiency, output and accessibility to healthy foods are the primary goals of the LSU AgCenter's Global Food Security and Hunger program. Targeted in the production agriculture portion of this initiative are the producers and agri-businesses associated with the production food and fiber in the state, primarily those in the areas of animal and animal production systems; crops and crop production systems; and aquaculture and fisheries. Members of the state's low-income population especially in places where food deserts exist are the target population for the food accessibility initiative.

The LSU AgCenter strives to continually improve growers' adoption of recommended practices which contribute to the sustainability of food and fiber production. Clientele are primarily reached through producer meetings, result demonstrations, farm visits and through the use of various Web-based media and social media tools such as blogs, Twitter and Facebook. Through the food accessibility initiative, clients are encouraged to adopt three or more management practices regarding the use of limited resources to produce, prepare and consume healthier foods.

3. Program existence : Mature (More than five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
102	Soil, Plant, Water, Nutrient Relationships	5%		5%	
201	Plant Genome, Genetics, and Genetic Mechanisms	0%		5%	
202	Plant Genetic Resources	0%		5%	
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants	0%		5%	
204	Plant Product Quality and Utility (Preharvest)	5%		5%	
205	Plant Management Systems	30%		10%	
211	Insects, Mites, and Other Arthropods Affecting Plants	5%		5%	
212	Pathogens and Nematodes Affecting Plants	5%		15%	
213	Weeds Affecting Plants	5%		5%	
216	Integrated Pest Management Systems	10%		10%	
302	Nutrient Utilization in Animals	5%		5%	
303	Genetic Improvement of Animals	0%		5%	
307	Animal Management Systems	15%		5%	
311	Animal Diseases	5%		5%	
601	Economics of Agricultural Production and Farm Management	5%		5%	
704	Nutrition and Hunger in the Population	5%		5%	
	Total	100%		100%	

V(C). Planned Program (Situation and Scope)**1. Situation and priorities**

Louisiana's cropping systems pose agronomic, economic, and environmental challenges. Variable soils, climatic conditions, and pest pressures affect crop yield and input costs. Furthermore, commodity price instabilities promote producer concerns about sustainability of agricultural enterprises. Major crops include corn, cotton, rice, grain sorghum, soybeans, sugarcane, sweet potatoes, and wheat. Research in variety development, plant nutrition, pest management, cultural practices, and farm management are necessary to sustain crop production as a viable economic industry. Extension outreach will include continued efforts in general row crop agriculture and commercial vegetable and fruit production as well as the Master Farmer and Pesticide Certification programs.

Rising input costs, global competition and increased regulations have strained Louisiana's \$416

million aquaculture industry, impacting over 2,100 farms. Sustained aquaculture production and its benefits for rural economies will depend upon enhanced profitability, diversification and improved production efficiencies.

Poor economic conditions threaten sustainability of many Louisiana livestock operations. Moreover, Louisiana's hot, humid climate creates challenges of heat-stress, high parasite populations, poor reproduction, disease pressures, impaired water quality/quantity and low forage quality. Assessing animal adaptability and designing effective production systems that manage the relationships among genetics, physiology, nutrition, and environment are key concerns. Improving the safety, quality, functionality and consumer acceptance of animal products is an ongoing concern. Extension efforts will include continued efforts in the Master Cattle Producer Program.

Due to the state's high rate of poverty, many citizens do not have access to and/or consume nutritious foods. Poverty rates are higher among African Americans and children under 18. Louisiana ranks 13th among states for Food Stamp Program participation with approximately 74% of the state Food Stamp eligible. Only 25% Louisiana adults consume 5 servings of fruits and vegetables daily. Access to fresh fruits and vegetables is a concern for this population.

2. Scope of the Program

- In-State Extension
- In-State Research
- Multistate Research
- Multistate Extension
- Integrated Research and Extension
- Multistate Integrated Research and Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

- The LSU AgCenter will continue to be the primary source of unbiased research information that will lead to positive behavior changes.
- Resources and personnel will be available for continued research and extension effort on this topic.
- Participants will be motivated to make behavioral changes based on their expectations of economic returns or improved quality of life.
- Expanded knowledge will result in behavior change.

2. Ultimate goal(s) of this Program

The ultimate goals of the program are to continually improve adoption rates of recommended practices which contribute to the sustainability of food and fiber production and to educate limited resource populations on how to gain access to, prepare and consume healthy foods.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2013	48.0	0.0	89.0	0.0
2014	48.0	0.0	86.0	0.0
2015	48.0	0.0	85.0	0.0
2016	48.0	0.0	84.0	0.0
2017	48.0	0.0	84.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Specific subject matter areas included in this initiative are:

- Animals and animal production systems
- Crops and crop production systems
- Commercial fruit and vegetable production systems
- Aquaculture production systems and coastal fisheries
- Food insecurity and hunger

Activities include extension outreach using group and individual methods and mass media, research experiments; result demonstrations; and field days, all incorporating the latest technological advances and use of social media.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension

Direct Methods	Indirect Methods
<ul style="list-style-type: none"> • Education Class • Workshop • Group Discussion • One-on-One Intervention • Demonstrations 	<ul style="list-style-type: none"> • Public Service Announcement • Billboards • Newsletters • TV Media Programs • eXtension web sites • Web sites other than eXtension • Other 1 (Social media)

3. Description of targeted audience

Livestock producers; row crop producers; crop consultants; commercial fruit and vegetable producers; agribusinesses; crawfish farmers; members of the coastal fishing sector; commercial and private pesticide applicators; consumers of food and fiber; and Louisiana families and individuals living in poverty.

V(G). Planned Program (Outputs)

NIFA no longer requires you to report target numbers for standard output measures in the Plan of Work. However, all institutions will report actual numbers for standard output measures in the Annual Report of Accomplishments and Results. The standard outputs for which you must continue to collect data are:

- Number of contacts
 - Direct Adult Contacts
 - Indirect Adult Contacts
 - Direct Youth Contacts
 - Indirect Youth Contact
- Number of patents submitted
- Number of peer reviewed publications

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(H). State Defined Outputs

1. Output Measure

- Number of Web page views
- Number of Web page visits
- Number of new pesticide certifications (private and commercial) issued
- Number of pesticide applicator certifications (private and commercial) renewed

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(I). State Defined Outcome

O. No	Outcome Name
1	Adoption of recommended practices by Louisiana livestock producers
2	Adoption of recommended practices by Louisiana row crop producers
3	Adoption of recommended practices by Louisiana commercial fruit and vegetable producers
4	Adoption of recommended practices by Louisiana aquaculture producers
5	Louisiana individuals below poverty level adopt 3 or more practices regarding the use of limited resources to prepare and consume healthier foods.

Outcome # 1

1. Outcome Target

Adoption of recommended practices by Louisiana livestock producers

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 302 - Nutrient Utilization in Animals
- 307 - Animal Management Systems
- 311 - Animal Diseases
- 601 - Economics of Agricultural Production and Farm Management

4. Associated Institute Type(s)

- 1862 Extension
- 1862 Research

Outcome # 2

1. Outcome Target

Adoption of recommended practices by Louisiana row crop producers

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships
- 201 - Plant Genome, Genetics, and Genetic Mechanisms
- 202 - Plant Genetic Resources
- 203 - Plant Biological Efficiency and Abiotic Stresses Affecting Plants
- 204 - Plant Product Quality and Utility (Preharvest)
- 205 - Plant Management Systems
- 211 - Insects, Mites, and Other Arthropods Affecting Plants
- 212 - Pathogens and Nematodes Affecting Plants
- 213 - Weeds Affecting Plants
- 216 - Integrated Pest Management Systems
- 601 - Economics of Agricultural Production and Farm Management

4. Associated Institute Type(s)

- 1862 Extension
- 1862 Research

Outcome # 3

1. Outcome Target

Adoption of recommended practices by Louisiana commercial fruit and vegetable producers

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships
- 201 - Plant Genome, Genetics, and Genetic Mechanisms
- 202 - Plant Genetic Resources
- 203 - Plant Biological Efficiency and Abiotic Stresses Affecting Plants
- 204 - Plant Product Quality and Utility (Preharvest)
- 205 - Plant Management Systems
- 211 - Insects, Mites, and Other Arthropods Affecting Plants
- 212 - Pathogens and Nematodes Affecting Plants
- 213 - Weeds Affecting Plants
- 216 - Integrated Pest Management Systems
- 601 - Economics of Agricultural Production and Farm Management

4. Associated Institute Type(s)

- 1862 Extension
- 1862 Research

Outcome # 4

1. Outcome Target

Adoption of recommended practices by Louisiana aquaculture producers

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 302 - Nutrient Utilization in Animals

- 307 - Animal Management Systems
- 311 - Animal Diseases
- 601 - Economics of Agricultural Production and Farm Management

4. Associated Institute Type(s)

- 1862 Extension
- 1862 Research

Outcome # 5

1. Outcome Target

Louisiana individuals below poverty level adopt 3 or more practices regarding the use of limited resources to prepare and consume healthier foods.

