

## 1. Program/Department Description

### 1A. Description

Environmental Science is a multidisciplinary field integrating topics from the geosciences, physical sciences, biological sciences, and public policy (including economic, legal, and social aspects) as they pertain to understanding working of the earth's ecosystems and the interplay of humans within those systems.

### Degrees/Certificates

Program's courses are designed to articulate to UC and CSU for transfer students.

### 1B. 2012-2013 Estimated Costs (Certificate of Achievement ONLY)

*Required for Gainful Employment regulations.*

	Cost		Cost		Cost		Cost
Enrollment Fees		Enrollment Fees					
Books/Supplies		Books/Supplies					
Total		Total		Total		Total	

### 1C. Criteria Used for Admission

### 1D. College Vision

Ventura College will be a model community college known for enhancing the lives and economic futures of its students and the community.

### 1E. College Mission

Ventura College, one of the oldest comprehensive community colleges in California, provides a positive and accessible learning environment that is responsive to the needs of a highly diverse student body through a varied selection of disciplines, learning approaches and teaching methods including traditional classroom instruction, distance education, experiential learning, and co-curricular activities. It offers courses in basic skills; programs for students seeking an associate degree, certificate or license for job placement and advancement; curricula for students planning to transfer; and training programs to meet worker and employee needs. It is a leader in providing instruction and support for students with disabilities. With its commitment to workforce development in support of the State and region's economic viability, Ventura College takes pride in creating transfer, career technical and continuing education opportunities that promote success, develop students to their full potential, create lifelong learners, enhance personal growth and life enrichment and foster positive values for successful living and membership in a multicultural society. The College is committed to continual assessment of learning outcomes in order to maintain high quality courses and programs. Originally landscaped to be an arboretum, the College has a beautiful, park-like campus that serves as a vital community resource.

**1F. College Core Commitments**

Ventura College is dedicated to following a set of enduring Core Commitments that shall guide it through changing times and give rise to its Vision, Mission and Goals.

- Student Success
  - Respect
  - Integrity
  - Quality
  - Collegiality
  - Access
- Innovation
  - Diversity
  - Service
  - Collaboration
  - Sustainability
  - Continuous Improvement

**1G. Program/Department Significant Events (Strengths and Successes)**

The ESRM program has been in place since Fall 2006, augmenting the one ES class offered prior to that time. The courses enjoy healthy enrollment, despite often being offered at sub-prime times (afternoons!) In many cases they have been overenrolled, because of demand.

Different faculty members from different backgrounds teach the courses, mirroring the interdisciplinary nature of this field of study.

Due to limited scheduling of ESRM 3, the number of Proficiency Awards granted has been small to date, but many students do indicated an interest in getting the Award, but are unable to get it to work in their schedule.

As the AG program has been shut down, the courses that overlapped with ESRM have been “rebranded” and are being worked into the schedule.

While much as been accomplished in the development of ESRM, there is still work to do to fully realize the potentials of this discipline area. Part of this will be establishing an AA degree.

**K. Organizational Structure**

President: Robin Calote

Executive Vice President: Ramiro Sanchez

Dean: David Oliver

Department Chair: (effectively, Steve Palladino)

Instructors and Staff

<b>Name</b>	<b>Steve Palladino (Lead ESRM professor)</b>
Classification	Professor
Year Hired	January, 1999
Years of Work-Related Experience	11 years of prior education-related experience
Degrees/Credentials	B.A. Environmental Studies/Geography, M.A. Geography, Cal Single Subject Teaching Credential

<b>Name</b>	<b>Bill Budke</b>
Classification	Associate Professor
Year Hired	Fall 2004
Years of Work-Related Experience	15 years in Environmental Compliance and Remediation
Degrees/Credentials	A.A., B.A., M.S.

These are the primary instructors, though other faculty from Political Science and Biology also help teach some of the courses

## 2. Performance Expectations

### 2A. Student Learning Outcomes

#### 2A1. **2012-2013** - *Institutional* Student Learning Outcomes

1. Communication - written, oral and visual
2. Reasoning - scientific and quantitative
3. Critical thinking and problem solving
4. Information literacy
5. Personal/community awareness and academic/career responsibilities

#### 2A2. **2012-2013** - *Program* Level Student Learning Outcomes

*For programs/departments offering degrees and/or certificates*

N/A

#### 2A3. **2012-2013** - *Course* Level Student Learning Outcomes

*Attached to program review (See appendices).*

### 2B. **2012-2013** Student SUCCESS Outcomes

- 1.
- 2.

### 2C. **2012-2013** Program OPERATING Outcomes

N/A

### 2D. Mapping of Student Learning Outcomes - Refer to TracDat

### 3. Operating Information

#### 3A. Productivity Terminology Table

<b>Sections</b>	A credit or non-credit class. Does not include not-for-credit classes (community education).
<b>Census</b>	Number of students enrolled at census (typically the 4 <sup>th</sup> week of class for fall and spring).
<b>FTES</b>	Full Time Equivalent Students A student in the classroom 15 hours/week for 35 weeks (or two semesters) = 525 student contact hours. 525 student contact hours = 1 FTES. Example: 400 student contact hours = $400/525 = 0.762$ FTES. The State apportionment process and District allocation model both use FTES as the primary funding criterion.
<b>FTEF</b>	Full Time Equivalent Faculty A faculty member teaching 15 units for two semesters (30 units for the year) = 1 FTE. Example: a 6 unit assignment = $6/30 = 0.20$ FTEF (annual). The college also computes semester FTEF by changing the denominator to 15 units. However, in the program review data, all FTE is annual. FTEF includes both Full-Time Faculty and Part-Time Faculty. FTEF in this program review includes faculty assigned to teach extra large sections (XL Faculty). This deviates from the prior practice of not including these assignments as part of FTEF. However, it is necessary to account for these assignments to properly represent faculty productivity and associated costs.
<b>Cross Listed FTEF</b>	FTEF is assigned to all faculty teaching cross-listed sections. The FTEF assignment is proportional to the number of students enrolled at census. This deviates from the practice of assigning load only to the primary section. It is necessary to account for these cross-listed assignments to properly represent faculty productivity and associated costs.
<b>XL FTE</b>	Extra Large FTE: This is the calculated assignment for faculty assigned to extra large sections (greater than 60 census enrollments). The current practice is not to assign FTE. Example: if census > 60, 50% of the section FTE assignment for each additional group of 25 (additional tiers).
<b>WSCH</b>	Weekly Student Contact Hours The term "WSCH" is used as a total for weekly student contact hours AND as the ratio of the total WSCH divided by assigned FTEF. Example: 20 sections of 40 students at census enrolled for 3 hours per week taught by 4.00 FTEF faculty. $(20 \times 40 \times 3) = 2,400$ WSCH / 4.00 FTEF = 600 WSCH/FTEF.
<b>WSCH to FTES</b>	Using the example above: $2,400$ WSCH x 35 weeks = 84,000 student contact hours = $84,000 / 525 = 160$ FTES (see FTES definition). Simplified Formulas: $FTES = WSCH/15$ or $WSCH = FTES \times 15$
<b>District Goal</b>	Program WSCH ratio goal. $WSCH/FTEF$ The District goal was set in 2006 to recognize the differences in program productivity.

