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PROGRAM/DEGREE REQUIREMENT CHANGE (MAJOR/MINOR)

SUBMITTED BY:

Department	CRCD Science Department	College/School	College of Rural and Community Development
Prepared by	Todd Radenbaugh	Phone	907-842-5109
Email Contact	taradenbaugh@alaska.edu	Faculty Contact	Todd Radenbaugh

See <http://www.uaf.edu/uafgov/faculty/cd> for a complete description of the rules governing curriculum & course changes.

PROGRAM IDENTIFICATION:

DEGREE PROGRAM	Renewable Resources
Degree Level: (i.e., Certificate, A.A., A.A.S., B.A., B.S., M.A., M.S., Ph.D.)	AAS

A. CHANGE IN DEGREE REQUIREMENTS: (Brief statement of program/degree changes and objectives)

The outlined changes to the Renewable Resources (RR) program are essential as the program has become outdated and in need to become more relevant to the modern issues of globalization, climate change, and other renewable resource issues. The program should also become better aligned with current certificates and degrees offered by UAF. First, since the time of RR's creation, the name Renewable Resources has become dated and has gained connotations that are no longer relevant to the original intent of this program. Second, with the adoption of the Environmental Studies (ENV) certificate in 2009, as well as a proposed Occupational Endorsement in Sustainable Energy, this proposed AAS degree would allow these students to seamlessly advance to the AAS level. Third, the Geography Department has an Environmental Studies Option (Geography Option 1, pg 168 of 2011-12 catalog) in their Bachelor of Science Degree. This proposed ENVI AAS degree would be aligned with this Geography Option.

After discussions with the College of Rural and Community Development (CRCD) Associate Dean, the Dean of the School of Natural Resources and Agricultural Sciences (SNRAS), the UAF Department Head of Geography, the UAF Bristol Bay Campus (BBC) Director, and the BBC advisory council, a consensus was made to update the RR program and to change the name to reflect modern relevancy. Environmental Studies was chosen as a new name because it more accurately defines the goal of the AAS degree as it is a broad field that includes topics such as renewable resources, science policy, ecosystem health, and sustainable energy.:-

A recent University of Alaska Fairbanks (UAF) review of the RR program indicated some original program deficiencies (as outlined in section D of this document).

Thus, this document hopes to address the current RR program deficiencies and provide a fresh and updated curriculum that will educate rural students on modern environmental subjects. In addition, the program will become more relevant as it will incorporate a pathways for the existing ENVI certificate and the proposed Occupational Endorsement in Sustainable Energy to better serve the needs of students.

Proposed changes:

- Change program name from Renewable Resources AAS to Environmental Studies AAS.
- Request to use ENVI program and course designator.
- Change program description to meet regionally relevant curriculum.
- Include ENVI courses many of which are designed specifically for rural Alaska

and distance education delivery.

- Remove courses from the curriculum that either do not meet student needs or have been difficult for rural students to access.
- Add pathways to align relevant and existing UAF Occupational Endorsements and Certificates (such as Sustainable Energy and ENVI Certificate) as feeders into this AAS degree.

The original mission of the program was to provide students, with a particular attention to rural Alaska Native and rural students, with quality academic instruction and training responsive to regional environmental needs including renewable resources ecosystem science and sustainable energy. This mission will not change. Moreover, the program's goal, to help empower graduates and their communities to adapt to the overwhelming social, ecological, and economic changes presently occurring while protecting and enriching regional culture, also will be met.

The proposed changes will broaden and strengthen the degree program and designed to increase student options and enrollment. The proposed changes should ensure that place-based students statewide will be able to complete program requirements.

Objectives:

- To prepare students for direct employment or continue on to a baccalaureate degree and other course work in environmental studies.
- To provide students with tools needed to develop environmental job-related skills in the environmental studies including the ecosystem health and sustainable energy fields.
- To promote place-based citizen environmental studies projects in the areas of ecosystem health and sustainable energy
- To prepared students to advance into a science, engineering, or policy related baccalaureate program or other related undergraduate course work.