2. Outcome Type : Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)

- 704 - Nutrition and Hunger in the Population

4. Associated Institute Type(s)

- 1862 Extension
- 1862 Research

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Description

{NO DATA ENTERED}

V(K). Planned Program - Planned Evaluation Studies

Description of Planned Evaluation Studies

LSU AgCenter programs are evaluated on a four-year cycle with 1/4 of the major base programs evaluated each year. Areas in this initiative that are scheduled for evaluation are:

FY2013-Poultry, feed grains, commercial vegetables and fruit

FY2014-Sheep/goats, aquaculture, soybeans/wheat, pasture & forage, Master Farmer

FY2015-Horses, beef, rice, sugarcane

FY2016-Dairy, swine, cotton, sweet potatoes, natural fisheries

Web-based survey software is used to gather input on emerging issues, adoption and intention to adopt recommended practices, use of LSU AgCenter resources and basic demographic information. Resulting information is used to develop impact reports and programming efforts are adjusted accordingly.

V(A). Planned Program (Summary)

Program # 2

1. Name of the Planned Program

Climate Change

2. Brief summary about Planned Program

The LSU AgCenter Research and Extension program strives to educate agricultural producers and others about the effective management and preservation of the state's abundant natural resources and environment through time-honored program delivery methods. Specific subject matter areas included in this initiative are:

- Animal waste handling and utilization
- Water quality and quantity
- Environment and natural resources (including Louisiana Master Farmer and Master Cattle Producers programs)
 - Sustainable housing
 - Wetland plants
 - Wildlife

3. Program existence : Mature (More than five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
101	Appraisal of Soil Resources	5%		15%	
112	Watershed Protection and Management	25%		0%	
132	Weather and Climate	5%		5%	
136	Conservation of Biological Diversity	0%		5%	
201	Plant Genome, Genetics, and Genetic Mechanisms	0%		15%	
202	Plant Genetic Resources	0%		5%	
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants	0%		15%	
205	Plant Management Systems	35%		5%	
206	Basic Plant Biology	0%		15%	
403	Waste Disposal, Recycling, and Reuse	5%		10%	
404	Instrumentation and Control Systems	10%		10%	
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures	15%		0%	
	Total	100%		100%	

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

Over 70 percent of LA's waterways are listed on EPA's 303d list as impaired and not suitable for fishing or swimming. Many of these impairments are thought to result from non-point pollution emanating from watershed land use practices such as agriculture, forestry, individual sewage treatment, home landscape and construction practices and other urban and suburban conditions.

Animal waste handling and utilization presents a challenge to producers. More than 280,000 tons of animal and poultry waste are produced in Louisiana each year. Producers must handle this waste in an environmentally-friendly manner to minimize the potential negative effects waste can have on waterways. Animal wastes improperly applied to or stored on land can lead to runoff that can reduce surface and groundwater quality by introducing excessive levels of nutrients such as nitrogen and phosphorus, organic matter and pathogens into the environment.

Louisiana has the highest erosion rate in the continental United States of almost 17 square miles per year according to the USGS. This equates to an area the size of a football field lost every hour and is caused by a variety of factors including climate change, human activities, and natural processes. The high rate of land loss threatens Louisiana industries that are essential to the entire nation including seafood, natural gas, petroleum, and global imports and habitats for numerous wildlife and marine species. The

need for certified coastal plant materials was identified as a quality control measure to respond to coastal erosion.

High performance, sustainable housing addresses national, state and household needs for energy efficiency to reduce dependence on non-renewable resources; environmental protection; disaster mitigation; human health and safety; and, economic recovery. The Louisiana House will continue to be used as a valuable teaching tool for both in-state and out-of-state visitors.

The well-being of Louisiana's citizens depends on its resource-based economy. Louisiana's natural capital assets must be efficiently managed for both current and future generations. Effective resource management implies more than utilization. It also calls for a careful analysis of resource allocation decisions made today and their current and future positive and negative impacts. While research and extension efforts related to natural resource conservation, use, and management have increased in recent years, efforts have been fragmented and widely dispersed. Improved coordination of these efforts is critical.

2. Scope of the Program

- In-State Extension
- In-State Research
- Multistate Research
- Multistate Extension
- Integrated Research and Extension
- Multistate Integrated Research and Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

- The LSU AgCenter will continue to be the primary source of unbiased research information that will lead to changing behavior
 - Resources and personnel will be available for continued research and extension effort on this topic.
 - Participants will be motivated to make behavioral changes based on their expectations of economic returns or improved quality of life.
 - Expanded knowledge will result in behavior change.

2. Ultimate goal(s) of this Program

The ultimate goal of this program is to provide transformational education that is necessary to achieve sustainable management of the state's abundant natural resources and protect the environment.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
		1862	1890	1862

Year	Extension		Research	
	1862	1890	1862	1890
2013	22.0	0.0	6.0	0.0
2014	22.0	0.0	6.7	0.0
2015	22.0	0.0	6.4	0.0
2016	22.0	0.0	6.0	0.0
2017	22.0	0.0	5.9	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Specific subject matter areas and programs included in this initiative are:

- Animal waste handling and utilization
- Water quality and quantity
- Environment and natural resources, including Louisiana Master Farmer and Master Cattle Producer programs
- Sustainable housing and the LaHouse Resource Educational Center
- Wetland/coastal plants
- Wildlife

Activities include extension outreach using group and individual methods and mass media, research experiments; result demonstrations; and field days, all incorporating the latest technological advances and use of social media. Further development of the Coastal Plants program is anticipated, as is continued coordination of natural resource extension and research activities by the Center for Natural Resource Economics and Policy (CNREP).

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension

Direct Methods	Indirect Methods
<ul style="list-style-type: none"> • Education Class • Workshop • Group Discussion • One-on-One Intervention • Demonstrations 	<ul style="list-style-type: none"> • Newsletters • TV Media Programs • eXtension web sites • Web sites other than eXtension

3. Description of targeted audience

Coastal managers, Louisiana wetlands stakeholders, commercial and recreational fishermen, participants in the Louisiana Master Farmer and Master Cattle Producer programs, other agricultural producers, livestock producers and Louisiana homeowners, builders and retrofitters.

V(G). Planned Program (Outputs)

NIFA no longer requires you to report target numbers for standard output measures in the Plan of Work. However, all institutions will report actual numbers for standard output measures in the Annual Report of Accomplishments and Results. The standard outputs for which you must continue to collect data are:

- Number of contacts
 - Direct Adult Contacts
 - Indirect Adult Contacts
 - Direct Youth Contacts
 - Indirect Youth Contact
- Number of patents submitted
- Number of peer reviewed publications

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(H). State Defined Outputs

1. Output Measure

- Number of Web page views
- Number of Web page visits
- Number of LaHouse Resource Center visitors
- Number of building professionals who participated in sustainable housing educational activities (seminars, tours, technical assistance)
- Number of consumer contacts in LaHouse sustainable housing and landscaping educational activities
- Number of farmers certified through the Louisiana Master Farmer program
- Number of LaHouse Facebook followers (Likes)

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(I). State Defined Outcome

O. No	Outcome Name
1	Increased adoption of high performance building and retrofitting practices
2	Reduce the impact of animal waste on the environment
3	Increased adoption of recommended practices to reduce non-point source pollution in Louisiana waterways
4	Increased coordination of research and extension activities to address environment and natural resource concerns across the southeastern U.S.
5	Reduce coastal erosion through the establishment of viable wetland plants.
6	Determine ways to reduce the impact of animal waste on the environment through research discovery and development.

