

AGENCY NAME:	Clemson University – Public Service Activities		
AGENCY CODE:	P200	SECTION:	45



Fiscal Year 2014-15 Agency Budget Plan

FORM A – SUMMARY

RECURRING FUNDS (FORM B DECISION PACKAGES)	My agency is submitting the following recurring decision packages (Form B): 444, 530	
	For FY 2014-15, my agency is (mark "X"):	
	<input checked="" type="checkbox"/>	Requesting a net increase in recurring General Fund appropriations.
	<input type="checkbox"/>	Not requesting a net increase in recurring General Fund Appropriations.

CAPITAL & NON-RECURRING FUNDS (FORM C DECISION PACKAGES)	My agency is submitting the following one-time decision packages (Form C): 598	
	For FY 2014-15, my agency is (mark "X"):	
	<input checked="" type="checkbox"/>	Requesting capital and/or non-recurring funds.
	<input type="checkbox"/>	Not requesting capital and/or non-recurring funds.

PROVISOS	For FY 2014-15, my agency is (mark "X"):	
	<input type="checkbox"/>	Requesting a new proviso and/or substantive changes to existing provisos.
	<input type="checkbox"/>	Only requesting technical proviso changes (such as date references).
	<input checked="" type="checkbox"/>	Not requesting any proviso changes.

Please identify your agency's preferred contacts for this year's budget process.

	<u>Name</u>	<u>Phone</u>	<u>Email</u>
PRIMARY CONTACT:	Dr. George Askew	864-650-1466	gaskew@clermson.edu
SECONDARY CONTACT:	Melissa Kelley	864-656-5273	melissk@clermson.edu

I have reviewed and approved the enclosed FY 2014-15 Agency Budget Plan, which is complete and accurate to the extent of my knowledge.

AGENCY DIRECTOR (SIGN/DATE):		
AGENCY DIRECTOR (TYPE/PRINT NAME):	Dr. John W. Kelly, Vice President for Economic Development	
		9/30/13

This form must be signed by the department head – not a delegate.

AGENCY NAME:	Clemson University – Public Service Activities		
AGENCY CODE:	P200	SECTION:	45

FORM B – PROGRAM REVISION REQUEST

DECISION PACKAGE	444
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Provide the decision package number issued by the PBF system ("Governor's Request").

TITLE	Agribusiness & Emerging Farmers
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Provide a brief, descriptive title for this request.

AMOUNT	\$2,000,000
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What is the net change in requested appropriations for FY 2014-15? This amount should correspond to the decision package's total in PBF across all funding sources.

ENABLING AUTHORITY	<p>Sections 46-7-10 et seq. of the SC Code of Laws authorizes Clemson PSA to carry out Extension work as assigned by law.</p> <p>There has been no revision to this authority.</p>
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What state or federal statutory, regulatory, and/or administrative authority established this program? Is this decision package prompted by the establishment of or a revision to that authority?

FACTORS ASSOCIATED WITH THE REQUEST	Mark "X" for all that apply:
	<input type="checkbox"/> Change in cost of providing current services to existing program audience.
	<input type="checkbox"/> Non-mandated change in eligibility / enrollment for existing program.
	<input type="checkbox"/> Change in case load / enrollment under existing program guidelines.
	<input type="checkbox"/> Non-mandated program change in service levels or areas.
	<input type="checkbox"/> Loss of federal or other external financial support for existing program.
	<input checked="" type="checkbox"/> Exhaustion of fund balances previously used to support program.
<input checked="" type="checkbox"/> Proposed establishment of a new program or initiative.	

RECIPIENTS OF FUNDS	<p>The funding will be utilized by Clemson University PSA to fund positions and operating in locations across the state to support the Agribusiness & Emerging Farmers Initiative. Extension specialists will be located at the Pee Dee Research and Education Center in Florence, the Edisto Research and Education Center in Blackville, the Coastal Research and Education Center in Charleston and at the Baruch Institute in Georgetown. Regional agribusiness Extension agents will be located in the Pee Dee, Coastal, Savannah Valley, Midland, Piedmont and Upstate regions of South Carolina to ensure statewide programming.</p>
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What individuals or entities would receive these funds (contractors, vendors, grantees, individual beneficiaries, etc.)? How would these funds be allocated – using an existing formula, through a competitive process, based upon predetermined eligibility criteria?