**3B: Student Success Terminology**

<b>Census</b>	Number of students enrolled at Census (typically the 4 <sup>th</sup> week of class for fall and spring). Census enrollment is used to compute WSCH and FTES for funding purposes.
<b>Retain</b>	Students completing the class with any grade other than W or DR divided by Census Example: 40 students enrolled, 5 students dropped prior to census, 35 students were enrolled at census, 25 students completed the class with a grade other than W or DR: Retention Rate = 25/35 = 71%
<b>Success</b>	Students completing the class with grades A, B, C, CR or P divided by Census Excludes students with grades D, F, or NC.

Program specific data was provided in Section 3 for all programs last year. This year, please refer to the data sources available at [http://www.venturacollege.edu/faculty\\_staff/academic\\_resources/program\\_review.shtml](http://www.venturacollege.edu/faculty_staff/academic_resources/program_review.shtml)

In addition, the 2011-2012 program review documents will provide examples of last year’s data and interpretations.

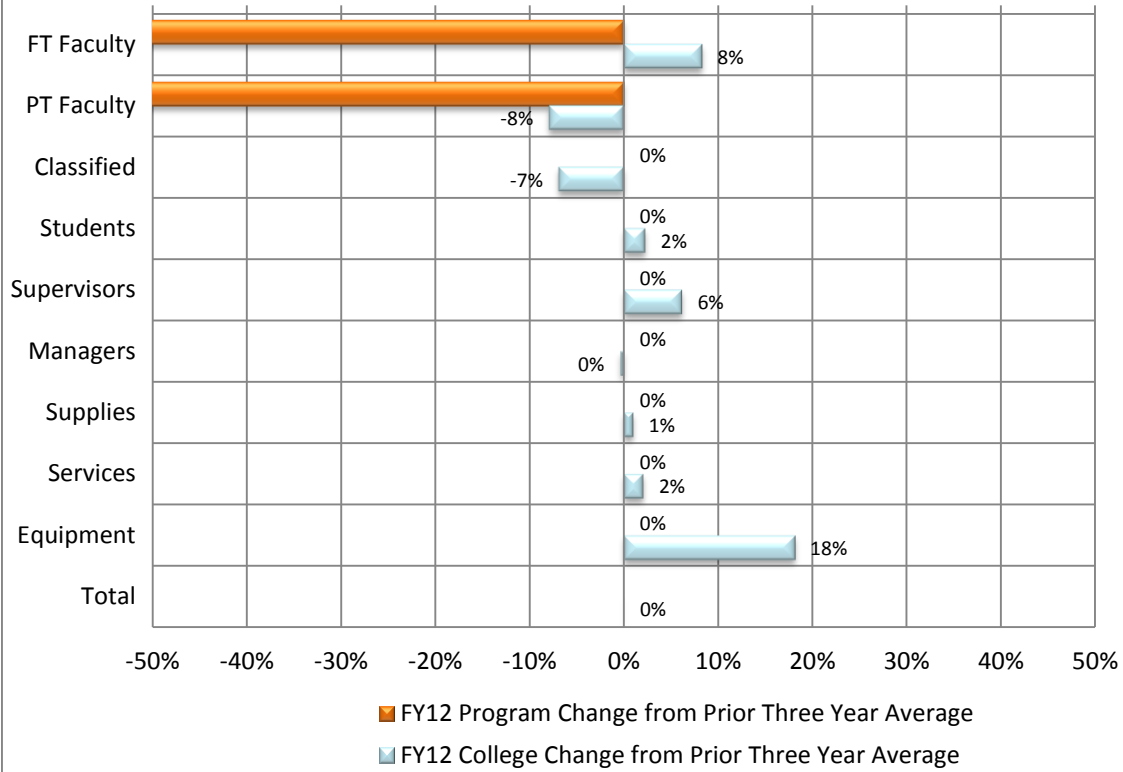
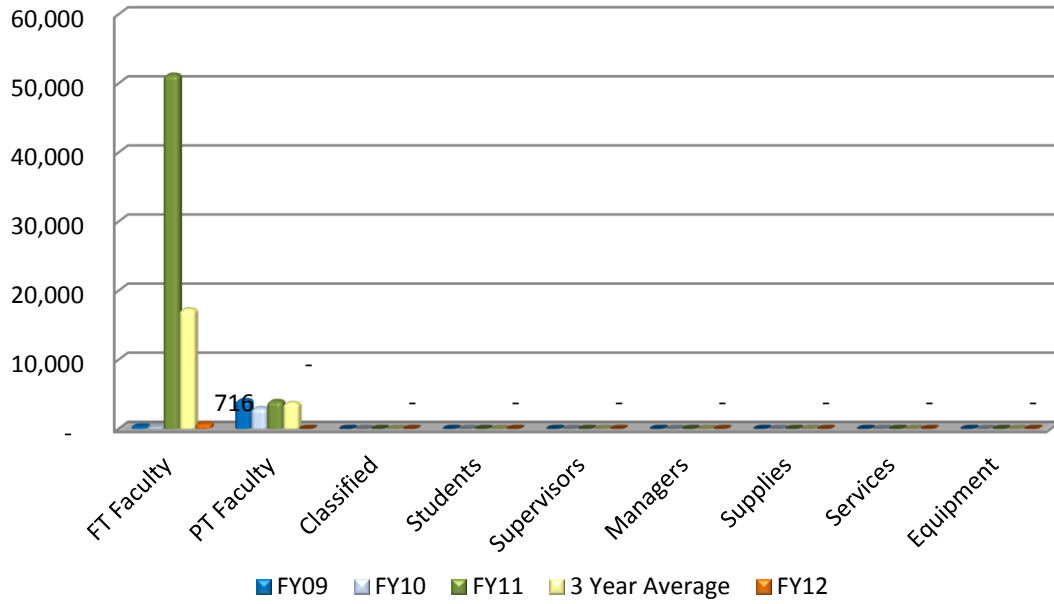
**3C: 2012 - 2013** Please provide program interpretation for the following:

**3C1: Interpretation of the Program Budget Information**

I’m not sure how this is being calculated. I suspect the FT hire for Environmental Technology a CTE area which IS NOT ESRM was mistakenly categorized as ESRM. This has been remedied. Not sure how the figures for faculty are being calculated. Since some of the courses are cross listed, the budgets are probably included in the other disciplines (BIOL, POLS). FT faculty may be teaching these classes as overload?