Outcome # 1

1. Outcome Target

Increased adoption of high performance building and retrofitting practices

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 804 - Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structures

4. Associated Institute Type(s)

- 1862 Extension
- 1862 Research

Outcome # 2

1. Outcome Target

Reduce the impact of animal waste on the environment

2. Outcome Type : Change in Condition Outcome Measure

3. Associated Knowledge Area(s)

- 112 - Watershed Protection and Management
- 403 - Waste Disposal, Recycling, and Reuse
- 404 - Instrumentation and Control Systems

4. Associated Institute Type(s)

- 1862 Extension
- 1862 Research

Outcome # 3

1. Outcome Target

Increased adoption of recommended practices to reduce non-point source pollution in Louisiana waterways

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 101 - Appraisal of Soil Resources
- 112 - Watershed Protection and Management
- 403 - Waste Disposal, Recycling, and Reuse

4. Associated Institute Type(s)

- 1862 Extension
- 1862 Research

Outcome # 4

1. Outcome Target

Increased coordination of research and extension activities to address environment and natural resource concerns across the southeastern U.S.

2. Outcome Type : Change in Condition Outcome Measure

3. Associated Knowledge Area(s)

- 101 - Appraisal of Soil Resources
- 112 - Watershed Protection and Management
- 132 - Weather and Climate
- 136 - Conservation of Biological Diversity

4. Associated Institute Type(s)

- 1862 Extension
- 1862 Research

Outcome # 5

1. Outcome Target

Reduce coastal erosion through the establishment of viable wetland plants.

2. Outcome Type : Change in Condition Outcome Measure

3. Associated Knowledge Area(s)

- 101 - Appraisal of Soil Resources
- 112 - Watershed Protection and Management
- 132 - Weather and Climate
- 136 - Conservation of Biological Diversity
- 201 - Plant Genome, Genetics, and Genetic Mechanisms

- 205 - Plant Management Systems

4. Associated Institute Type(s)

- 1862 Extension
- 1862 Research

Outcome # 6

1. Outcome Target

Determine ways to reduce the impact of animal waste on the environment through research discovery and development.

2. Outcome Type : Change in Condition Outcome Measure

3. Associated Knowledge Area(s)

- 112 - Watershed Protection and Management
- 205 - Plant Management Systems
- 404 - Instrumentation and Control Systems

4. Associated Institute Type(s)

- 1862 Research

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Description

{NO DATA ENTERED}

V(K). Planned Program - Planned Evaluation Studies

Description of Planned Evaluation Studies

LSU AgCenter programs are evaluated on a four-year cycle with 1/4 of the major base programs evaluated each year. Areas in this initiative that are scheduled for evaluation are:

FY2013-Housing

FY2014-Coastal wetlands, Master Farmer, wildlife

FY2015-No applicable programs scheduled for evaluation

FY2016-Natural fisheries

Web-based survey software is used to gather input on emerging issues, adoption and intention to adopt recommended practices, use of LSU AgCenter resources and basic demographic information. Resulting information is used to develop impact reports and programming efforts are adjusted accordingly.

V(A). Planned Program (Summary)

Program # 3

1. Name of the Planned Program

Sustainable Energy

2. Brief summary about Planned Program

Agricultural landowners, producers and managers should understand their options for sustainable ways to grow biomass and how they can reduce their own energy needs through the use of more efficient technology and conservation. The LSU AgCenter Research and Extension program educates its clients about renewable energy use in agricultural production systems. The overarching goal of this initiative is to assist agricultural producers in understanding how they can contribute to the nation's supply of biofuels by producing the biomass necessary to produce that fuel and to lead others in the adoption of new technologies that will reduce the demands on our current energy supply.

3. Program existence : Intermediate (One to five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
402	Engineering Systems and Equipment	10%		20%	
403	Waste Disposal, Recycling, and Reuse	10%		10%	
404	Instrumentation and Control Systems	0%		5%	
511	New and Improved Non-Food Products and Processes	70%		55%	
512	Quality Maintenance in Storing and Marketing Non-Food Products	10%		10%	
	Total	100%		100%	

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

The Energy Independence and Security Act of 2007 called for at least 12.95 billion gallons of renewable fuels to be used in the U.S. in 2010 and 36 billion gallons (16 billion gallons of cellulosic biofuel) by 2022. The recent USDA Roadmap on Biofuels calls for production of 13.4 billion gallons of advanced biofuels from grassy crops. The rapid expansion of the biofuel's industry has occurred as a result, for the most part, of this country's growing dependence of foreign oil.

Agriculture underlies the country's push to sustainable energy, yet agricultural feedstocks are available only in a fixed window of time. Flexibility in operation of a biorefinery requires continuous feedstock delivery. The technical hurdles that block biofuel production in Louisiana range from finding multiple feedstocks for year round delivery, developing the tools for producers and processors to determine value of these crops, developing processing technologies for biofuels and finding supplemental high value products to improve the economics.

Biofuels derived from plant biomass can contribute substantially to improving energy independence of the United States. Louisiana has a long growing season and high vegetation diversity that can foster biomass production to support a biofuel industry. Maximizing biomass production potential for the state necessitates identification of crops and cropping systems capable of producing high biomass in an economically viable and environmentally sustainable manner. Extension faculty in the W.A. Callegari Center will continue to educate clientele in the production and use of biodiesel as an alternative fuel.

2. Scope of the Program

- In-State Extension
- In-State Research
- Multistate Research
- Multistate Extension
- Integrated Research and Extension
- Multistate Integrated Research and Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

- The LSU AgCenter will continue to be the primary source of unbiased research information that will lead to changing behavior.
 - Resources and personnel will be available for continued research and extension effort on this topic
 - Participants will be motivated to make behavioral changes based on their expectations of economic returns or improved quality of life.
 - Expanded knowledge will result in behavior change.

2. Ultimate goal(s) of this Program

The goals of this program are to educate agricultural producers who can contribute to the source of biomass to create biofuels and to educate consumers regarding the adoption of energy-saving and alternative energy technologies.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2013	4.0	0.0	6.7	0.0

Year	Extension		Research	
	1862	1890	1862	1890
2014	4.0	0.0	6.4	0.0
2015	4.0	0.0	6.1	0.0
2016	4.0	0.0	6.8	0.0
2017	4.0	0.0	6.5	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Activity will include research and extension efforts regarding biofuel development using Louisiana-produced crops and the production and use of biodiesel as an alternative fuel.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension

Direct Methods	Indirect Methods
<ul style="list-style-type: none"> ● Education Class ● Workshop ● Group Discussion ● One-on-One Intervention ● Demonstrations 	<ul style="list-style-type: none"> ● Newsletters ● TV Media Programs ● eXtension web sites ● Web sites other than eXtension ● Other 1 (Social media)

3. Description of targeted audience

Agricultural producers in Louisiana and the southeastern U.S., consumers, extension faculty and scientists.

V(G). Planned Program (Outputs)

NIFA no longer requires you to report target numbers for standard output measures in the Plan of Work. However, all institutions will report actual numbers for standard output measures in the Annual Report of Accomplishments and Results. The standard outputs for which you must continue to collect data are:

- Number of contacts
 - Direct Adult Contacts
 - Indirect Adult Contacts
 - Direct Youth Contacts
 - Indirect Youth Contact
- Number of patents submitted
- Number of peer reviewed publications

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(H). State Defined Outputs

1. Output Measure

- Number of agricultural producers providing biomass as feedstock for fuels
- Number of workshops conducted

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(I). State Defined Outcome

O. No	Outcome Name
1	Increased knowledge regarding the use of agricultural feedstocks to generate biofuels.
2	Identification of crops and cropping systems capable of producing biomass.

Outcome # 1

1. Outcome Target

Increased knowledge regarding the use of agricultural feedstocks to generate biofuels.

2. Outcome Type : Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)

- 402 - Engineering Systems and Equipment
- 511 - New and Improved Non-Food Products and Processes

4. Associated Institute Type(s)

- 1862 Extension
- 1862 Research

Outcome # 2

1. Outcome Target

Identification of crops and cropping systems capable of producing biomass.

2. Outcome Type : Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)

- 402 - Engineering Systems and Equipment
- 511 - New and Improved Non-Food Products and Processes

4. Associated Institute Type(s)

- 1862 Extension
- 1862 Research

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges

Description

{NO DATA ENTERED}

V(K). Planned Program - Planned Evaluation Studies

Description of Planned Evaluation Studies

LSU AgCenter programs are evaluated on a four-year cycle with 1/4 of the major base programs evaluated each year. This program area is scheduled for evaluation in FY 2013.

Web-based survey software is used to gather input on emerging issues, adoption and intention to adopt recommended practices, use of LSU AgCenter resources and basic demographic information. Resulting information is used to develop impact reports and programming efforts are adjusted accordingly.

