

V(A). Planned Program (Summary)

Program # 7

1. Name of the Planned Program

Sustainable Energy

Reporting on this Program

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
111	Conservation and Efficient Use of Water	0%		1%	
123	Management and Sustainability of Forest Resources	22%		0%	
133	Pollution Prevention and Mitigation	0%		2%	
201	Plant Genome, Genetics, and Genetic Mechanisms	0%		30%	
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants	0%		3%	
204	Plant Product Quality and Utility (Preharvest)	0%		11%	
205	Plant Management Systems	0%		2%	
206	Basic Plant Biology	0%		5%	
211	Insects, Mites, and Other Arthropods Affecting Plants	0%		1%	
212	Pathogens and Nematodes Affecting Plants	0%		1%	
302	Nutrient Utilization in Animals	0%		1%	
305	Animal Physiological Processes	0%		3%	
402	Engineering Systems and Equipment	22%		4%	
403	Waste Disposal, Recycling, and Reuse	0%		1%	
503	Quality Maintenance in Storing and Marketing Food Products	0%		3%	
511	New and Improved Non-Food Products and Processes	0%		23%	
605	Natural Resource and Environmental Economics	22%		8%	
608	Community Resource Planning and Development	34%		0%	
609	Economic Theory and Methods	0%		1%	
	Total	100%		100%	

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2012	Extension		Research	
	1862	1890	1862	1890
Plan	0.5	0.0	7.5	0.0
Actual Paid Professional	0.5	0.0	7.0	0.0
Actual Volunteer	0.0	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
21613	0	226902	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
21613	0	226902	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
172975	0	4639188	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

UC ANR's integrated research and extension activities will conduct research projects, workshops, education classes and demonstrations, as well as one-on-one interventions. In addition, the programs will use PSAs, newsletters, mass media, web sites and collaborations with other agencies and organizations to create and deliver programs.

2. Brief description of the target audience

- Relevant agency and private-sector partners
- Lawmakers working on issues related to energy
- Members of the public in general
- Agricultural producers of crops for use as biofuels

3. How was eXtension used?

UC ANR academics used eXtension to participate in and contribute to many Communities of Practice, to answer "Ask an Expert" questions, and for other networking purposes.

V(E). Planned Program (Outputs)

1. Standard output measures

2012	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	0	0	0	0

2. Number of Patent Applications Submitted (Standard Research Output)
Patent Applications Submitted

Year: 2012
 Actual: 1

Patents listed

1. Short Chain Volatile Hydrocarbon Production Using Fast Growth Microalgae

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2012	Extension	Research	Total
Actual	0	24	24

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Classes/Short Courses Conducted

Year	Actual
2012	0

Output #2

Output Measure

- Workshops Conducted

Year	Actual
2012	0

Output #3

Output Measure

- Demonstrations and Field Days Conducted

Year	Actual
2012	0

Output #4

Output Measure

- Newsletters Produced

Year	Actual
2012	0

Output #5

Output Measure

- Web Sites Created or Updated

Year	Actual
2012	0

Output #6

Output Measure

- Research Projects Conducted

Year	Actual
2012	14

Output #7

Output Measure

- Videos, Slide Sets and Other AV or Digital Media Educational Products Created

Year	Actual
2012	0

Output #8

Output Measure

- Manuals and Other Printed Instructional Materials Produced

Year	Actual
2012	0

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

Outcome #1

1. Outcome Measures

{No Data Entered}

V(H). Planned Program (External Factors)

External factors which affected outcomes

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

Brief Explanation

V(I). Planned Program (Evaluation Studies)

Evaluation Results

The Report Overview's federal Planned Program summary of accomplishments describes the significant research developments. No extension clientele outcomes measured through evaluation studies were captured during FY 2012.

Key Items of Evaluation

The Report Overview's federal Planned Program summary of accomplishments highlights ANR's most significant work during FY 2012, especially the research developments.