Category	Title	FY09	FY10	FY11	3 Year Average	FY12	Program Change from Prior Three Year Average	College Change from Prior Three Year Average
1	FT Faculty	330	239	51,218	17,262	716	-96%	8%
2	PT Faculty	4,142	2,984	3,990	3,705	-	-100%	-8%
3	Classified	-	-	-	-	-	0%	-7%
4	Students	-	-	-	-	-	0%	2%
5	Supervisors	-	-	-	-	-	0%	6%
6	Managers	-	-	-	-	-	0%	0%
7	Supplies	-	-	-	-	-	0%	1%
8	Services	-	-	-	-	-	0%	2%
9	Equipment	-	-	-	-	-	0%	18%
	<b>Total</b>	<b>4,472</b>	<b>3,223</b>	<b>55,208</b>	<b>20,968</b>	<b>716</b>		<b>0%</b>

### Environmental Science: Budget Expenditure Trends



### 3C2: Interpretation of the Program Inventory Information

[http://www.venturacollege.edu/assets/pdf/program\\_review/2012-2013/3C2a%20Inventory%20by%20Program.pdf](http://www.venturacollege.edu/assets/pdf/program_review/2012-2013/3C2a%20Inventory%20by%20Program.pdf)

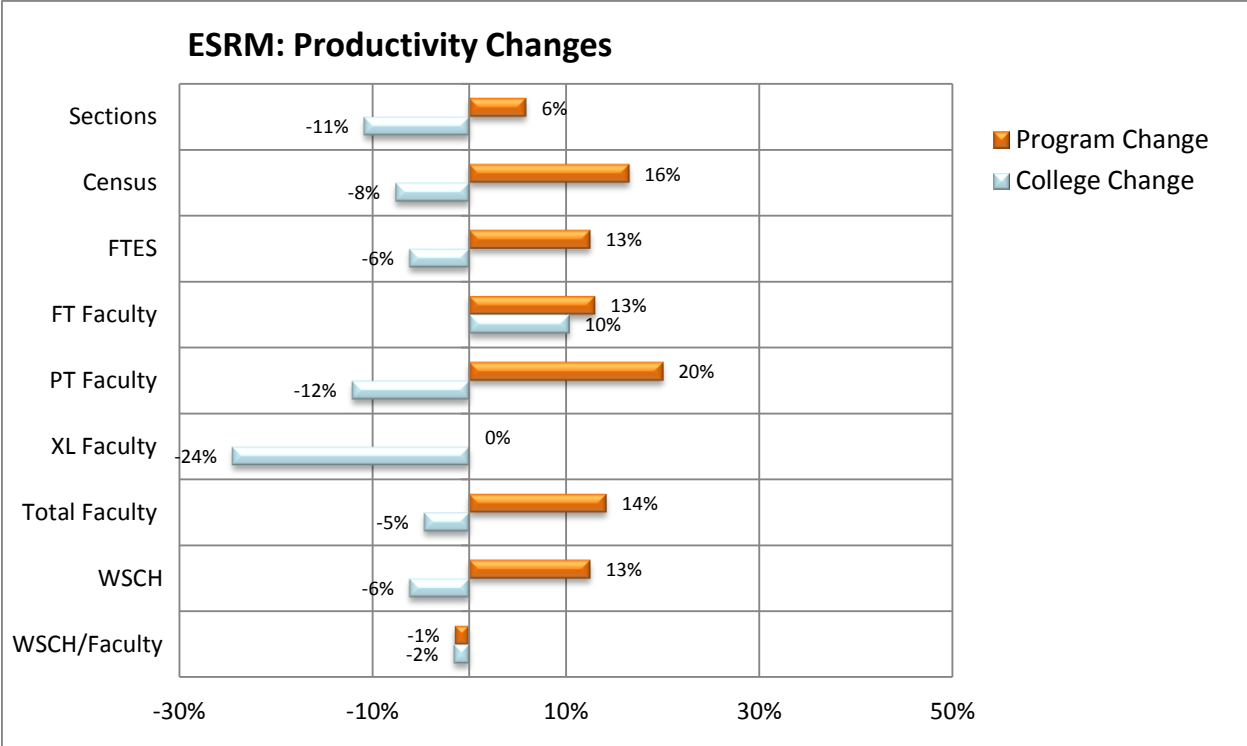
Inventory is not complete and may be difficult to determine since the courses cross disciplines. One area that may come under ESRM, would be the resources from AG (and the grants that were crossing over between AG and ESRM).

**3C3: Interpretation of the Program Productivity Information**

This will not be fully accurate as we have cross-listed classes and classes that used to be AG that are not ESRM. Until we clarify and stabilized the program and the regular offerings, this information will not be very meaningful. See the program initiatives for 2013.

Student numbers reflect some of the smaller enrollment courses, which have since increased enrollment (and the offering of the larger courses more often will increase the numbers in the future.)

<b>ESRM: Productivity Changes</b>							
<b>Title</b>	<b>FY09</b>	<b>FY10</b>	<b>FY11</b>	<b>3 Year Average</b>	<b>FY12</b>	<b>Program Change</b>	<b>College Change</b>
Sections	5	6	6	6	6	6%	-11%
Census	105	161	128	131	153	16%	-8%
FTES	11	16	13	13	15	13%	-6%
FT Faculty	0.23	0.28	0.26	0	0.29	13%	10%
PT Faculty	0.08	0.16	0.11	0	0.14	20%	-12%
XL Faculty	-	-	-	-	-	0%	-24%
Total Faculty	0.31	0.44	0.38	0	0.43	14%	-5%
WSCH	165	240	195	200	225	13%	-6%
WSCH/Faculty	532	545	513	531	523	-1%	-2%