V(A). Planned Program (Summary)

Program # 4

1. Name of the Planned Program

Childhood Obesity

2. Brief summary about Planned Program

Louisiana school-aged youth will participate in the Extension Smart Bodies program, which includes an innovative approach to teaching nutrition and physical activity by integrating the program into core curriculum academics to promote child wellness and healthy lifestyles. Parents will learn the importance of healthy eating habits in order to improve overall family health. Nutrition efforts which focus solely on adults are reported in the Human Nutrition and Food (Adults) section of this plan.

3. Program existence : Intermediate (One to five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
702	Requirements and Function of Nutrients and Other Food Components	0%		60%	
703	Nutrition Education and Behavior	50%		30%	
724	Healthy Lifestyle	50%		10%	
	Total	100%		100%	

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

In Louisiana 35.6% of children ages 10-17 are considered overweight or obese according to BMI standards. The state ranks 46th out of 50 for overall prevalence. Increased obesity leads to increased rates of other chronic diseases such as diabetes, heart disease, and respiratory diseases. Louisiana also has one of the highest poverty rates with 26% of children and 25% of adults living in poverty.

2. Scope of the Program

- In-State Extension
- In-State Research
- Multistate Research

- Multistate Extension
- Integrated Research and Extension
- Multistate Integrated Research and Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

Obesity is a complex problem requiring a multi-faceted approach. Achieving a healthy weight requires a lifelong commitment to change and adoption of recommended practices for healthy eating and physical activity. Environmental factors are not conducive to following a healthy lifestyle. Additional assumptions include:

- The LSU AgCenter will continue to be the primary source of unbiased research information that will lead to changing behavior.
 - Resources and personnel will be available for continued research and extension effort on this topic.
 - Participants will be motivated to make behavioral changes based on their expectations of economic returns or improved quality of life.
 - Expanded knowledge will result in behavior change.

2. Ultimate goal(s) of this Program

The ultimate goal of this program is for youth to establish healthy eating and physical activity habits which lead to reduced incidence of childhood obesity. Indicators of goal achievement are: daily physical activity time increased 5% over their baseline, introduction/exposure to 3 new fruits and 3 new vegetables; and inclusion of at least one new fruit and one new vegetable as a part of their regular diet.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2013	20.0	0.0	0.5	0.0
2014	20.0	0.0	0.4	0.0
2015	20.0	0.0	0.4	0.0
2016	20.0	0.0	1.0	0.0
2017	20.0	0.0	1.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Smart Bodies is an innovative program of nutrition and physical activities that is integrated into core curriculum academics to promote child wellness. Smart Bodies consists of three components: Body Walk, the OrganWise Guys (OWG), and Take 10! Body Walk students explore the brain, mouth, stomach, small intestines, heart, lungs, muscles, bones, and skin stopping at learning stations to participate in interactive

activities focused on the effects that the food has on each organ. The OWG are fun characters that help children understand physiology and healthy behaviors through books, games, dolls and informational videos. The Take 10! classroom program is a grade-specific educational tool that encourages short bouts of physical activity integrated with academic lessons. Parent newsletters are monthly themed and include tips for incorporating physical activity into family life and kid-friendly, low-cost recipes emphasizing fruits and vegetables.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension

Direct Methods	Indirect Methods
<ul style="list-style-type: none"> ● Education Class ● Workshop ● Group Discussion ● One-on-One Intervention ● Demonstrations 	<ul style="list-style-type: none"> ● Billboards ● Newsletters ● TV Media Programs ● Web sites other than eXtension ● Other 1 (Social media)

3. Description of targeted audience

The target audience includes public and private elementary schools in Louisiana and their students in grades K-5 with emphasis on limited income youth. Participating schools' administrators, faculty, and parents are served indirectly through the program by receiving monthly newsletters, Body Walk activity books, and the OrganWise Guys and Take 10! curricula. Parents have the opportunity to volunteer and participate in the Body Walk when it visits their child's school.

V(G). Planned Program (Outputs)

NIFA no longer requires you to report target numbers for standard output measures in the Plan of Work. However, all institutions will report actual numbers for standard output measures in the Annual Report of Accomplishments and Results. The standard outputs for which you must continue to collect data are:

- Number of contacts
 - Direct Adult Contacts
 - Indirect Adult Contacts
 - Direct Youth Contacts
 - Indirect Youth Contact
- Number of patents submitted
- Number of peer reviewed publications

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(H). State Defined Outputs

1. Output Measure

- Number of Web page views
 - Number of Web page visits
 - Number of youth who participate in Smart Bodies Program
 - Number of elementary school participating in Smart Bodies program
- Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(I). State Defined Outcome

O. No	Outcome Name
1	Louisiana youth and their caregivers adopt healthy lifestyle behaviors that lead to reduced incidence of childhood obesity.

Outcome # 1

1. Outcome Target

Louisiana youth and their caregivers adopt healthy lifestyle behaviors that lead to reduced incidence of childhood obesity.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 702 - Requirements and Function of Nutrients and Other Food Components
- 703 - Nutrition Education and Behavior
- 724 - Healthy Lifestyle

4. Associated Institute Type(s)

- 1862 Extension
- 1862 Research

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Description

{NO DATA ENTERED}

V(K). Planned Program - Planned Evaluation Studies

Description of Planned Evaluation Studies

LSU AgCenter programs are evaluated on a four year cycle with 1/4 of the major base programs evaluated each year. The Childhood Obesity program is scheduled for evaluation in FY 2016.

Web-based survey software is used to gather input on emerging issues, adoption and intention to adopt recommended practices, use of LSU AgCenter resources and basic demographic information. Resulting information is used to develop impact reports and programming efforts are adjusted accordingly.

V(A). Planned Program (Summary)

Program # 5

1. Name of the Planned Program

Food Safety

2. Brief summary about Planned Program

The LSU AgCenter extension and research team works with food consumers to increase their knowledge of proper food selection, storage and preparation. This work is particularly important to low-income families. Additionally, education of food producers, small food businesses and food handlers is critical to insuring a safe and secure food supply. The LSU AgCenter plays a key role in providing training necessary for food safety certifications.

3. Program existence : Mature (More than five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
504	Home and Commercial Food Service	45%		0%	
711	Ensure Food Products Free of Harmful Chemicals, Including Residues from Agricultural and Other Sources	10%		10%	
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins	5%		60%	
723	Hazards to Human Health and Safety	20%		15%	
724	Healthy Lifestyle	20%		15%	
	Total	100%		100%	

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

Louisiana is subjected to violent weather events due to its close proximity to the coast. These events create power outages and flooding. This leads to increased opportunities for food borne illnesses especially in Louisiana's hot humid climate. Louisiana is a state that holds many warm weather festivals which increases the likelihood of food safety issues. In Louisiana between 1980 and 2006 there were 182 outbreaks of food poisoning or on average, 13.3 outbreaks per year. The state also has a passive

surveillance reporting system for food borne illnesses and these numbers are probably low due to unreported food borne illnesses. Louisiana also has a large proportion of susceptible populations such as the elderly and economically challenged individuals: these individuals are least likely to seek care when experiencing food-borne illnesses and thus more likely to have more serious reactions to food poisoning. Research indicates that handling food correctly can prevent 90 to 95% of food borne illnesses. The need to develop a crisis communication response plan for the U. S. Sweet Potato Industry was identified.

Commercial processors of seafood, meat, poultry, and juice are required to be certified in principles of HACCP (Hazard Analysis and Critical Control Point). Companies, such as Wal Mart, are requiring HACCP. Small companies and start-ups need help in meeting these requirements. Oyster companies that use a post-harvest treatment are required by the FDA to validate if their treatments adequately reduced levels of *Vibrio vulnificus* in oysters. Seafood safety concerns, exacerbated throughout the U.S. following the 2010 Gulf oil spill, still exist.

2. Scope of the Program

- In-State Extension
- In-State Research
- Multistate Research
- Multistate Extension
- Integrated Research and Extension
- Multistate Integrated Research and Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

- The LSU AgCenter will continue to be the primary source of unbiased research information that will lead to changing behavior.
 - Resources and personnel will be available for continued research and extension effort on this topic.
 - Participants will be motivated to make behavioral changes based on their expectations of economic returns or improved quality of life.
 - Expanded knowledge will result in behavior change.