B. CURRENT REQUIREMENTS AS IT APPEARS IN THE CATALOG:

Renewable Resources

College of Rural and Community Development
Rural and Economic Development Division
Fairbanks Campus (907) 474-6433
Bristol Bay Campus (800) 478-5109 or (907) 842-5109
Chukchi Campus (907) 442-3400
Interior-Aleutians Campus (907) 474-6433
Kuskokwim Campus (907) 543-4582
Northwest Campus (907) 443-2201
www.uaf.edu/rural/

A.A.S. Degree

Minimum Requirements for Degree: 60 Credits

[Downloadable PDF \(55K\)](#)

The renewable resources degree program is offered by the College of Rural and Community Development on the Fairbanks campus and through rural campuses. Students interested in the

degree should first contact a faculty advisor at the Bristol Bay Campus (toll free number above) to discuss program content, requirements and expectations. This two-year A.A.S. degree program helps students gain employment with state, federal or tribal resource management agencies, Alaska Native Claims Settlement Act (ANCSA) corporations or other entities. For those already employed in this field, this program provides an opportunity to improve job skills.

Major--A.A.S. Degree

1. Complete the [general university requirements](#).
 2. Complete the [A.A.S. degree requirements](#) (As part of the A.A.S. degree requirements, complete MATH 103X or MATH 107X, CHEM 103X or CHEM 105X.)
 3. Complete the following program (major) requirements:*
- a. Complete the following:
 - ECON 235--Introduction to Natural Resource Economics--3 credits
 - NRM 101--Natural Resources Conservation and Policy--3 credits
 - NRM 204--Public Lands Law and Policy--3 credits
 - RD 255--Rural Alaska Land Issues--3 credits
 - RD 280--Resource Management Research Techniques--3 credits
 - b. Complete one course from each of the following groups:
 - Group 1**
 - BIOL 104--Natural History of Alaska--3 credits
 - BIOL 104X--Natural History of Alaska--4 credits
 - BIOL 105X--Fundamentals of Biology I--4 credits
 - Group 2**
 - GEOG 205--Elements of Physical Geography--3 credits
 - GEOG 205X--Elements of Physical Geography--4 credits
 - GEOG 100X--Introduction to Earth Science--4 credits
 - NRM 380W--Soils and the Environment--3 credits
 - Group 3**
 - NRM 102--Practicum in Natural Resources Management--1-2
 - WLF 304--Wildlife Internships--1-3
 - c. Complete the following:
 - CIOS 100--Introduction to Personal Computers (1)
and CIOS 111--Computer Software for Beginners (2)
or CIOS 150--Computer Business Applications (3)--3 credits
 - FISH 101--Introduction to Fisheries (3)
and WLF 101--Survey of Wildlife Science (1)
or ABUS 223--Real Estate Law (3)
and RD 256--Co-Management of Renewable Resources (3)
or BIOL 271--Principles of Ecology (4)
and WLF 201--Wildlife Management Principles (3)--4-7
 - d. Complete 9-14 credits from the following courses:
 - ANS 310--The Alaska Native Lands Settlement--3 credits
 - ANTH 242--Native Cultures of Alaska--3 credits
 - BIOL 106X--Fundamentals of Biology II--4 credits
 - BIOL 150--Introduction to Marine Biology--3 credits
 - BIOL 239--Introduction to Plant Biology--4 credits

BIOL 271--Principles of Ecology--4 credits
CE 112--Elementary Surveying--3 credits
EMS 152--Emergency Trauma Training First Responder--3 credits
ENGL 314W,O/2--Technical Writing--3 credits
FISH 101--Introduction to Fisheries--3 credits
MIN 101--Minerals, Man and the Environment--3 credits
NRM 251--Silvics and Dendrology--4 credits
NRM 304--Perspectives in Natural Resources Management--3 credits
NRM 340--Natural Resources Measurement and Inventory--3 credits
RD 265--Perspectives on Subsistence in Alaska--3 credits
RD 492--Rural Development Leadership Seminar--3 credits
STAT 200--Elementary Probability and Statistics--3 credits
WLF 101--Survey of Wildlife Science--1 credit
WLF 201--Wildlife Management Principles--3 credits
WLF 303W--Wildlife Management Techniques--3 credits
Or other advisor approved renewable resource related electives--9-14 credits

4. Minimum credits required--60

* *Student must earn a C grade or better in each course.*

Note: Prerequisites required for many courses.

