

Management of Ecosystems- AFES

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V(A). Planned Program (Summary)

1. Name of the Planned Program

Management of Ecosystems- AFES

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
121	Management of Range Resources	0%		10%	
122	Management and Control of Forest and Range Fires	0%		20%	
123	Management and Sustainability of Forest Resources	0%		15%	
125	Agroforestry	0%		5%	
131	Alternative Uses of Land	0%		5%	
134	Outdoor Recreation	0%		10%	
136	Conservation of Biological Diversity	0%		20%	
610	Domestic Policy Analysis	0%		5%	
803	Sociological and Technological Change Affecting Individuals, Fam	0%		10%	
Total		0%		100%	

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	0.0	3.6	0.0
Actual	0.0	0.0	7.7	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
	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	406377	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	1764107	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

•Growth and Yield for the Alaska Northern Forest: this project provides a comprehensive database of boreal forest conditions and dynamics in Alaska. •Evapotranspiration Interior Alaska: Winter lake level measurements were obtained during 2006-2007 in an attempt to isolate a net groundwater flow component from the overall rate of loss. •Forest Growth and Climate Change: Fertilization and thinning studies were developed in birch, aspen and white spruce forest types representing young, middle and old age classes in interior Alaska. Both climatic and tree growth monitoring has continued through 2007.

•Climate sensitivity of tree growth:A comprehensive set of long-term monitoring photos was collected in 6 forest types (white spruce, aspen, Alaska birch) including both young post-fire regenerating forest and mature forest. The study is documenting patterns and events in forest succession and forest health and began in 1988.

2. Brief description of the target audience

•Growth and Yield for the Alaska Northern Forest: Federal, state and community land managers, state and federal agency personnel, commercial and private foresters, forest industries.

•Evapotranspiration in Interior Alaska: Local, state, and federal water resource managers and the scientific community interested in hydrology, lake-side property owners. •Forest Growth and Climate Change: State and private forest and land managers; undergraduate and graduate students, state of Alaska & community governments. •Climate sensitivity of tree growth: Congress - 2 invited testimonies, individual briefings of 2 members, 6 staff. Alaska Legislature - individual briefings of 2 members. Alaska Governor's Cabinet - sub cabinet working group on climate change adaptations. Providing information in response to requests. Alaska village residents. News media. Alaska resource managers. Young scientists interested in long-term forest research - University senior thesis students, undergraduate applicants to graduate school, interdisciplinary Resilience and Adaptation IGERT project. •Graduate and undergraduate students.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	300	1500	0	0
2007	300	1759	0	0

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

Patent Applications Submitted

Year	Target
Plan:	0
2007:	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	0	9	9

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

Identify agricultural and forestry management practices that minimize environmental risks

Year	Target	Actual
2007	3	3

Output #2

Output Measure

Models developed

Year	Target	Actual
2007	5	6

Output #3

Output Measure

Databases for land resources planning, policy, and law as it relates to human activity and annual updates for tourism.

Year	Target	Actual
2007	3	11

V(G). State Defined Outcomes

O No.	Outcome Name
1	Changes in land-use patterns that will support sustainable development
2	Adoption of models for ecosystem management.
3	Regulatory agency and private sector adoption of soil and wetlands criteria for Alaska
4	Reduce instances of surface water contamination related to resource development
5	Adoption of criteria for effective conflict resolution

Outcome #1

1. Outcome Measures

Not reporting on this Outcome for this Annual Report

2. Associated Institution Types

3a. Outcome Type:

3b. Quantitative Outcome

Year	Quantitative Target	Actual
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3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
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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

Climate change and policy decisions are the most important external factors that affect these outcomes. Since the majority of Alaska is consumed by national parks, reserves and preserves these management issues are national issues as well.

In many areas of Alaska moisture stress from drought has played a large part in tree decline, while climate change continues to suggest threats in the not-to distant future. Lack of adequate funding continues to hamper efforts to understand these threats.

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

Before-After (before and after program)

During (during program)

Evaluation Results

{No Data Entered}

Key Items of Evaluation

{No Data Entered}