2. Ultimate goal(s) of this Program

The ultimate goal of this program is to continually increase the adoption rate of safe food preparation and handling practices by clientele including commercial and non-commercial food- handlers, cooks and processors.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2013	2.0	0.0	3.1	0.0
2014	2.0	0.0	3.0	0.0
2015	2.0	0.0	2.8	0.0
2016	2.0	0.0	3.2	0.0
2017	2.0	0.0	3.1	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Appropriate extension and research including result demonstrations, workshops, classes, certification programs, studies and effective use of a variety of media sources to address food safety-related issues. Specific certification trainings will include Sanitation Control Protocol (SCP), Seafood HACCP; Meat and Poultry HACCP; Vacuum Packaging HACCP, Better Process Control School (BPCS) and ServSafe.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension

Direct Methods	Indirect Methods
<ul style="list-style-type: none"> ● Education Class ● Workshop ● Group Discussion ● One-on-One Intervention ● Demonstrations 	<ul style="list-style-type: none"> ● Public Service Announcement ● Newsletters ● TV Media Programs ● Web sites other than eXtension ● Other 1 (Social media)

3. Description of targeted audience

Consumers, commercial seafood processors, children and food handlers including restaurateurs and food vendors

V(G). Planned Program (Outputs)

NIFA no longer requires you to report target numbers for standard output measures in the Plan of Work. However, all institutions will report actual numbers for standard output measures in the Annual Report of Accomplishments and Results. The standard outputs for which you must continue to collect data are:

- Number of contacts
 - Direct Adult Contacts
 - Indirect Adult Contacts
 - Direct Youth Contacts
 - Indirect Youth Contact
 - Number of patents submitted
 - Number of peer reviewed publications
- Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(H). State Defined Outputs

1. Output Measure

- Number of individuals certified through food safety programs
- Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(I). State Defined Outcome

O. No	Outcome Name
1	Increase awareness, knowledge and/or skills regarding safe food handling and preparation by both commercial and non-commercial entities.
2	Identify ways to minimize food safety threats related to Louisiana-produced food products through research.

Outcome # 1

1. Outcome Target

Increase awareness, knowledge and/or skills regarding safe food handling and preparation by both commercial and non-commercial entities.

2. Outcome Type : Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)

- 504 - Home and Commercial Food Service
- 711 - Ensure Food Products Free of Harmful Chemicals, Including Residues from Agricultural and Other Sources
- 712 - Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins
- 724 - Healthy Lifestyle

4. Associated Institute Type(s)

- 1862 Extension
- 1862 Research

Outcome # 2

1. Outcome Target

Identify ways to minimize food safety threats related to Louisiana-produced food products through research.

2. Outcome Type : Change in Condition Outcome Measure

3. Associated Knowledge Area(s)

- 711 - Ensure Food Products Free of Harmful Chemicals, Including Residues from Agricultural and Other Sources
- 712 - Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins
- 723 - Hazards to Human Health and Safety
- 724 - Healthy Lifestyle

4. Associated Institute Type(s)

- 1862 Research

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Description

{NO DATA ENTERED}

V(K). Planned Program - Planned Evaluation Studies

Description of Planned Evaluation Studies

LSU AgCenter programs are evaluated on a four-year cycle with 1/4 of the major base programs evaluated each year. The Food Safety program area is scheduled for evaluation in FY 2015.

Web-based survey software is used to gather input on emerging issues, adoption and intention to adopt recommended practices, use of LSU AgCenter resources and basic demographic information. Resulting information is used to develop impact reports and programming efforts are adjusted accordingly.

V(A). Planned Program (Summary)

Program # 6

1. Name of the Planned Program

Human Nutrition and Food (Adult)

2. Brief summary about Planned Program

Obesity and improper weight management are the leading causes of preventable death in the U.S. Heart disease, diabetes, cancer, and stroke are all linked to this widespread problem. Participants in weight-related, research-based educational programs will improve their knowledge and thus be encouraged to change their behavior in both eating habits and exercise routine. Research and extension will continue their goal of reducing the number of clientele who are overweight or obese and those with other chronic disease risk factors. In addition, functional foods will be emphasized because they contain bioactive products that may reduce chronic disease risks. Group discussion, educational classes, workshops, and one-on-one intervention are all proven methods of dissemination of educational information. The LSU AgCenter has selected nutrition and health to be a primary focus in FCS and has shifted available resources to address the related issues.

3. Program existence : Mature (More than five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
501	New and Improved Food Processing Technologies	0%		35%	
502	New and Improved Food Products	0%		30%	
503	Quality Maintenance in Storing and Marketing Food Products	0%		10%	
702	Requirements and Function of Nutrients and Other Food Components	0%		20%	
703	Nutrition Education and Behavior	100%		5%	
	Total	100%		100%	

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

Louisiana residents suffer from chronic diseases such as heart disease, stroke, cancer and diabetes at rates higher than the national average, while fruit and vegetable intake and participation in physical activity is below the national average. Approximately 7% of adults have been diagnosed with diabetes and 1 in 4 adults is obese. Louisiana has the fourth highest cardiovascular death rate in the nation, accounting

for almost 40 percent of all deaths in the state. Maintaining a healthy lifestyle by eating well and being physically active can greatly impact these startling statistics.

Obesity is a primary negative factor influencing resulting in Louisiana ranking 47th in overall health, 7th in diabetes and 8th in high blood pressure. There is an alarming increase in the rate of Type 2 diabetes among youth. Chronic inflammation is one of the primary side effects of obesity. Excess body fat results in the production of pro-inflammatory cytokines. Compounds that are presented in fruits, vegetables, coffee and chocolate can help prevent the formation of these inflammatory compounds. Unique approaches to delivery of these compounds will help delay the negative side effects of obesity.

2. Scope of the Program

- In-State Extension
- In-State Research
- Multistate Research
- Multistate Extension
- Integrated Research and Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

Participants will improve their knowledge and change their behaviors based on improvement in knowledge. Participants will be willing and motivated to change their behaviors. The LSU AgCenter Nutrition Team will be engaged and fully participate in implementation of nutrition programming efforts. LSU AgCenter will have the resources (personnel, facilities, materials, etc.) to conduct programming on these issues. There will be funding available for nutrition education programming and evaluation.

2. Ultimate goal(s) of this Program

Reduced percent of clients/participants with chronic disease risk factors, overweight and obesity. Client base that is educated on nutrition and health issues.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2013	16.0	0.0	12.3	0.0
2014	16.0	0.0	11.6	0.0
2015	16.0	0.0	11.1	0.0
2016	16.0	0.0	11.5	0.0

Year	Extension		Research	
	1862	1890	1862	1890
2017	16.0	0.0	11.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Adult audiences will participate in activities to promote the maintenance of a healthy lifestyle by eating well and being physically active. Primary curricula to be used are:

- Smart Portions, a series of sessions that address nutrition, physical activity and eating habits for a healthy lifestyle
- Diabetes Nutrition Education Works (Diabetes NEWS) classes for Louisiana adults with diabetes or who had a family member with diabetes to educate them about managing the disease
- Smart Choices, a Community Nutrition Education Program teaching the principles of eating based on the Dietary Guidelines for Americans, money management and food safety
- Master Nutrition Volunteer program, a program that certifies individuals to teach nutrition classes to the public

Research will be conducted to identify and/or develop familiar foods which are reformulated to deliver higher fiber and anti-inflammatory ingredients to help control obesity and the negative side effects of obesity while minimizing changes in food choices.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension

Direct Methods	Indirect Methods
<ul style="list-style-type: none"> • Education Class • Workshop • Group Discussion • One-on-One Intervention • Demonstrations 	<ul style="list-style-type: none"> • Public Service Announcement • Billboards • Newsletters • TV Media Programs • Web sites other than eXtension • Other 1 (Social media)

3. Description of targeted audience

Adults in the general public

V(G). Planned Program (Outputs)

NIFA no longer requires you to report target numbers for standard output measures in the Plan of Work. However, all institutions will report actual numbers for standard output measures in the Annual Report of Accomplishments and Results. The standard outputs for which you must continue to collect data are:

- Number of contacts
 - Direct Adult Contacts
 - Indirect Adult Contacts
 - Direct Youth Contacts
 - Indirect Youth Contact
- Number of patents submitted
- Number of peer reviewed publications

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(H). State Defined Outputs

1. Output Measure

- Number of Web page views
- Number of Web page visits
- Number of individuals completing Smart Portions classes
- Number of individuals completing Diabetes NEWS classes
- Number of families completing Smart Choices classes
- Number of Master Nutrition Volunteers certified

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(I). State Defined Outcome

O. No	Outcome Name
1	Participants adopt healthy lifestyle and weight management practices
2	Identify and/or develop familiar foods which are reformulated to deliver higher fiber and anti-inflammatory ingredients to help control obesity and the negative side effects of obesity while minimizing changes in food choices.