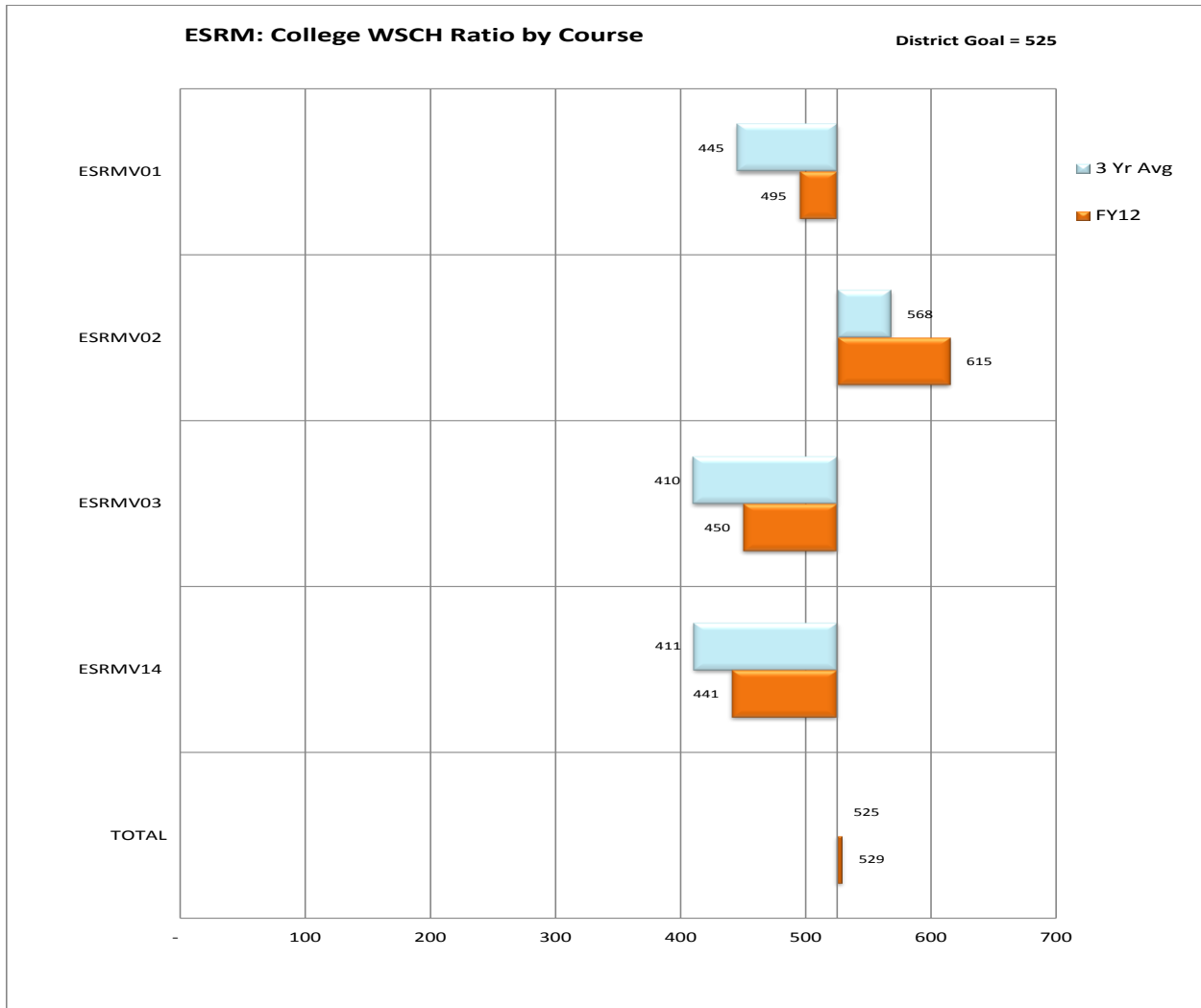


**3C4: Interpretation of the Program Course Productivity Information**

ESRM is right on its district goal. Since some of the classes have been offered in the mid-afternoon that has affected student count. Also we have used a room with a smaller student count for ESRM V14 (though now we put more students in there.) The strongest class is ESRM 2 which is offered every semester and has a good track record. We'd like to offer ESRM 1 and ESRM 3 every semester and see if we can use that regularity to increase enrollment.

College WSCH Ratio: Weekly Student Contact Hours/(FT FTE + PT FTE + XL FTE)									
Course	Title	FY09	FY10	FY11	3 Yr Avg	FY12	Change	Dist Goal	% Goal
ESRMV01	Intro to Environmental Issues	510	345	480	445	495	50	525	94%
ESRMV02	Intro to Environmental Science	548	675	480	568	615	47	525	117%
ESRMV03	Environ & Natural Resource Mg	-	585	645	410	450	40	525	86%
ESRMV14	Conservation Natural Resource	384	381	467	411	441	30	525	84%
<b>TOTAL</b>	<b>Annual College WSCH Ratio for</b>	509	547	512	525	529	4	525	101%



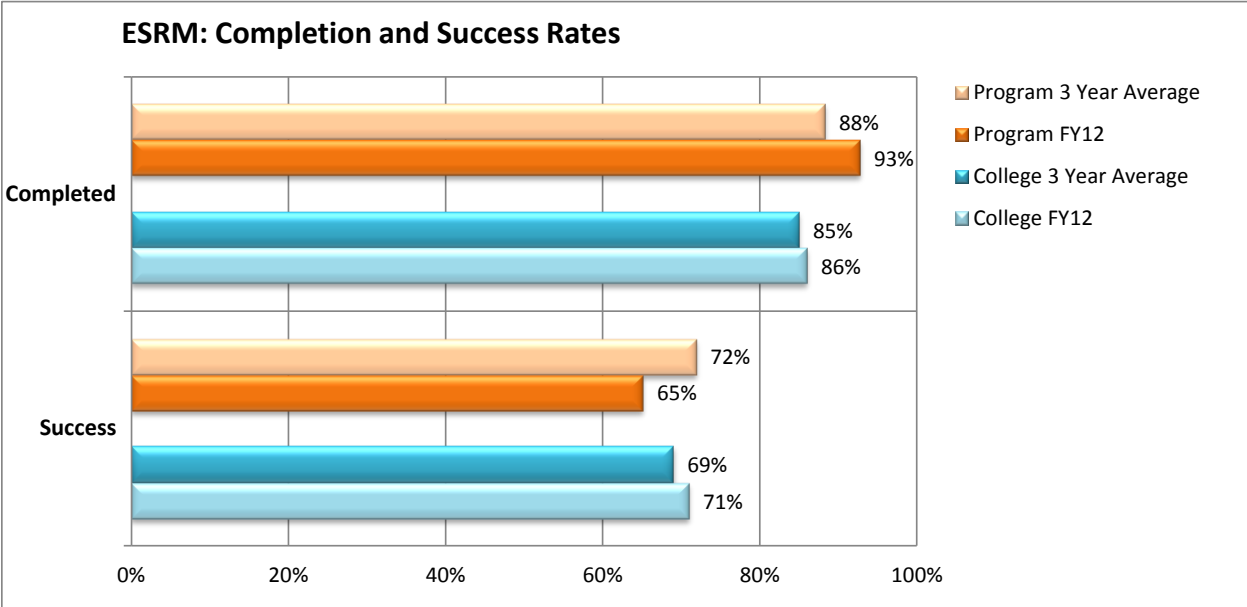
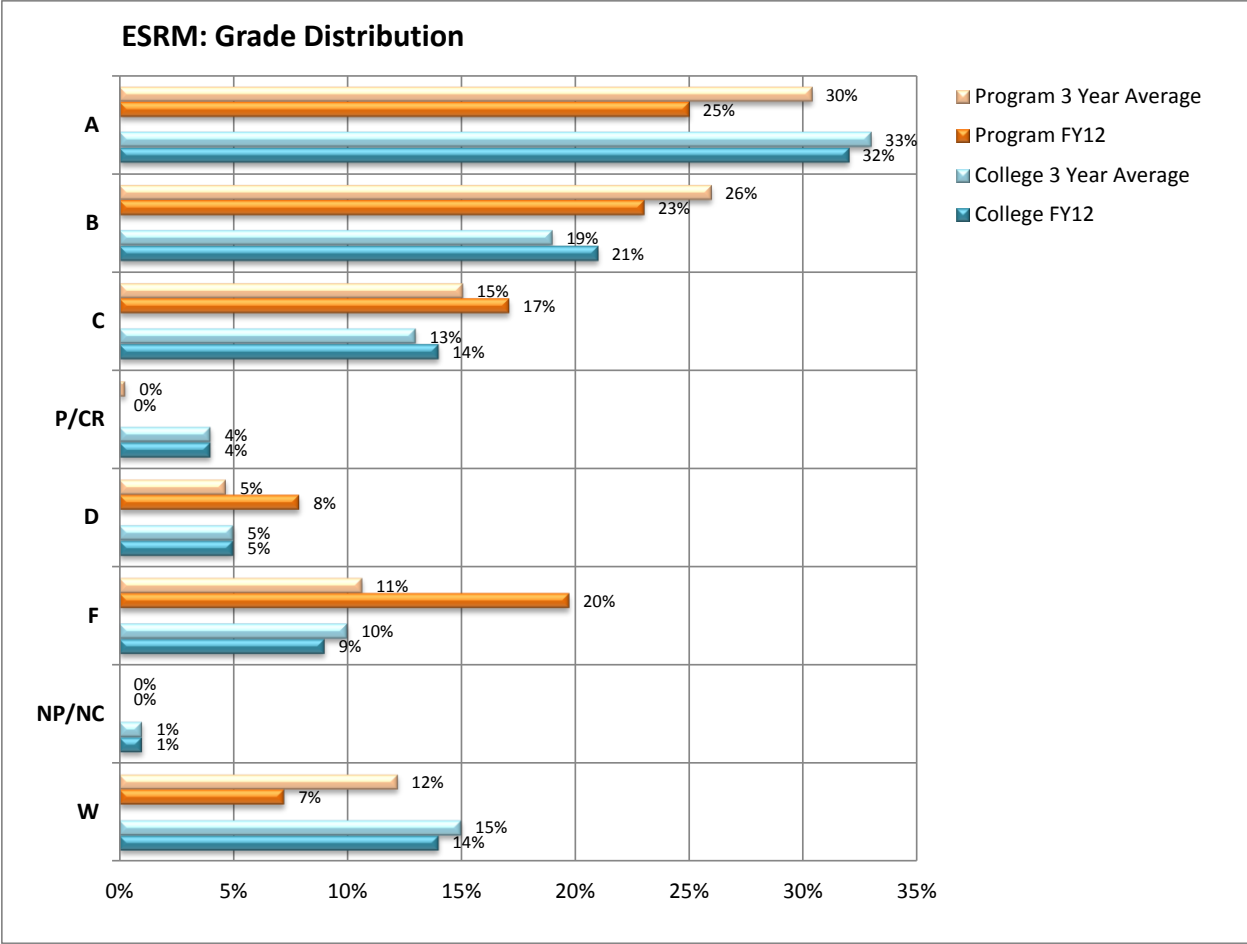