**C. PROPOSED REQUIREMENTS AS IT WILL APPEAR IN THE CATALOG WITH THESE CHANGES:
(Underline new wording ~~strike-through old wording~~ and use complete catalog format)**

~~Renewable Resources-~~ Environmental Studies

College of Rural and Community Development

~~Rural and Economic Development Division~~

~~Fairbanks Campus (907) 474-6433~~

~~Bristol Bay Campus (800) 478-5109 or (907) 842-5109~~

~~Chukchi Campus (907) 442-3400~~

~~Interior Aleutians Campus (907) 474-6433~~

~~Kuskokwim Campus (907) 543-4582~~

~~Northwest Campus (907) 443-2201~~

Primary point of contact with the program head: UAF Bristol Bay Campus

Phone: 907-842-5109 or 800-478-5109

www.uaf.edu/rural/

Certificate; A.A.S. Degree

Minimum Requirements for Degree: 60 Credits

Downloadable PDF (55K)

~~The renewable resources degree program is offered by the College of Rural and Community Development on the Fairbanks campus and through rural campuses. Students interested in the degree should first contact a faculty advisor at the Bristol Bay Campus (toll free number above) to discuss program content, requirements and expectations. This two year A.A.S. degree program helps students gain employment with state, federal or tribal resource management agencies, Alaska Native Claims Settlement Act (ANCSA) corporations or other entities. For those already employed in this field, this program provides an opportunity to improve job skills.~~

The Environmental Studies AAS degree is a place-based program that emphasizes renewable resources, ecosystem health, and sustainable energy that can be applied across Alaska. The program provides students the basic academic preparation, technical know-how, hands-on experience, and

vocationally-related skills necessary for entry-level environmental careers and tools needed to enter a science-related baccalaureate program. Since environmental studies are interdisciplinary, each student decides to take one of two tracks for their foundation science courses – ecosystem health or sustainable energy. Most of the course work can be completed via e-learning, but there are a few week-long science intensives that provide the important field and laboratory skills needed in environmental studies.

Admission is open to all individuals, especially those interested in entering into a science-related environmental field. Students interested in the degree should first contact a faculty advisor at the CRCD or the UAF Bristol Bay Campus to discuss program content, requirements and expectations.

Students should possess a high school diploma or GED. Due to the science focus of the AAS, it is noted that students seeking admission to this program will benefit from having completed a high school lab-based science course, preferably in biology, chemistry, or physics, as well as math through the algebra level. Students also should be familiar with computer applications such as word processing, spreadsheets, database, and operating systems. Students planning on continuing into a baccalaureate program need to work closely with their advisors and are encouraged to select courses meeting core requirements in the associate or baccalaureate disciplines and courses with an X designator.

Students who do not take the ACT/SAT are required to take the Acuplacer test and will be placed into the appropriate level course.

To remain in good standing students must:

- a) Maintain an overall 2.0 grade point average in all coursework,
- b) Maintain a 2.5 grade average or better in all core Math and Science courses

Major—A.A.S. Degree

1. Complete the general university requirements.
2. ~~Complete the A.A.S. degree requirements (As part of the A.A.S. degree requirements, complete MATH 103X or MATH 107X, CHEM 103X or CHEM 105X.)~~
3. ~~Complete the following program (major) requirements:*~~
 - a. ~~Complete the following:~~
 - ~~ECON 235—Introduction to Natural Resource Economics—3 credits~~
 - ~~NRM 101—Natural Resources Conservation and Policy—3 credits~~
 - ~~NRM 204—Public Lands Law and Policy—3 credits~~
 - ~~RD 255—Rural Alaska Land Issues—3 credits~~
 - ~~RD 280—Resource Management Research Techniques—3 credits~~
 - b. ~~Complete one course from each of the following groups:~~
 - Group 1**
 - ~~—BIOL 104—Natural History of Alaska—3 credits~~
 - ~~—BIOL 104X—Natural History of Alaska—4 credits~~
 - ~~—BIOL 105X—Fundamentals of Biology I—4 credits~~
 - Group 2**
 - ~~—GEOG 205—Elements of Physical Geography—3 credits~~