Outcome # 1

1. Outcome Target

Participants adopt healthy lifestyle and weight management practices

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 501 - New and Improved Food Processing Technologies
- 502 - New and Improved Food Products
- 503 - Quality Maintenance in Storing and Marketing Food Products
- 702 - Requirements and Function of Nutrients and Other Food Components
- 703 - Nutrition Education and Behavior

4. Associated Institute Type(s)

- 1862 Extension

Outcome # 2

1. Outcome Target

Identify and/or develop familiar foods which are reformulated to deliver higher fiber and anti-inflammatory ingredients to help control obesity and the negative side effects of obesity while minimizing changes in food choices.

2. Outcome Type : Change in Condition Outcome Measure

3. Associated Knowledge Area(s)

- 501 - New and Improved Food Processing Technologies
- 502 - New and Improved Food Products
- 503 - Quality Maintenance in Storing and Marketing Food Products
- 702 - Requirements and Function of Nutrients and Other Food Components

4. Associated Institute Type(s)

- 1862 Research

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Public Policy changes
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Description

{NO DATA ENTERED}

V(K). Planned Program - Planned Evaluation Studies

Description of Planned Evaluation Studies

LSU AgCenter programs are evaluated on a four-year cycle with 1/4 of the major base programs evaluated each year. The Human Nutrition and Food (Adult) program area is scheduled for evaluation in FY 2014.

Web-based survey software is used to gather input on emerging issues, adoption and intention to adopt recommended practices, use of LSU AgCenter resources and basic demographic information. Resulting information is used to develop impact reports and programming efforts are adjusted accordingly

V(A). Planned Program (Summary)

Program # 7

1. Name of the Planned Program

Consumer Horticulture, Ornamentals & Turf

2. Brief summary about Planned Program

Interest in consumer horticulture related topics is growing rapidly in Louisiana. LSU AgCenter extension and research programs in horticulture focus on two distinct clientele: commercial horticulture professionals and the consumer. The key in this effort is to provide timely, relevant, up-to-date, research-based, and environmentally friendly information to both clientele groups. Clientele are reached through educational classes, workshops, farm and home visits, field days, garden shows and plant health clinics, one-on-one contact, newsletters, and mass media. The LSU AgCenter Web site is well-used by the consumer audience. Louisiana Master Gardener volunteers continue to extend extension's outreach to clients. The LCES School Gardens initiative and Junior Master Gardener program will continue to expand.

3. Program existence : Mature (More than five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
202	Plant Genetic Resources	0%		20%	
204	Plant Product Quality and Utility (Preharvest)	15%		10%	
205	Plant Management Systems	75%		60%	
213	Weeds Affecting Plants	10%		10%	
	Total	100%		100%	

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

Horticulture professionals seek to improve production efficiency, enhance marketing potential and reduce environmental impact associated with pesticide and fertilizer use. Home gardeners require information in the areas of species and cultivar selection, weed management and cultural practice improvements. Producers of bedding plants, landscapers and consumers encounter disposal issues with petroleum-based plastic containers once the plants are removed at transplanting. Container media availability and functionality were problems for nursery growers. Louisiana retail garden centers desired an ornamental plant promotion program that recognizes the highest quality and broadest selection of materials.

Reduced personnel resources coupled with increased interest in consumer horticulture, home gardening and home grounds has exacerbated the need for well-trained volunteers to assist in the delivery of mission-driven quality educational horticulture programs. The Louisiana Master Gardener (LMG) program will continue to serve as a valuable resource in meeting this demand.

2. Scope of the Program

- In-State Extension
- In-State Research
- Multistate Research
- Multistate Extension
- Integrated Research and Extension
- Multistate Integrated Research and Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

- The LSU AgCenter will continue to be the primary source of unbiased research information that will lead to changing behavior.
 - Resources and personnel will be available for continued research and extension effort on this topic.
 - Participants will be motivated to make behavioral changes based on their expectations of economic returns or improved quality of life.
 - Expanded knowledge will result in behavior change.

2. Ultimate goal(s) of this Program

- Commercial producers maintain profitable enterprises in an environmentally-safe manner.
- Consumers adopt recommended practices that improve home grounds and protect the environment.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2013	20.0	0.0	4.2	0.0
2014	20.0	0.0	4.0	0.0
2015	20.0	0.0	4.8	0.0
2016	20.0	0.0	4.1	0.0
2017	20.0	0.0	4.4	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Appropriate extension and research activities such as result demonstrations, volunteer training, field days, studies, individual consultations, group meetings, mass media, publication development and extensive use of Web technology and social media outlets will be used to reach target audiences. Louisiana Master Gardener volunteers will continue to be recruited, trained and utilized to supplement mission critical extension efforts to address growing consumer horticultural needs.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension

Direct Methods	Indirect Methods
<ul style="list-style-type: none"> ● Education Class ● Workshop ● Group Discussion ● One-on-One Intervention ● Demonstrations 	<ul style="list-style-type: none"> ● Public Service Announcement ● Billboards ● Newsletters ● TV Media Programs ● eXtension web sites ● Web sites other than eXtension ● Other 1 (Social media (blogs, etc.))

3. Description of targeted audience

Horticulture professionals, home gardeners, nursery growers, Louisiana Master Gardener volunteers, K-12 schools with gardens and related agribusiness clientele

V(G). Planned Program (Outputs)

NIFA no longer requires you to report target numbers for standard output measures in the Plan of Work. However, all institutions will report actual numbers for standard output measures in the Annual Report of Accomplishments and Results. The standard outputs for which you must continue to collect data are:

- Number of contacts
 - Direct Adult Contacts
 - Indirect Adult Contacts
 - Direct Youth Contacts
 - Indirect Youth Contact
- Number of patents submitted
- Number of peer reviewed publications

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(H). State Defined Outputs

1. Output Measure

- Number of Web page views
- Number of Web page visits
- Number of Louisiana Master Gardeners completing training series
- Number of service hours contributed by all Louisiana Master Gardeners

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(I). State Defined Outcome

O. No	Outcome Name
1	Adoption of recommended horticultural practices
2	Louisiana Master Gardener volunteers supplement the delivery of consumer horticulture program to clients.

Outcome # 1

1. Outcome Target

Adoption of recommended horticultural practices

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 202 - Plant Genetic Resources
- 204 - Plant Product Quality and Utility (Preharvest)
- 205 - Plant Management Systems
- 213 - Weeds Affecting Plants

4. Associated Institute Type(s)

- 1862 Extension
- 1862 Research

Outcome # 2

1. Outcome Target

Louisiana Master Gardener volunteers supplement the delivery of consumer horticulture program to clients.

2. Outcome Type : Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)

- 204 - Plant Product Quality and Utility (Preharvest)
- 205 - Plant Management Systems
- 213 - Weeds Affecting Plants

4. Associated Institute Type(s)

- 1862 Extension
- 1862 Research

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy

- Appropriations changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges

Description

{NO DATA ENTERED}

V(K). Planned Program - Planned Evaluation Studies

Description of Planned Evaluation Studies

LSU AgCenter programs are evaluated on a four-year cycle with 1/4 of the major base programs evaluated each year. Areas in this initiative that are scheduled for evaluation are:

FY2013-Nursery crops, Louisiana Master Gardener
FY2014-School gardens
FY2015-Home grounds
FY2016-Home gardens

Web-based survey software is used to gather input on emerging issues, adoption and intention to adopt recommended practices, use of LSU AgCenter resources and basic demographic information. Resulting information is used to develop impact reports and programming efforts are adjusted accordingly.

V(A). Planned Program (Summary)

Program # 8

1. Name of the Planned Program

Forestry and Forest Products

2. Brief summary about Planned Program

Managing and sustaining forest resources and their products are extremely important to Louisiana's economy. A better understanding of the biology and ecology of forest ecosystems and the techniques necessary to improve and regenerate forest stands will benefit landowners and companies involved in these enterprises. Additionally, developing and marketing of new and improved wood products to increase forest resource value and provide more efficiently for consumer needs will stimulate economic development. Methods of dissemination of educational materials include landowner meetings, workshops, newsletters, conventional mass media, and an increasing use of the LSU AgCenter Web site. The overall aim of the program is to assist clientele in decision making regarding research-based, sustained management and use of forest resources and their products.