**3C5: Interpretation of Program Retention, Student Success, and Grade Distribution**

Good completion rates (above the campus). As a science area, the grades are less A's than campus as a whole, but the success rate is actually a tad higher.

Subject	Fiscal Year	A	B	C	P/CR	D	F	NP/NC	W	Graded	Completed	Success
ESRM	FY09	23	29	15	1	6	12	-	14	100	86	68
ESRM	FY10	51	41	25	-	6	19	-	16	158	142	117
ESRM	FY11	43	30	18	-	6	10	-	17	127	112	92
ESRM	3 Year Avg	39	33	19	0	6	14	-	16	128	113	92
ESRM	FY12	38	35	26	-	12	30	-	11	152	141	99

Subject	Fiscal Year	A	B	C	P/CR	D	F	NP/NC	W	Graded	Completed	Success
ESRM	FY09	23%	29%	15%	1%	6%	12%	0%	14%	100%	86%	68%
ESRM	FY10	32%	26%	16%	0%	4%	12%	0%	10%	100%	90%	74%
ESRM	FY11	34%	24%	14%	0%	5%	8%	0%	13%	98%	88%	72%
ESRM	3 Year Avg	30%	26%	15%	0%	5%	11%	0%	12%	99%	88%	72%
ESRM	FY12	25%	23%	17%	0%	8%	20%	0%	7%	100%	93%	65%
<b>College</b>	<b>3 Year Avg</b>	<b>33%</b>	<b>19%</b>	<b>13%</b>	<b>4%</b>	<b>5%</b>	<b>10%</b>	<b>1%</b>	<b>15%</b>	<b>100%</b>	<b>85%</b>	<b>69%</b>
College	FY12	32%	21%	14%	4%	5%	9%	1%	14%	100%	86%	71%



**3C6: Interpretation of the Program Completion Information**

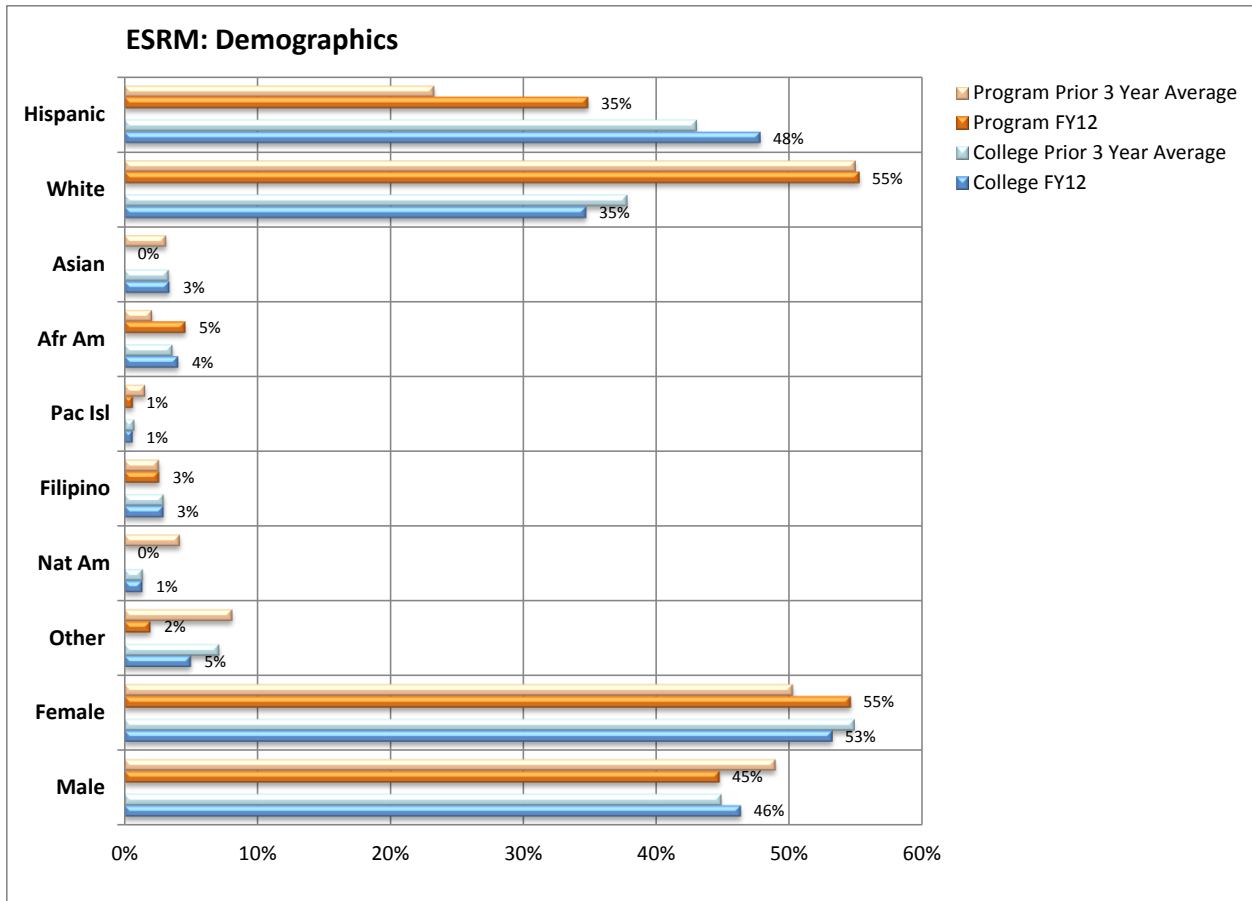
ESRM: Student Certificates and Degrees					
Program	FY	Certificates	Degrees	Female	Male
ESRM	FY09	-	-	-	-
ESRM	FY10	-	-	-	-
ESRM	FY11	-	-	-	-
ESRM	FY12	-	-	-	-
<b>Total Awards in 4 Years</b>		-	-	-	-

### **3C7: Interpretation of the Program Demographic Information**

Male/Female ratio similar to campus, but the ethnicity seems a bit skewed toward White. This may be because concerns about the Environment as an issue may be more prevalent in various ethnic communities.