AGENCY NAME:	Clemson University – Public Service Activities		
AGENCY CODE:	P200	SECTION:	45

RELATED REQUEST(S)	No
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Is this decision package associated with other decision packages requested by your agency or other agencies this year? Is it associated with a specific capital or non-recurring request?

MATCHING FUNDS	N/A
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Would these funds be matched by federal, institutional, philanthropic, or other resources? If so, identify the source and amount.

FUNDING ALTERNATIVES	This initiative is reliant upon support from additional state funding.
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What other possible funding sources were considered? Could this request be met in whole or in part with the use of other resources, including fund balances? If so, please comment on the sustainability of such an approach.

SUMMARY	<p>Agriculture and forestry are growing business sectors of the economy and new and beginning farmers and landowners are seeking information on start-up operations, marketing strategies, budget analyses, production efficiencies and the integration of technology. Established farming and forestry operations are also demanding new and timely information on these strategies as well. Clemson PSA can develop an agriculture and forestry Extension program to support these producers in risk assessment, crop selection, alternate cropping system selection, and capital investment decisions, as well as programming support to develop enterprise budgets and improvement of their Return on Investments.</p> <p>Agribusiness specialists will work in conjunction with Extension agents to provide advice in production techniques for agronomic crops, forestry, commercial horticulture, livestock and food processing. The specialists and agents also will support Clemson’s agribusiness degree program in the College of Agriculture Forestry and Life Sciences, 4-H programs and FFA programs to develop the next generation of industry leaders through statewide program development and outreach.</p> <p>Extension specialists will be located at the Pee Dee Research and Education Center in Florence, the Edisto Research and Education Center in Blackville, the Coastal Research and Education Center in Charleston and at the Baruch Institute in Georgetown. Regional agribusiness Extension agents will be located in the Pee Dee, Coastal, Savannah Valley, Midland, Piedmont and Upstate regions of South Carolina to ensure statewide programming.</p>
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AGENCY NAME:	Clemson University – Public Service Activities		
AGENCY CODE:	P200	SECTION:	45

METHOD OF CALCULATION	<p>This project will:</p> <ul style="list-style-type: none"> • Provide risk assessment metrics for emerging and existing farmers and forest landowners; • Develop: <ul style="list-style-type: none"> ○ Economic & market analysis tools for regional, national and international trade to improve the competitiveness of SC growers ○ Growth enhancement of the SC Locally Grown initiative through customized enterprise analysis ○ Public/private partnerships in agribusiness development
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Provide a summary of the rationale for the decision package. Why has it been requested? How specifically would the requested funds be used?

METHOD OF CALCULATION	<p>The request is based on the following calculations:</p> <p>Salary & fringe benefits for:</p> <ul style="list-style-type: none"> • 4 Area Agribusiness Agents (\$59,400 each) • 4 Agriculture and Natural Resources Outreach Agents (\$59,400 each) • 4 Agriculture and Natural Resources Business Specialists (\$118,800 each) • 2 Natural Resource Economists (\$118,800 each) • 1 Sustainable/Organic Agriculture Specialist (\$118,800) • 1 Program Assistant (\$46,200) <p>Graduate & Postdoctoral Stipends \$200,000 Operating funds for these positions and the statewide program \$447,000</p> <p>The above calculations are average starting salaries for the positions identified and may vary based on experience of the applicants for each position.</p>
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How was the amount of the request calculated? What factors could cause deviations between the request and the amount that could ultimately be required in order to perform the underlying work?

AGENCY NAME:	Clemson University – Public Service Activities		
AGENCY CODE:	P200	SECTION:	45

FUTURE IMPACT	<p>This request utilizes existing facilities. There are no future capital projects planned for this request.</p>
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Will the state incur any maintenance-of-effort or other obligations by adopting this decision package? What impact will there be on future capital and/or operating budgets if this request is or is not honored? Has a source of any such funds been identified and/or obtained by your agency?