- ~~— GEOG 205X Elements of Physical Geography 4 credits~~
- ~~— GEOS 100X Introduction to Earth Science 4 credits~~
- ~~— NRM 380W Soils and the Environment 3 credits~~

Group 3

- ~~— NRM 102 Practicum in Natural Resources Management 1 2~~
- ~~— WLF 304 Wildlife Internships 1 3~~

e. Complete the following:

- ~~CIOS 100 Introduction to Personal Computers (1)~~
- ~~— and CIOS 111 Computer Software for Beginners (2)~~
- ~~— or CIOS 150 Computer Business Applications (3) 3 credits~~
- ~~FISH 101 Introduction to Fisheries (3)~~
- ~~— and WLF 101 Survey of Wildlife Science (1)~~
- ~~— or ABUS 223 Real Estate Law (3)~~
- ~~— and RD 256 Co Management of Renewable Resources (3)~~
- ~~— or BIOL 271 Principles of Ecology (4)~~
- ~~— and WLF 201 Wildlife Management Principles (3) 4 7~~

2. Complete the A.A.S. degree requirements (see page 97)..... 15

a. Written and Oral Communication....(complete the following)

- ENGL 111X – Introduction to Academic Writing..... 3 AND
- ENGL 213X – Academic Writing about the Social and
- Natural Sciences..... 3 AND
- COMM 131X – Fundamentals of Oral Communication
- Group Context..... 3 OR
- COMM 141X – Fundamentals of Oral Communication
- Public Context..... 3

b. Computation.....(complete one of the following)

- DEVM 105..... 3 OR
- DEVM 106..... 3 OR
- Other higher math designated courses 3

c. Human Relations.....(complete one of the following)

- ANTH 100X/SOC 100X – Individual, Society & Culture..... 3 OR
- ABUS 154 – Human Relations 3 OR
- HUMS 120 – Cultural Diversity in Human Services..... 3 OR
- Other program approved discipline-based human relations course of discipline-
- based courses with embedded human relations content..... 3

3. Complete the following major requirements* 26-29

a. Environmental Studies Core Courses...(complete all 5)

- ENVI 101 – Introduction to Environmental Science 3 AND
- ENVI 160 – Internship in Environmental Studies..... 1-2 AND
- ENVI 220 – Introduction to Sustainable Energy..... 3 AND
- ENVI 260 – Field Techniques for Environmental Technicians 2 AND
- ENVI 265 – Intro. to Methods in Environmental Studies Reporting... 2

b. Science Foundation Courses...(complete TWO of the following lab courses)

- BIOL 100X – Human Biology 4 OR
- BIOL 103X – Biology and Society 4 OR
- BIOL 104X – Natural History of Alaska 4 OR
- BIOL 115X – Fundamentals of Biology I..... 4 OR
- BIOL 116X – Fundamentals of Biology II..... 4 OR
- CHEM 100X – Chemistry in Complex Systems..... 4 OR
- CHEM 103X – Basic General Chemistry 4 OR

CHEM 104X – A Survey of Organic Chemistry and Biochemistry 4 OR
CHEM 105X – General Chemistry I..... 4 OR
CHEM 106X – General Chemistry II..... 4 OR
GEOG 111X – Elements of Physical Geography 4 OR
PHYS 102X – Energy and Society..... 4

c. ENVI Disciplinary Courses (complete one of the following tracks; note that the lab courses specific to the tracks are in addition to the two lab courses in section b)

Ecosystem Health Track

BIOL 104X – Natural History of Alaska 4 AND
ENVI 110 – Introduction to Water Quality 1: Measurement..... 1 AND
ENVI 130 – Intro to the National Environmental Policy Act..... 1
Or other courses approved by the program head

Sustainable Energy Track

CTT 100 – Construction Technology Core..... 3 AND
ENVI 120 – Home Energy Basics..... 1 AND
PHYS 102X – Energy and Society..... 4
Or other courses approved by the program head

d. Library Sciences

LS 101X – Library Information and Research 1

d. Complete 9-14 27 credits from the following courses:

ANS 310 – The Alaska Native Lands Settlement – 3 credits

ANTH 242 – Native Cultures of Alaska – 3 credits

* Student must earn a C grade (2.0) or better in each course.