Subject	FY	Hispanic	White	Asian	Afr Am	Pac Isl	Filipino	Nat Am	Other	Female	Male	Other	Avg Age
ESRM	FY09	19	58	2	3	3	3	1	11	57	41	2	30
ESRM	FY10	38	84	6	3	3	4	10	10	77	80	1	28
ESRM	FY11	32	68	4	2	-	3	5	10	58	66	-	28
<b>ESRM</b>	<b>3 Year Avg</b>	<b>30</b>	<b>70</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>5</b>	<b>10</b>	<b>64</b>	<b>62</b>	<b>1</b>	<b>29</b>
ESRM	FY12	53	84	-	7	1	4	-	3	83	68	1	24
<b>College</b>	<b>3 Year Avg</b>	<b>12,714</b>	<b>11,174</b>	<b>990</b>	<b>1,074</b>	<b>223</b>	<b>880</b>	<b>414</b>	<b>2,110</b>	<b>16,221</b>	<b>13,261</b>	<b>97</b>	<b>27</b>
College	FY12	13,598	9,875	966	1,157	183	842	390	1,424	15,137	13,183	115	25

Subject	FY	Hispanic	White	Asian	Afr Am	Pac Isl	Filipino	Nat Am	Other	Female	Male	Other	Avg Age
ESRM	FY09	19%	58%	2%	3%	3%	3%	1%	11%	57%	41%	2%	30
ESRM	FY10	24%	53%	4%	2%	2%	3%	6%	6%	49%	51%	1%	28
ESRM	FY11	26%	55%	3%	2%	0%	2%	4%	8%	47%	53%	0%	28
<b>ESRM</b>	<b>3 Year Avg</b>	<b>23%</b>	<b>55%</b>	<b>3%</b>	<b>2%</b>	<b>2%</b>	<b>3%</b>	<b>4%</b>	<b>8%</b>	<b>50%</b>	<b>49%</b>	<b>1%</b>	<b>24</b>
ESRM	FY12	35%	55%	0%	5%	1%	3%	0%	2%	55%	45%	1%	24
<b>College</b>	<b>3 Year Avg</b>	<b>43%</b>	<b>38%</b>	<b>3%</b>	<b>4%</b>	<b>1%</b>	<b>3%</b>	<b>1%</b>	<b>7%</b>	<b>55%</b>	<b>45%</b>	<b>0%</b>	<b>27</b>
College	FY12	48%	35%	3%	4%	1%	3%	1%	5%	53%	46%	0%	24



#### 4. Performance Assessment

##### 4A1: 2012-2013 Institutional Level Student Learning Outcomes

Institutional Level Student Learning Outcome 1	Performance Indicators
Communication	This ISLO will not be assessed by ESRM.
<b>Operating Information</b>	
<b>Analysis – Assessment</b>	

Institutional Level Student Learning Outcome 2	Performance Indicators
Reasoning – Scientific and Quantitative	90% of students will reach a satisfactory or higher level according to the institutional communication rubric for visual communication.
<b>Operating Information</b>	
This ISLO will be assessed by: ESRM V11, ESRM V22, ESRM V23	
<b>Analysis – Assessment</b>	
This ISLO has not been assessed yet	
Institutional Level Student	Performance Indicators

Learning Outcome 3	
Critical Thinking and problem solving	This ISLO will not be assessed by ESRM.
<b>Operating Information</b>	
<b>Analysis – Assessment</b>	

Institutional Level Student Learning Outcome 4	Performance Indicators
Information Literacy	90% of students will reach a satisfactory or higher level according to the institutional communication rubric for visual communication.
<b>Operating Information</b>	
This ISLO will be assessed by: ESRM V01, ESRM V02, ESRM V03, ESRM V10, ESRM V14, ESRM V21	
<b>Analysis – Assessment</b>	
This ISLO has not been assessed yet	

Institutional Level Student Learning Outcome 5	Performance Indicators
Personal/community awareness and academic / career responsibilities	This ISLO will not be assessed by ESRM.
<b>Operating Information</b>	
<b>Analysis – Assessment</b>	

**4A2:** 2012-2013 **Program Level Student Learning Outcomes - For programs/departments offering degrees and/or certificates**  
N/A

**4A3:** 2012-2013 **Course Level Student Learning Outcomes - Refer to TracDat**

**4B:** 2012-2013 **Student Success Outcomes**

Student Success Outcome 1	Performance Indicators
Continue good values	Seek to stay at about 90% completion and above 70% success.
<b>Operating Information</b>	
<b>Analysis – Assessment</b>	

**4C:** 2012-2013 **Program Operating Outcomes**

N/A

#### **4D. Program Review Rubrics for Instructional Programs**

N/A

### **5. Findings**

#### **2012-2013 - FINDINGS**

**Finding 1:** ESRM as a multi-class area of study was established after a number of years of faculty input and the spring 2006 sabbatical of Steve Palladino (taken for the purpose of getting the “program” off the ground). The three core courses, ESRM 1, 2, and 3 have done well over the years. ESRM 2 (Intro the Environmental Science) has been offered every semester. ESRM 1/BIOL 10 was offered once a year, but the Biology department has committed to its current every semester offering. ESRM 3/POLS 12 also should be offered every semester, but right now resources issues have kept it as a once a year offering. With the advent of ESRM at Ventura College, there were a number of Agriculture courses that were seen as related to the program (Conservation of Natural Resources, Soil and Water, Plant Biology, and a few others that have been now modified to fit in ESRM more seamlessly). This has changed the overall courses offered in the discipline, so the Environmental Studies Proficiency Award needs to be updated to reflect this and a AA degree should be created to provide pathways for students who want to major (or minor) in this area.

**Finding 2:** As the ESRM program evolves and develops, we are establishing appropriate teaching and support spaces. At this time we utilize both the computer-supported lecture room, SCI 106 for some classes and the Lab Space (ECT 8) ECT 8 has been updated with grant funding into a facility for lab and smaller lecture courses. Despite not being co-located these two facilities seem to meet our needs for teaching, but they don’t provide a space for part-time faculty or for working individually with students. ECT does have a small lab prep area (for dry/wet exercises), but this is not oriented toward faculty prepping for class or working with students. Establishing a location of an ESRM support area near SCI 106 would be helpful.

### **6. Initiatives**

#### **6A: 2011-2012 - Initiatives**

**Initiative** – SCI 106 Smart Classroom

**Initiative ID** - ESRM #1-2011

**Links to Finding 1** – ESRM courses will increasingly be taught in this space which currently has a jury rigged set up, but needs (along with other classes beginning to be taught in that space) to have a solid smart classroom set up.

**Benefits:** ESRM is a very visual discipline as we explore the Earth, Environmental Problems, and Technologies. Having internet connectivity and computer supported projection for presentation is vital.

**Request for Resources** – A full smart room set up

**Funding Sources**

No new resources are required (use existing resources)	
Requires additional general funds for personnel, supplies or services (includes maintenance contracts)	X
Requires computer equipment funds (hardware and software)	X
Requires college equipment funds (other than computer related)	X
Requires college facilities funds	
Requires other resources (grants, etc.)	

**Initiative** – Full slate of ESRM courses

**Initiative ID** - ESRM #2-2011

**Links to Finding 2** –We need to have all four ESRM courses taught each semester. This will mean 2 more classes a year and the associated uptick in staff required. If Geosciences get a new faculty member, that will free up the current Geosciences faculty to help cover the new ESRM courses.