PRIORITIZATION	<p>The Agribusiness and Emerging Farmers initiative could be modified to defer portions of the program to future fiscal years if full funding is not provided with this request.</p>
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If no or insufficient new funds are available in order to meet this need, how would the agency prefer to proceed? By using fund balances, generating new revenue, cutting other programs, or deferring action on this request in FY 2014-15?

INTENDED IMPACT	<p>Agribusiness specialists will work in conjunction with Extension agents to provide programming in production techniques for agronomic crops, forestry, commercial horticulture, livestock and food processing. The specialists and agents also will support Clemson’s agribusiness degree program in the College of Agriculture Forestry and Life Sciences, 4-H programs and FFA programs to develop the next generation of industry leaders through statewide program development and outreach. This assistance and guidance is intended to provide the industry with the information they need to minimize financial risk, maximize production value, and improve competitiveness and maximize their Return on Investment.</p>
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What impact is this decision package intended to have on service delivery and program outcomes, and over what period of time?

AGENCY NAME:	Clemson University – Public Service Activities		
AGENCY CODE:	P200	SECTION:	45

PROGRAM EVALUATION	<p>The program will be evaluated based on impacts reported through our annual Accountability report to the state. Clemson University PSA is in constant contact with constituents, commodity boards, SC Farm Bureau and other advisory boards throughout the state. Our communication with these groups allows us to provide them with program updates and allows them the opportunity to provide feedback on these same programs. Our State Extension Advisory Council will also provide feedback on the effectiveness of the program.</p>
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How would the use of these funds be evaluated? What specific outcome or performance measures would be used to assess the effectiveness of this program?

AGENCY NAME:	Clemson University – Public Service Activities		
AGENCY CODE:	P200	SECTION:	45

FORM B – PROGRAM REVISION REQUEST

DECISION PACKAGE	530
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Provide the decision package number issued by the PBF system (“Governor’s Request”).

TITLE	Precision Agriculture & Environmental Technology
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Provide a brief, descriptive title for this request.

AMOUNT	\$2,000,000
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What is the net change in requested appropriations for FY 2014-15? This amount should correspond to the decision package’s total in PBF across all funding sources.

ENABLING AUTHORITY	<p>Sections 46-7-30 et seq. of the SC Code of Laws authorizes Clemson PSA to operate Experiment Stations for farm demonstration work.</p> <p>There has been no revision to this authority.</p>
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What state or federal statutory, regulatory, and/or administrative authority established this program? Is this decision package prompted by the establishment of or a revision to that authority?

FACTORS ASSOCIATED WITH THE REQUEST	Mark “X” for all that apply:
	<input type="checkbox"/> Change in cost of providing current services to existing program audience.
	<input type="checkbox"/> Non-mandated change in eligibility / enrollment for existing program.
	<input type="checkbox"/> Change in case load / enrollment under existing program guidelines.
	<input type="checkbox"/> Non-mandated program change in service levels or areas.
	<input type="checkbox"/> Loss of federal or other external financial support for existing program.
	<input checked="" type="checkbox"/> Exhaustion of fund balances previously used to support program.
<input checked="" type="checkbox"/> Proposed establishment of a new program or initiative.	

RECIPIENTS OF FUNDS	<p>The funding will be utilized by Clemson University PSA to fund positions and operating in locations across the state to support the Precision Agriculture & Environmental Technology Initiative. Intelligent Farm research will be conducted at the Edisto and Pee Dee Research & Education Centers. Intelligent Forest research will be conducted at Baruch Institute in Georgetown and in the Clemson Experimental Forest on the main campus. Intelligent Watershed research will be conducted at all relevant PSA facilities. The resulting technology improvements will impact the entire state.</p>
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What individuals or entities would receive these funds (contractors, vendors, grantees, individual beneficiaries, etc.)? How would these funds be allocated – using an existing formula, through a competitive process, based upon predetermined eligibility criteria?

AGENCY NAME:	Clemson University – Public Service Activities		
AGENCY CODE:	P200	SECTION:	45

RELATED REQUEST(S)	<p>Yes. The Agricultural & Natural Resources Equipment request will support upgrades, replacements and enhancements to our research equipment and research infrastructure.</p>
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Is this decision package associated with other decision packages requested by your agency or other agencies this year? Is it associated with a specific capital or non-recurring request?