3. Program existence : Mature (More than five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
102	Soil, Plant, Water, Nutrient Relationships	10%		10%	
112	Watershed Protection and Management	10%		5%	
123	Management and Sustainability of Forest Resources	65%		35%	
135	Aquatic and Terrestrial Wildlife	5%		20%	
403	Waste Disposal, Recycling, and Reuse	5%		10%	
511	New and Improved Non-Food Products and Processes	0%		10%	
604	Marketing and Distribution Practices	5%		10%	
	Total	100%		100%	

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

The southern U.S., including Louisiana, supports the most productive forestlands in the world. They provide many goods and services from water and air filtration, to employment opportunities, to wood products, to recreational activities. However, societal and demographic changes, global competition, invasive species, land management shifts, urbanization and parcelization threaten the sustainability of these forests. Research and education is needed to identify both the benefits and threats to southern forest sustainability and to more clearly identify problems and potential solutions. In Louisiana, protection, management and utilization of coastal wetland forests, bottomland hardwood forests, and upland pine forests are important.

Management effects on hydrology and water quality and their reciprocal effects on forests, degradation of coastal forests, restoration tools and incentives, and long-term forest productivity remain concerns. Mills have closed from depressed housing markets. There are needs to improve processing production and efficiency, recycling, marketing and worker safety. Both managers and loggers seek continuing education from the LSU AgCenter forestry faculty.

2. Scope of the Program

- In-State Extension
- In-State Research
- Multistate Research
- Multistate Extension
- Integrated Research and Extension
- Multistate Integrated Research and Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

- The LSU AgCenter will continue to be the primary source of unbiased research information that will lead to changing behavior.
 - Resources and personnel will be available for continued research and extension effort on this topic.
 - Participants will be motivated to make behavioral changes based on their expectations of economic returns or improved quality of life.
 - Expanded knowledge will result in behavior change.

2. Ultimate goal(s) of this Program

Provide knowledge and expertise that assists the clientele to make wise decisions concerning sustained use of forest resources and provide knowledge and expertise to restore forest systems. Stakeholders use research-based information to improve management and sustainability of forest resources.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890

Year	Extension		Research	
	1862	1890	1862	1890
2013	5.0	0.0	13.8	0.0
2014	5.0	0.0	13.1	0.0
2015	5.0	0.0	12.5	0.0
2016	5.0	0.0	11.8	0.0
2017	5.0	0.0	12.2	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Efforts will focus on tax issues, forest management, GPS systems, feral hog and deer management and mineral leasing. Research on wetland forest hydrology changes, forest carbon storage and nutrient cycling, and development of short-rotation forest plantations and agroforests for biofuel production will be conducted. As always, worksite safety among loggers and arborists will be critical. Extension outreach efforts will include workshops, result demonstrations, and individual consultations as appropriate.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension

Direct Methods	Indirect Methods
<ul style="list-style-type: none"> ● Education Class ● Workshop ● Group Discussion ● One-on-One Intervention ● Demonstrations 	<ul style="list-style-type: none"> ● Public Service Announcement ● Newsletters ● TV Media Programs ● Web sites other than eXtension ● Other 1 (Social media)

3. Description of targeted audience

Forest landowners, managers and loggers; arborists.

V(G). Planned Program (Outputs)

NIFA no longer requires you to report target numbers for standard output measures in the Plan of Work. However, all institutions will report actual numbers for standard output measures in the Annual Report of Accomplishments and Results. The standard outputs for which you must continue to collect data are:

- Number of contacts
 - Direct Adult Contacts
 - Indirect Adult Contacts
 - Direct Youth Contacts
 - Indirect Youth Contact
 - Number of patents submitted
 - Number of peer reviewed publications
- Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(H). State Defined Outputs

1. Output Measure

- Number of Web page views
 - Number of Web page visits
- Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(I). State Defined Outcome

O. No	Outcome Name
1	Participants adopt recommended forestry practices.

Outcome # 1

1. Outcome Target

Participants adopt recommended forestry practices.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships
- 112 - Watershed Protection and Management
- 123 - Management and Sustainability of Forest Resources
- 135 - Aquatic and Terrestrial Wildlife
- 403 - Waste Disposal, Recycling, and Reuse
- 511 - New and Improved Non-Food Products and Processes
- 604 - Marketing and Distribution Practices

4. Associated Institute Type(s)

- 1862 Extension
- 1862 Research

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Description

{NO DATA ENTERED}

V(K). Planned Program - Planned Evaluation Studies

Description of Planned Evaluation Studies

LSU AgCenter programs are evaluated on a four-year cycle with 1/4 of the major base programs evaluated each year. The Forestry and Forest Products program is scheduled for evaluation in FY 2013.

Web-based survey software is used to gather input on emerging issues, adoption and intention to adopt recommended practices, use of LSU AgCenter resources and basic demographic information. Resulting information is used to develop impact reports and programming efforts are adjusted accordingly

V(A). Planned Program (Summary)

Program # 9

1. Name of the Planned Program

Community Development

2. Brief summary about Planned Program

Extension and research activities are designed to reduce persistent poverty through entrepreneurship, agribusiness development, leadership and broadband educational programs. The Louisiana Center for Rural Initiatives, the Connect My LA (CML) rural broadband initiative and agritourism will continue to be major program efforts in the state. Additional external funding will be sought to support this initiative.

3. Program existence : Mature (More than five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
608	Community Resource Planning and Development	5%		0%	
610	Domestic Policy Analysis	0%		15%	
721	Insects and Other Pests Affecting Humans	0%		40%	
722	Zoonotic Diseases and Parasites Affecting Humans	0%		20%	
802	Human Development and Family Well-Being	5%		5%	
803	Sociological and Technological Change Affecting Individuals, Families, and Communities	80%		10%	
903	Communication, Education, and Information Delivery	10%		10%	
	Total	100%		100%	

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

Persistent poverty is the greatest barrier to economic development in Louisiana communities. The poverty rate in Louisiana is 7 percent higher than other states in the U.S. (19.6 compared to 12.4 percent), and rural poverty in Louisiana continues to be more severe than urban (24.2 compared to 18.1percent).

According to the United States Department of Agriculture, twenty-four of sixty-four (or 38 percent) of rural parishes are considered 'persistent poverty' parishes, which means 20 percent or more of the population fell below the poverty line in 1970, 1980, 1990 and 2000 (as measured by the Census of Population Housing). In many rural parishes, broadband connectivity limits access to vast resources that can lead to a partial solution to this problem. Opportunities for agritourism development continue to grow as added value is sought for agricultural ventures in the state.

2. Scope of the Program

- In-State Extension
- In-State Research
- Multistate Research
- Multistate Extension
- Integrated Research and Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

- Information exists on researched-based best practices on how to educate rural residents concerning workforce development, rural business and agribusiness entrepreneurship, leadership and rural governance of community boards;
 - Rural community leaders, businesses and other stakeholders need access to community development educational programs but do not have adequate resources to gain access;
 - Rural stakeholders value access to community development programs; and
 - Funding is secure, sufficient and steady for this program

2. Ultimate goal(s) of this Program

- Goal 1: Foster sustainable rural development.
 - Objective 1: Promote value-added agriculture and agritourism.
 - Objective 2: Promote rural tourism.
 - Objective 3: Provide educational programming in entrepreneurship and workforce development.
 - Objective 4: Implement broadband initiative in Delta region.

- Goal 2: Build the capacity of local citizens to be key players in the future of their communities.
 - Objective 1: Increase individual and organizational leadership skills in communities.
 - Objective 2: Increase widespread participation in community decision-making.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2013	4.0	0.0	3.8	0.0

Year	Extension		Research	
	1862	1890	1862	1890
2014	4.0	0.0	3.6	0.0
2015	4.0	0.0	3.4	0.0
2016	4.0	0.0	3.3	0.0
2017	4.0	0.0	3.4	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Extension and research activities designed to reduce persistent poverty through entrepreneurship, agribusiness development, leadership and broadband educational programs.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension

Direct Methods	Indirect Methods
<ul style="list-style-type: none"> ● Education Class ● Workshop ● Group Discussion ● One-on-One Intervention 	<ul style="list-style-type: none"> ● Public Service Announcement ● Newsletters ● TV Media Programs ● eXtension web sites ● Web sites other than eXtension ● Other 1 (Social media)

3. Description of targeted audience

General public, elected officials, small business owners & governmental agencies, primarily in the Delta region of the state or northeast Louisiana; potential agritourism developers statewide.