**Benefits** - Having each ESRM course offered each semester should help students get the courses they need to earn a Proficiency Award or to transfer.

**Request for Resources** – Staffing and rooms for two new sections.

**Funding Sources**

Please check one or more of the following funding sources.

No new resources are required (use existing resources)	
Requires additional general funds for personnel, supplies or services (includes maintenance contracts)	X
Requires computer equipment funds (hardware and software)	
Requires college equipment funds (other than computer related)	
Requires college facilities funds	
Requires other resources (grants, etc.)	

**Initiative** ESRM tools/tech course

**Initiative ID** – ESRM #3-2011

**Links to Finding 3** – Investigate the options for a lab oriented course to explore the tools and technologies for the Environmental Scientist and Resource Manager. This would both give students a potential lab transfer class in the sciences, but also ensure they are well rounded when they depart from Ventura College. Most of the equipment that would be used has already been acquired with the help of various grants over the last few years.

**Benefits** - Students will have access to tools that will help ensure they are prepared for the next step in their educational or professional journey.

**Request for Resources** – Time/support to write a grant and some supplies. Over time, in addition to what past grants have and future grants might supply, there may be an infrequent call for campus resources to help augment/update our technology.

**Funding Sources**

No new resources are required (use existing resources)	
Requires additional general funds for personnel, supplies or services (includes maintenance contracts)	minimal
Requires computer equipment funds (hardware and software)	
Requires college equipment funds (other than computer related)	
Requires college facilities funds	

Requires other resources (grants, etc.)	X
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**Initiative** –Geosciences lead for ESRM

**Initiative ID** – ESRM #4-2011

**Links to Finding 4** – Officially provide the oversight structure for ESRM that already exists in the Geosciences.

**Benefits** – More coherent leadership, chain of collaboration, and ability to clearly identify who, where, what will be needed for long term program health.

**Request for Resources** – The resources for Geosciences in general will hopefully be augmented in response to request in the Geography/GIS and Geology program review documents. So more support for managing ESRM will be in the form of more release time and faculty in Geosciences in general. See the other program initiatives for details.

**Funding Sources**

No new resources are required (use existing resources)	X (assumes Geosciences augmentation)
Requires additional general funds for personnel, supplies or services (includes maintenance contracts)	
Requires computer equipment funds (hardware and software)	
Requires college equipment funds (other than computer related)	
Requires college facilities funds	
Requires other resources (grants, etc.)	

## 2011 - 2012 FINAL Program Initiative Priority Ratings

Line Number	Program	Category	Program Priority (0, 1, 2, 3...)	Division Priority (R,H,M,L)	Committee Priority (R, H, M, L)	College Priority (R, H, M, L)	Initiative ID	Initiative Title	Resource Description	Estimated Cost	Adjusted Cost	Accumulated Costs	Full Time or Part Time
1	ESRM	None	0	H			ESRM1204	Geosciences lead for ESRM	Geosciences will provide the leadership for ESRM			-	
2	ESRM	Faculty	2	M			ESRM1202	Full slate of ESRM courses	Cover 1 class/semester .2fte	6,000	6,000	6,000	PT
3	ESRM	Grants	3	H			ESRM1203	ESRM tools/tech course	Time/equip create course	UNK		6,000	

## 6B: 2012-2013 INITIATIVES

**Initiative 1: ESRM AA degree** – As part of the development of the ESRM discipline we outlined a general ESRM degree, but at the time the articulation officer, Jeff Ferguson, advised us to hold off on this since things were changing dramatically at the state level. In the intervening 5-6 years, we just haven't got back to this task. We are hoping by having this as an initiative it will give us impetus to move forward with establishing a degree. Due to the varied nature of environmental programs at various institutions (due to its very multidisciplinary dynamic), there may never be a TMC for this subject area. So we'll try to build a degree that will capitalize on the transferability we have already established with the UCSB and CSUCI Environmental programs.



**Initiative ID – ESRM1301**

**Links to Finding – 1**

**Benefits** – Students will be able to transfer with greater confidence to our neighboring institutions. Some students may see this as a terminal degree to go with other studies or professional skills they have.

**Request for Resources** – None explicitly, though it will take many more faculty hours (on top of the many that have already been invested). Without any release time to do this task, the progress will likely be slow, but we hope starting now and extending over the next couple years this may get accomplished. Steve Palladino will be requesting a sabbatical to prepare the college for the new Visualization Lab that will be built in the next two years, but also will use the time away to update a number of courses and the programs in the Geosciences department (including ESRM).

**Funding Sources**

No new resources are required (use existing resources)	X
Requires additional general funds for personnel, supplies or services (includes maintenance contracts)	
Requires computer equipment funds (hardware and software)	
Requires college equipment funds (other than computer related)	
Requires college facilities funds	
Requires other resources (grants, etc.)	

**Initiative 2: ESRM/ENGR/GIS Workroom for PT faculty** - Adjacent to SCI 106 is a former office space used by CAD/Drafting for meeting with students and keeping items useful to their program. This space, SCI 105, is effectively an oversized office, with external entrance and window. We see this best used as a shared space for ENGR/ESRM/GIS part-time faculty to get work done and to meet with students. Limit storage (bookshelves and filing cabinets) would allow faculty to be productive before/after class. The room already has two large wood desks and chairs. All that is needed initially is an instructor computer workstation (hookups for Power and Ethernet are already in there.) This room (along with SCI 106) had been promised by the administration (Kimberling/Renger) to the GIS program as part of GIS being voluntarily removed from the “programming” for the new Advanced Technology Building (MCE).

**Initiative ID – ESRM1302**

**Links to Finding - 2**

**Benefits** – This space will provide a “home” for part-time instructors (and as far as working with students and accessing resources, also full-time faculty) in the areas of ESRM, GIS, and Engineering. This is adjacent to the GIS/ENGR computer lecture room (SCI 106) used by GIS/ESRM/ENGR/GEOG. It is also adjacent to the ENGR Lab (SCI 101). We are already beginning to use this in some of the functions identified and it has been a very helpful space for meeting with multiple faculty and students.

**Request for Resources** – Only one basic computer station.

**Funding Sources**

No new resources are required (use existing resources)	
Requires additional general funds for personnel, supplies or services (includes maintenance contracts)	
Requires computer equipment funds (hardware and software)	X
Requires college equipment funds (other than computer related)	
Requires college facilities funds	
Requires other resources (grants, etc.)	

**Initiative 3: Reinstate courses** – In the winding down of the Agriculture Program, certain courses were identified as being tied to the ESRM program and should continue to be offered as rebranded courses. Effectively this included 2 courses we are continuing to offer on the previous schedule (Soil and Water, Conservation of Natural Resources), but also 4 other courses that were on a rotation of about 1/semester. We will want to begin offering these courses on that schedule. This should not be a financial hit to the college other than the fact that there has been a one year hiatus due to needing to get courses through the curriculum committee under new names (and in some cases some modification of the course outlines) which may have produced “phantom” savings. We are ready to begin reoffering these courses (in conjunction with our efforts to define an ESRM AA degree and an update to the existing Environmental Studies Proficiency Award.)

**Initiative ID – ESRM1303**

**Links to Finding - 1**

**Benefits** – These are valuable courses to students interested in the natural world and the impact of humans on it. These courses, offered on a rotating basis, will help students complete the ES proficiency award and also, eventually, be part of a new ESRM AA degree.