MATCHING FUNDS	N/A
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Would these funds be matched by federal, institutional, philanthropic, or other resources? If so, identify the source and amount.

FUNDING ALTERNATIVES	This initiative is reliant upon support from additional state funding.
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What other possible funding sources were considered? Could this request be met in whole or in part with the use of other resources, including fund balances? If so, please comment on the sustainability of such an approach.

SUMMARY	<p>Agriculture and forestry face increasing pressures to maximize their efficiency in irrigation, water quality assurance, fertilizer and pesticide applications and operational costs. To address these issues and provide agriculture producers and forest managers with solutions, Clemson seeks to expand and enhance its leading technology for modernizing real-time decision making and system monitoring on farms and in forests.</p> <p>GIS and sensor-based information gathering and management provide an information system needed to project impacts of management decisions and to monitor real-time impacts of storms, droughts, and insect and disease issues. Real-time information gathering and processing allows for precise application of water, fertilizer, and pesticide. It allows for fast reaction to emerging problems to minimize their impacts, such as drought, insect predation, environmental pollution, system failures and variable conditions within large production areas.</p> <p>Extension agents will be located in all regions of the state to assist farmers and foresters with the implementation and use of the technologies as they are developed and deployed.</p>
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Provide a summary of the rationale for the decision package. Why has it been requested? How specifically would the requested funds be used?

AGENCY NAME:	Clemson University – Public Service Activities		
AGENCY CODE:	P200	SECTION:	45

METHOD OF CALCULATION	<p>The request is based on the following calculations:</p> <p>Salary and fringe benefits for:</p> <ul style="list-style-type: none"> • 6 Research Scientists (\$118,800 each) <ul style="list-style-type: none"> ▪ Watershed & stream nutrient management ▪ GIS mapping ▪ Sensor and sensor network development & deployment • 2 Precision Agriculture Technical Support Positions (\$46,200 each) • 2 Precision Agriculture Technical Support Positions (\$59,400 each) • 3 Environmental Technology Support Positions (\$59,400 each) • 2 Program Assistants (\$46,200 each) <p>Graduate and Postdoctoral Stipends (\$250,000) Position and Program Operational Support (\$555,400)</p> <p>The above calculations are average starting salaries for the positions identified and may vary based on experience of the applicants for each position.</p>
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How was the amount of the request calculated? What factors could cause deviations between the request and the amount that could ultimately be required in order to perform the underlying work?

FUTURE IMPACT	<p>This request utilizes existing facilities. There are no future capital building projects envisioned. However, this funding will enable Clemson to keep its programs at the forefront of agriculture and environmental technology. Operating costs to maintain this technology is included within our request.</p>
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Will the state incur any maintenance-of-effort or other obligations by adopting this decision package? What impact will there be on future capital and/or operating budgets if this request is or is not honored? Has a source of any such funds been identified and/or obtained by your agency?

PRIORITIZATION	<p>The Precision Agriculture & Environmental Technology initiative could be modified to defer portions of the program to future fiscal years if full funding is not provided with this request.</p>
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If no or insufficient new funds are available in order to meet this need, how would the agency prefer to proceed? By using fund balances, generating new revenue, cutting other programs, or deferring action on this request in FY 2014-15?

AGENCY NAME:	Clemson University – Public Service Activities		
AGENCY CODE:	P200	SECTION:	45

INTENDED IMPACT	<p>GIS and sensor-based information gathering and management provide an information system needed to project impacts of management decisions and to monitor real-time impacts of storms, droughts, and insect and disease issues. Real-time information gathering and processing allows for precise application of water, fertilizer, and pesticides. It allows for fast reaction to emerging problems to minimize their impacts. Development and deployment of new technology helps farmers minimize their costs and maximize the efficiency of their operations.</p>
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What impact is this decision package intended to have on service delivery and program outcomes, and over what period of time?