4. Complete 15-19 credits from the following electives to reach to 60 credits.

(Students take courses based on their science concentrations in Ecosystem Health or Sustainable Energy)

ANS 310 – The Alaska Native Lands Settlement..... 3
BIOL 103X – Biology and Society 4
BIOL 105X – Fundamentals of Biology I..... 4
BIOL 106X – Fundamentals of Biology II 4
BIOL 115X – Fundamentals of Biology I..... 4
BIOL 116X – Fundamentals of Biology II 4
BIOL 271 – Principles of Ecology 4
BIOL 277 – Introduction to Conservation Biology..... 3
CE 112 – Elementary Surveying 3
CHEM 103X – Basic General Chemistry 4
CHEM 104X – Beginnings in Biochemistry..... 4
CHEM 105X – General Chemistry I..... 4
CHEM 106X – General Chemistry II..... 4
ECON 111 – Economics of Rural Alaska..... 3
EMS 152 – Emergency Trauma Training First Responder 3
ENGL 314W,O/2 – Technical Writing 3
ENVI 131 – Environmental Science Internship..... 1-2
ES166 – Electric Car Conversion 2
FISH 101 – Introduction to Fishes 3
HLRM 130 – Research Field Logistics..... 2
MIN 101 – Minerals, Man and the Environment 3
NRM 101 – Natural Resources Conservation and Policy..... 3
NRM 107 – Leaves of Our Lives: Food 1
NRM 108 – Leaves of Our Lives: Diversity 1
NRM 109 – Leaves of Our Lives and Fungi..... 1

NRM 277 – Introduction to Conservation Biology	3
NRM 251 Silvics and Dendrology.....	4
NRM 304O – Perspectives in Natural Resources Management.....	3
NRM 340 – Natural Resources Measurement and Inventory.....	3
PGEN 101 – Intro to Power Generation, Distribution and Alternative Energy	3
<u>RD 200 – Rural Development in the North</u>	<u>3</u>
<u>RD 250 – Grant Writing for Community Development</u>	<u>1-3</u>
<u>RD 300 – Rural Development in a Global Perspective.....</u>	<u>3</u>
RD 265--Perspectives on Subsistence in Alaska	3
RD 492--Rural Development Leadership Seminar	3
STAT 200X – Elementary Probability and Statistics.....	3
WLF 101--Survey of Wildlife Science	1
WLF 201--Wildlife Management Principles	3
WLF 303W--Wildlife Management Techniques	3
Or Other Advisor Approved Electives	

Minimum credits required..... 60

Note: Prerequisites required for many courses.

D. ESTIMATED IMPACT

WHAT IMPACT, IF ANY, WILL THIS HAVE ON BUDGET, FACILITIES/SPACE, FACULTY, ETC.

BUDGET

ENVI program development and implementation is directly supported by many federal and state grants including the United States Department of Agriculture (USDA), National Institutes for Food and Agriculture (NIFA), Alaska Native/Native Hawaiian (AN/NH) Serving Institutions Higher Education Grants program and National Ocean and Atmospheric Administration (NOAA). The goals of these grants are to increase the number of AN/NH and rural students engaged in Science Technology Engineering and Math (STEM) careers. These careers require training in topics such as ecosystem health and sustainable energy. This program serves these requirements by increasing the number of rural students entering associate degree programs, but also promoting Bachelor degrees and preparing students for entry-level science employment.

While faculty for this program are primarily located at the UAF Bristol Bay Campus, other faculty and staff from campuses across Alaska, both urban and rural, will be involved. The program is estimated to generate approximately \$34,000 per year with a minimum of eight full-time students. As student participation increases, tuition income will increase gradually replacing grant funding.

FACILITIES/SPACE NEEDS

Office and classroom space will be provided by existing University urban and rural campuses throughout Alaska. Some of the rural communities with available facilities include Galena, Fort Yukon, Tok, Nenana, McGrath, Unalaska, Dillingham, Bethel, Nome, Kotzebue, Barrow, and Sitka. In villages without a University facility, training space can be found in the local schools and businesses and are reasonably supported by student tuition fees. No new facilities or space will be required.