**Request for Resources** – 1 class/semester reinstated (these were funds previously allocated to these courses ... they have only changed names). I am indicating no new resources, though understanding that the year off from offering these courses may have created a new baseline, in which this will need to be seen as adding one 3 unit class a semester at a cost of \$4000/sem for part-time instructor pay.

**Funding Sources**

No new resources are required (use existing resources)	X
Requires additional general funds for personnel, supplies or services (includes maintenance contracts)	
Requires computer equipment funds (hardware and software)	
Requires college equipment funds (other than computer related)	
Requires college facilities funds	
Requires other resources (grants, etc.)	

**Initiative 4: Full slate of core ESRM courses** - Each core class, ESRM 1, ESRM 2, and ESRM 3 should be offered with at least one section every semester (ESRM 2 has done this all along, but ESRM 1/BIOL 10 has just begun to do this. Only ESRM 3/POLYS 12 still needed to accomplish this as it is offered right now, only once a year in the spring semester. ESRM 3 could also be offered in the fall semester by either having POLS not teach one of their other courses (which they currently are unwilling to do) or to add an allowance for this course to be taught in the Fall (requiring staffing cost). This may best be accomplished by establishing an ESRM total course load (so that the extra course wouldn't be converted by POLS into an extra offering of another class instead. This initiative seeks to both add the one section a year of ESRM 3, but also to establish a baseline of ESRM courses offered per semester (see discussion in Initiative 3.)

**Initiative ID – ESRM1304**

**Links to Finding - 1**

**Benefits** – This will ensure students transferring to other institutions in Environmental Studies, such as UCSB) will have all the core courses available to them. UCSB has a lower division 3 course requirement that lines up directly with our ESRM 1, 2, 3. The core ESRM courses are popular and should have at least one section of each core course each semester to best serve our students with interest in this subject.

**Request for Resources** – One semester per year part-time faculty cost (unless POLS opts to reduce their POLS courses by 1 class).

**Funding Sources**

No new resources are required (use existing resources)	
Requires additional general funds for personnel, supplies or services (includes maintenance contracts)	X
Requires computer equipment funds (hardware and software)	
Requires college equipment funds (other than computer related)	
Requires college facilities funds	
Requires other resources (grants, etc.)	

**Initiative 5: ESRM Tech/Tools Class** – Since the development of the ESRM discipline area at Ventura College (almost 10 years ago) we have discussed the desire to create a capstone course for students that would acquaint them with the field techniques, tools, and technologies used in the discipline. This could be a 1 unit lab course or some other arrangement as becomes apparent as the course is developed. It would be nice to develop this in concert with the ESRM AA development so there will not be a need to amend the ESRM degree later. It may make sense to write a grant to pay for some faculty release time and for the various technology and other tool items that will be required.

**Initiative ID – ESRM1305**

**Links to Finding - 1**

**Benefits** – Many of the jobs in the environmental field are in the area of monitoring and remediation. These are field positions that require the professional to use various technologies and tools to complete their tasks. Our students who complete this course will have skills useful

to finding employment or, if transferring for additional study, give them a leg up on the other students in the 4-year programs. This capstone course will also help provide an opportunity for students to synthesize what they have learned in the various courses in the degree and put the concepts to test in an applied manner.

**Request for Resources** – Can really vary. May be determined in part by what the grant opportunities are!

**Funding Sources**

No new resources are required (use existing resources)	
Requires additional general funds for personnel, supplies or services (includes maintenance contracts)	
Requires computer equipment funds (hardware and software)	
Requires college equipment funds (other than computer related)	
Requires college facilities funds	
Requires other resources (grants, etc.)	X

**6C: 2012-2013 Program Initiative Priority Ratings**

Program	Funding Number	Category	Program Priority (R, H, M, L)	Division Priority (R, H, M, L)	Committee Priority (R, H, M, L)	College Priority (H, M, L)	Initiative ID	Initiative Title	Resource Description	Estimated Cost
ESRM		0					ESRM1301	ESRM AA degree	Work on ESRM degree and update Proficiency Award	\$0 (just faculty time as available)
ESRM		3	H				ESRM1302	SCI 105 Workroom	ESRM/ENGR/GIS Workroom for PT faculty	\$900
ESRM		2	H				ESRM1303	Reinstate Courses (1/semester)	AG courses that have been converted to ESRM should be offered at rate they were prior to change.	No Cost (should be equal to what was in the past)
ESRM		2	M				ESRM1304	Full slate of core ESRM courses	Each core class offered every semester (only ESRM 3 still needed to accomplish this)	\$4000 (or no cost if replaces POLS course)
ESRM		6	L				ESRM1305	ESRM tools/tech course	Time/equip create course	UNK. Grant Funds

**6D: PRIORITIZATIONS OF INITIATIVES WILL TAKE PLACE AT THE PROGRAM, DIVISION, COMMITTEE, AND COLLEGE LEVELS:**

**Program/Department Level Initiative Prioritization**

All initiatives will first be prioritized by the program/department staff. Prioritize the initiatives using the **RHML** priority levels defined below.

**Division Level Initiative Prioritization**

The program initiatives within a division will be consolidated into division spreadsheets. The dean may include additional division-wide initiatives. All initiatives will then be prioritized using the **RHML** priority levels defined below.

**Committee Level Initiative Prioritization**

The division's spreadsheets will be prioritized by the appropriate college-wide committees (staffing, technology, equipment, facilities) using the **RHML** priority levels defined below.

**College Level Initiative Prioritization**

Dean's will present the consolidated prioritized initiatives to the College Planning Council. The College Planning Council will then prioritize the initiatives using the **RHML** priority levels defined below.

**R:** Required – mandated or unavoidable needs (litigation, contracts, unsafe to operate conditions, etc.).

**H:** High – approximately 1/3 of the total program/department/division's initiatives by resource category (personnel, equipment, etc.)

**M:** Medium – approximately 1/3 of the total program/department/division's initiatives by resource category (personnel, equipment, etc.)

**L:** Low – approximately 1/3 of the total program/department/division's initiatives by resource category (personnel, equipment, etc.)

## 7. Process Assessment and Appeal

### **7A. Purpose of Process Assessment**

The purpose of program review assessment is to evaluate the process for continual improvement. The process is required for accreditation and your input is very important to us as we strive to improve.

### **7B. 2012 - 2013 ASSESSMENT QUESTIONS**

1. Did you complete the program review process last year, and if so, did you identify program initiatives?

Yes

2a. Were the identified initiatives implemented?

Initiative 1, setting up SCI 106 as a smart classroom was implemented. Initiative 2 which was to get a full slate of core ESRM courses each semester has been partially implemented (see Initiative ESRM 1304). Initiative 3 for ESRM capstone class was not implemented and is repeated this year (this is a no-cost initiative at this point and will need to be implemented by the department). Finally Initiative 4, having Geosciences manage ESRM, which was the de facto situation prior to the Initiative, appears to have been implemented (perhaps not officially, but it is the case logistically ... this is the second year Geosciences is filing the Program Review and we have been doing the scheduling for ESRM from the beginning).

2b. Did the initiatives make a difference?

Yes, especially the smart classroom update for SCI 106.

3. If you appealed or presented a minority opinion for the program review process last year, what was the result?

4. How have the changes in the program review process worked for your area?

5. How would you improve the program review process based on this experience?  
Streamline the process. Can some sections be optional? Like this one.