V(G). Planned Program (Outputs)

NIFA no longer requires you to report target numbers for standard output measures in the Plan of Work. However, all institutions will report actual numbers for standard output measures in the Annual Report of Accomplishments and Results. The standard outputs for which you must continue to collect data are:

- Number of contacts
 - Direct Adult Contacts
 - Indirect Adult Contacts
 - Direct Youth Contacts
 - Indirect Youth Contact
 - Number of patents submitted
 - Number of peer reviewed publications
- Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(H). State Defined Outputs

1. Output Measure

- Number of Web page views
 - Number of Web page visits
- Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(I). State Defined Outcome

O. No	Outcome Name
1	Entrepreneurs and community leaders gain knowledge of sustainable economic development strategies in relationship to operating an e-business, broadband connectivity, leadership and agritourism.

Outcome # 1

1. Outcome Target

Entrepreneurs and community leaders gain knowledge of sustainable economic development strategies in relationship to operating an e-business, broadband connectivity, leadership and agritourism.

2. Outcome Type : Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)

- 610 - Domestic Policy Analysis
- 721 - Insects and Other Pests Affecting Humans
- 722 - Zoonotic Diseases and Parasites Affecting Humans
- 802 - Human Development and Family Well-Being
- 803 - Sociological and Technological Change Affecting Individuals, Families, and Communities
- 903 - Communication, Education, and Information Delivery

4. Associated Institute Type(s)

- 1862 Extension
- 1862 Research

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Public Policy changes
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Description

{NO DATA ENTERED}

V(K). Planned Program - Planned Evaluation Studies

Description of Planned Evaluation Studies

LSU AgCenter programs are evaluated on a four-year cycle with 1/4 of the major base programs evaluated each year. The Community Development program is scheduled for evaluation in FY 2015 and Agritourism is scheduled for 2016.

Web-based survey software is used to gather input on emerging issues, adoption and intention to

adopt recommended practices, use of LSU AgCenter resources and basic demographic information. Resulting information is used to develop impact reports and programming efforts are adjusted accordingly

V(A). Planned Program (Summary)

Program # 10

1. Name of the Planned Program

Youth Development

2. Brief summary about Planned Program

The focus of the Louisiana 4-H Youth Development program will continue to be on citizenship, healthy living and SET (Science, Engineering & Technology). In this state, 4-H continues to offer a broad range of learning opportunities for youth, including but not limited to, traditional school club programs, school enrichment activities and community service learning. Delivery of educational programs other than in-school clubs will be emphasized. Youth will be guided in developing skills that result in effective decision-making, planning, and interacting with others.

3. Program existence : Mature (More than five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
610	Domestic Policy Analysis	0%		70%	
806	Youth Development	100%		30%	
	Total	100%		100%	

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

Through educational programs delivered in organized clubs, special interest groups, after- school programs, school enrichment and other delivery methods, Louisiana 4-H offers a broad range of opportunities to develop life skills and leadership potential. Through these educational opportunities, youth become positive, productive, and capable citizens of their communities. Community, state, and national assessments through an advisory process facilitate providing meaningful, in-depth, quality program. Resources are allocated to areas where needs and potential for benefit can be maximized. Focus will be on Citizenship, Healthy Living, and Science & Technology.

According to KIDS COUNT, Louisiana has ranked 49th in the nation on childhood health and well-being since 2002. Louisiana received a D on the Report Card on Physical Activity and Health for Children and Youth. Most of the effort in this area will be reported under the NIFA Childhood Obesity initiative area.

While national volunteer rates going up (26.8%), only 20% of Louisiana citizens volunteer, which results in a state ranking of 47th in the nation. While youth and adult volunteers are serving to make a difference, there remains an unclear yet blatant sense among most that volunteer efforts matter little to the civic life and health of communities. Americans express despair over the drift away from core civic values to emphasize "winning at all costs." Greed and selfishness eclipse family, community, and responsibility.

America faces a crisis in its ability to keep up with the increasing demand for professionals in science, engineering and technology (SET). Youth in Louisiana are ill-prepared to enter careers in SET. In Louisiana, the percentages of 4th graders with below basic test scores were: Math-28%; Science-43% and Reading-48%. The percentages of 8th graders with below basic test scores were: Math-38%; Science-53% and Reading-36%. Less than half (44%) of youth had computers in their home.

2. Scope of the Program

- In-State Extension
- Multistate Extension
- Integrated Research and Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

- The LSU AgCenter will continue to be the primary source of unbiased research information that will lead to changing behavior.
 - Resources and personnel will be available for continued research and extension effort on this topic.
 - Participants will be motivated to make behavioral changes based on their expectations of economic returns or improved quality of life.
 - Expanded knowledge will result in behavior change.

2. Ultimate goal(s) of this Program

The Louisiana 4-H program will provide a mix of new and traditional programming emphasizing community service learning, science and technology and healthy living.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2013	90.0	0.0	0.3	0.0
2014	90.0	0.0	0.3	0.0
2015	90.0	0.0	0.3	0.0
2016	90.0	0.0	0.3	0.0
2017	90.0	0.0	0.3	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Age appropriate educational experiences will be provided to youth in the following four focus areas: Citizenship; Healthy Living; Science and Technology and Leadership.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension	
Direct Methods	Indirect Methods
<ul style="list-style-type: none"> ● Education Class ● Workshop ● Group Discussion ● One-on-One Intervention ● Demonstrations 	<ul style="list-style-type: none"> ● Public Service Announcement ● Billboards ● Newsletters ● TV Media Programs ● eXtension web sites ● Web sites other than eXtension ● Other 1 (Social media)

3. Description of targeted audience

Louisiana youth ages 9-19 as well as youth and adult volunteers.

V(G). Planned Program (Outputs)

NIFA no longer requires you to report target numbers for standard output measures in the Plan of Work. However, all institutions will report actual numbers for standard output measures in the Annual Report of Accomplishments and Results. The standard outputs for which you must continue to collect data are:

- Number of contacts
 - Direct Adult Contacts
 - Indirect Adult Contacts
 - Direct Youth Contacts
 - Indirect Youth Contact
- Number of patents submitted
- Number of peer reviewed publications

Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(H). State Defined Outputs

1. Output Measure

- Number of Web page views
 - Number of Web page visits
 - Number of youth participating in service projects
 - Number of hours of service performed by youth
 - Number of teens serving on state leadership boards
 - Number of current NIFA 4-H Programs of Distinction designations
- Clicking this box affirms you will continue to collect data on these items and report the data in the Annual Report of Accomplishments and Results.

V(I). State Defined Outcome

O. No	Outcome Name
1	Youth develop and strengthen skills which promote healthy living.
2	Increased scientific and technology literacy among Louisiana youth through hands-on scientific learning and discovery.
3	Youth are engaged as contributing citizens within their community.
4	Adults and youth gain knowledge and skills associated with personal, organizational and community leadership.
5	Youth will practice caring and respectful behaviors which lead to positive relationships.

Outcome # 1

1. Outcome Target

Youth develop and strengthen skills which promote healthy living.

2. Outcome Type : Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)

- 806 - Youth Development

4. Associated Institute Type(s)

- 1862 Extension

Outcome # 2

1. Outcome Target

Increased scientific and technology literacy among Louisiana youth through hands-on scientific learning and discovery.

2. Outcome Type : Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)

- 806 - Youth Development

4. Associated Institute Type(s)

- 1862 Extension

Outcome # 3

1. Outcome Target

Youth are engaged as contributing citizens within their community.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 806 - Youth Development

4. Associated Institute Type(s)

- 1862 Extension

Outcome # 4

1. Outcome Target

Adults and youth gain knowledge and skills associated with personal, organizational and community leadership.

2. Outcome Type : Change in Knowledge Outcome Measure

3. Associated Knowledge Area(s)

- 806 - Youth Development

4. Associated Institute Type(s)

- 1862 Extension

Outcome # 5

1. Outcome Target

Youth will practice caring and respectful behaviors which lead to positive relationships.

2. Outcome Type : Change in Action Outcome Measure

3. Associated Knowledge Area(s)

- 806 - Youth Development

4. Associated Institute Type(s)

- 1862 Extension

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Public Policy changes
- Government Regulations
- Competing Public priorities

- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Description

{NO DATA ENTERED}

V(K). Planned Program - Planned Evaluation Studies

Description of Planned Evaluation Studies

LSU AgCenter programs are evaluated on a four-year cycle with 1/4 of the major base programs evaluated each year. Areas in this initiative that are scheduled for evaluation are:

- FY2013-4-H Belonging
- FY2014-4-H School Gardens (SET)
- FY2015-4-H Citizenship, 4-H Science literacy
- FY2016-4-H Youth leadership, 4-H Environmental education

Resulting information is used to develop impact reports and programming efforts are adjusted accordingly.