As the University continues to upgrade its capacity to address the growing need for adequate education in rural Alaska, specifically with regard to the distance delivery processes and audio/visual equipment, and computer delivery platforms the ENVI certificate will be made readily available to more students. UAF BBC is also expanding its science teaching space using Department of Education Title III funds by adding a teaching science lab, student research space, and a science classroom. Construction for this space begins in the Fall 2011.

FACULTY RESOURCES

The primary faculty for this program are already employed by the University. Dr. Todd Radenbaugh and Dr. Tom Marsik have been hired through the USDA Higher Education Grant specifically to coordinate the ENVI and Sustainable Energy programs. Both professors also teach required ENVI and other appropriate science courses. Cooperative Extension Service (CES) faculty will also participate in development and instruction of some ENVI courses. Fairbanks-based classes could show a small, but non-significant, increase in student registrations and enrollment.

The ENVI AAS degree will have an Advisory Council composed of academic, government, and business partners: The current ENVI AAS Degree Advisory Council members are:

- Izetta Chambers – UAF Marine Advisory Program
- Paul Liedberg – Manager Togiak National Wildlife Refuge
- Philip Loring, – Alaska Center for Climate Assessment and Policy, UAF Institute for Northern Engineering and The Center for Cross Cultural Studies Center for Climate Assessment
- Rich Seifert – UAF Cooperative Extension Service

E. IMPACTS ON PROGRAMS/DEPTS:

*What programs/departments will be affected by this proposed action?
Include information on the Programs/Departments contacted (e.g., email, memo)*

ENVI AAS program information and course requirements were sent out for comments, via email on September 6, 2011, to specific University departments that may have increased course enrollments due to the required science courses and the elective credit options ENVI students may take. The department contact names include:

Claudia Ill, CRCD Science Department
Diane McEachern, Patty Meritt, CRCD Department of Social and Human
Jane Weber and Judy Atkinson, Department of Developmental Education and CRCD
Math
Anthony Rickard, Math and Statistics
Cary de Wit, Geography
Christa Mulder, Biology
Bill Simson, Chemistry
Ataur Chowdury, Physics
Mario Gho, Construction Trades Technology

Elective Credit Options:

Christa Mulder, Biology
Bill Simson, Chemistry
Mike Sfraga, Geography
Carol Lewis, School of Natural Resources and Agricultural Sciences
Michael Castellini, School of Fisheries and Ocean Sciences
Anthony Rickard, Math and Statistics
Miranda Wright and Ralph Gabrielli, Department of Alaska Native Studies and

Rural Development

F. IF MAJOR CHANGE - ASSESSMENT OF THE PROGRAM:

Description of the student learning outcomes assessment process.)

The ENVI AAS program will be assessed through ongoing and periodic student and faculty evaluation. This evaluation will consist of progress of students in the program as well as perceptions of the program as seen by colleague, alumni, and employers.

The full Student Outcomes Assessment Plan follows this section in Appendix A.

JUSTIFICATION FOR ACTION REQUESTED

The purpose of the department and campus-wide curriculum committees is to scrutinize program/degree change applications to make sure that the quality of UAF education is not lowered as a result of the proposed change. Please address this in your response. This section needs to be self-explanatory. If you drop a course, is it because the material is covered elsewhere? Use as much space as needed to fully justify the proposed change and explain what has been done to ensure that the quality of the program is not compromised as a result.

The purpose of the changes to this AAS degree is to update and make an existing program relevant in the UAF system. It is also to provide an educational program that leads directly to employment opportunities for Alaskan native and rural students. The specific changes reflect a consensus based on discussions with the Vice Chancellor Associate Dean of CRCDD, the Dean of SNRAS, and the Director of the Bristol Bay Campus. In May 6th, 2011 the BBC advisory council reviewed the proposed changes and endorsed them as outlined in this document. Changes to the program are also based on the overall recommendations from a June 06, 2006 university program review committee and a 2011 Program Review Faculty Committee level. Recommendations from the committees are listed below.

2006 Program Review

Recommendation 1:

The educational opportunities and job-related training provided by the program in the Bristol Bay area are exemplary and should be continued and supported by the university.