PROGRAM EVALUATION	<p>The program will be evaluated based on impacts reported through our annual Accountability report to the state. Clemson University PSA is in constant contact with constituents, commodity boards, SC Farm Bureau and other advisory boards throughout the state. Our communication with these groups allows us to provide them with program updates and allows them the opportunity to provide feedback on these same programs. Our State Extension Advisory Council will also provide feedback on the effectiveness of the program.</p>
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How would the use of these funds be evaluated? What specific outcome or performance measures would be used to assess the effectiveness of this program?

AGENCY NAME:	Clemson University – Public Service Activities		
AGENCY CODE:	P200	SECTION:	45

FORM C – CAPITAL OR NON-RECURRING APPROPRIATION REQUEST

DECISION PACKAGE	598
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Provide the decision package number issued by the PBF system ("Governor's Request").

TITLE	Agriculture & Natural Resources Equipment
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Provide a brief, descriptive title for this request.

AMOUNT	\$5,000,000
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How much is requested for this project in FY 2014-15?

BUDGET PROGRAM	(II.A) Livestock-Poultry Health – General & (III.) Agricultural Research
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Identify the associated budget program(s) by name and budget section.

SUMMARY	<p>Clemson University has ongoing agriculture and natural resources research programs at our Research and Education Centers in Florence (Pee Dee REC), Blackville (Edisto REC), Charleston (Coastal REC), Georgetown (Baruch) and on the farms at the main campus in Clemson. In particular, we are conducting an Advanced Plant Technology program at the Pee Dee REC , Precision Agriculture research at the Edisto REC to improve the efficiency and effectiveness of agriculture production and sensor-based watershed monitoring research at Baruch. Additionally, the Livestock & Poultry Health Unit in Columbia provides support to the animal agriculture industry.</p> <p>These highly focused programs require modern equipment that is representative of the equipment currently being used, under consideration for use, or being developed for use by South Carolina's farmers, agricultural producers, and forest managers, as well as equipment for laboratories that are developing the new technologies. Modern lab equipment for plant breeding is needed, as well as remote sensing technology, irrigation equipment and farming machinery for production agriculture. The Livestock & Poultry Health Unit also needs to maintain current levels of technology and equipment.</p>
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AGENCY NAME:	Clemson University – Public Service Activities		
AGENCY CODE:	P200	SECTION:	45

	<p>Specifically, these funds will be used in the following areas:</p> <ul style="list-style-type: none"> • To purchase equipment for agriculture research at Pee Dee, Edisto and Coastal RECs, as well as Clemson University’s campus research farms • To purchase and develop GIS and Sensor-Based laboratory and field technology at the Baruch Institute • To replace an incinerator at Livestock & Poultry Health to remain in compliance for the disposal of animals after the diagnostic work has been completed.
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Provide a summary of the project and explain why it is necessary.

RELATED REQUEST(S)	<p>A portion of the requested funding for equipment will be utilized to enhance the recurring fund request for Precision Agriculture and Environmental Technology (Decision Package 530).</p>
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Is this decision package associated with other decision packages requested by your agency or other agencies this year? Is it associated with a specific capital or non-recurring request?

MATCHING FUNDS	<p>N/A</p>
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Would these funds be matched by federal, institutional, philanthropic, or other resources? If so, identify the source and amount.

AGENCY NAME:	Clemson University – Public Service Activities		
AGENCY CODE:	P200	SECTION:	45

FUNDING ALTERNATIVES	<p>This initiative is reliant upon support from additional state funding.</p>
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What other possible funding sources were considered?

LONG-TERM PLANNING AND SUSTAINABILITY	<p>This \$5M request is for equipment that needs to be updated or replaced. If fully funded, there should be no need for additional equipment funding requests for the next 5 years, absent of unexpected equipment failure or significant changes in technology.</p>
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What other funds have already been invested in this project (source/type, amount, timeframe)? Will other capital and/or operating funds for this project be requested in the future? If so, how much, and in which fiscal years? Has a source for those funds been identified/secured?

OTHER APPROVALS	<p>Equipment purchases will require no additional approvals.</p>
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What approvals have already been obtained? Are there additional approvals that must be secured in order for the project to succeed? (Institutional board, JBRC, BCB, etc.)