Recommendation 2:

The degree program as presently constituted needs serious consideration as to its viability. Discontinuing or supplementing the degree program with a certificate program would be a good resolution to a degree program that has only produced a single graduate in the past five years.

Recommendation 3:

In any event, with a new program coordinator having just arrived in Dillingham, adequate time should be allowed for him to make his own assessment of the viability of the degree program and make his own recommendation as to the form it should take, if any.

2011 Program Review

Recommendations:

The committee recommends that RR develop and implement the program's assessment process in a clear and consistent format to include definite, achievable, multiple and measurable outcomes in an Assessment Plan and clear evidence of outcomes and any curricular changes shown in the Assessment Summary of future reviews.

Addressing the recommendations

Fix 1:

Change designator from Renewable Resource (RR) to Environmental Studies (ENVI) AAS program and incorporate sustainable energy opportunities into the curriculum. Promote and offer undergraduate research opportunities and hands on building projects including field-based data collection, laboratory work, internship opportunities and energy efficient construction with ongoing faculty science projects.

Fix 2:

UAF College of Rural and Community Development acquired the ENVI Certificate program in 2009, which has shown rapid growth, particularly in the Bristol Bay region. Graduates of this program will have the

FORMAT 5 ENVI STUDIES AAS

option to move directly into the ENVI AAS degree. Additionally, an Occupational Endorsement in Sustainable Energy was submitted to CRCD in the Spring 2011. The college has been offering components of the proposed Occupational Endorsement as special topics courses, which have become popular with rural students. This illustrates a regional need for more classes and program in this discipline. These occupational endorsement and certificate programs will serve as a bridging program to more students entering the AAS degree.

Fix 3:
Dr. Todd Radenbaugh and Dr. Tom Marsik have assessed the current RR AAS program and agreed with the findings of the university program review committees. By changing the RR AAS degree there is an excellent opportunity to strengthen the regional programs that are relevant to rural Alaskans. The proposed changes listed in this document developed after consulting with prospective students, science faculty, program heads, deans and directors across UAF as well as the UAF BBC advisory council.

APPROVALS:

<i>Clara Tol</i>	Date	Nov - 3 - 2011
Signature, Chair, Program/Department of: Science CRCD		
<i>Debra Blende</i>	Date	11/2/11
Signature, Chair, College/School Curriculum Council for: CRCD		
<i>Peter P...</i>	Date	11/3/11
Signature, Dean, College/School of: CRCD		

ALL SIGNATURES MUST BE OBTAINED PRIOR TO SUBMISSION TO THE GOVERNANCE OFFICE

	Date	
Signature, Chair, UAF Faculty Senate Curriculum Review Committee		

APPROVALS SIGNATURES FOR ENVI PROGRAM CHANGE:

Program level Approval:

_____ Date _____
ENVI Program Coordinator, Todd Radenbaugh

CRCD Approvals:

 _____ Date Oct 10, 2011
Co-Chair, CRCD Science Department, Claudia III

_____ Date _____
Chair, CRCD Academic Council, Linda Curda

_____ Date _____
Dean, CRCD, Bernice Joseph

ALL SIGNATURES MUST BE OBTAINED PRIOR TO SUBMISSION -- Offerings above the level of approved programs must be approved in advance by the Provost.

_____ Date _____
Chair, Senate Curriculum Review Committee

option to move directly into the ENVI AAS degree. Additionally, an Occupational Endorsement in Sustainable Energy was submitted to CRCD in the Spring 2011. The college has been offering components of the proposed Occupational Endorsement as special topics courses, which have become popular with rural students. This illustrates a regional need for more classes and program in this discipline. These occupational endorsement and certificate programs will serve as a bridging program to more students entering the AAS degree.

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APPROVALS:

	Date	
Signature, Chair, Program/Department of:		

	Date	
Signature, Chair, College/School Curriculum Council for:		

	Date	
Signature, Dean, College/School of:		

ALL SIGNATURES MUST BE OBTAINED PRIOR TO SUBMISSION TO THE GOVERNANCE OFFICE

	Date	
Signature, Chair, UAF Faculty Senate Curriculum Review Committee		