

CSU Channel Islands
Program Assessment and Review Committee (PARC)
Report to the Provost and Dean of Faculty
PARC Comments and Recommendations for

Environmental Sciences and Resource Management

April 26, 2010

With the program's self-study and external review as its major data sources, the Program Assessment and Review Committee (PARC) reviewed the undergraduate major in Environmental Sciences and Resource Management (ESRM) and offers the following comments and recommendations.

Organizationally, this review follows the four elements of review of these earlier assessments, and should be read in conjunction with them.

Members of PARC are: Simon Aloisio, Don Rodriguez, Harley Baker, Mike Riley, Scott Frisch, Liz King, Nelle Moffett, Steve Lefevre (co-chair), Alex McNeill, Amy Denton, Stephen Clark, Peter Smith, Tiina Itkonen, Jesse Elliot, Betsy Quintero, Dennis Downey, Jaye Smith, Marie Francois, Karen Jensen, Greg Wood, Ed Nuhfer (co-chair), and Luda Popenhagen.

Element I: Defining Program Purposes and Ensuring Educational Outcomes

1. Comment: Among the program's strengths, faculty expertise and interests are a good match to local resources and research opportunities. (ESRM Self Study, p. 19)

Recommendations:

- *As the ESRM faculty grows, this match is an element to retain and further develop.*
- *As a consequence, ESRM has the potential to attract funding/donors from local businesses, corporations, and agencies in the region.*
- *In the long-run and as the number of faculty grows, it might be beneficial to include faculty with expertise in a diversity of areas with perspectives from other cultures both at a national and international level.*
- *ESRM complements the four pillars of the university mission, as reflected in the ESRM Program mission statement: "The ESRM program embodies the four pillars of the CI mission... community, region, and state." (ESRM Self Study, p 17)*

2. Comment: While acknowledging the new research space made available to ESRM, a program weakness is the lack of space (lab, research, storage, prep). (ESRM Self Study, p. 19; External Review Report, p. 5)

Recommendations:

- *ESRM work with OPC and the Physical Master Planning Committee to identify spaces on campus that could be modified to accommodate the program's lab and storage needs.*
- *ESRM discuss with the Dean's office the availability of necessary funds*

3. Comment: A Program Weakness is the lack of adequate CI transportation for field studies (ESRM Self Study, p. 19; External Review Report, p. 4-5)

Recommendations:

- *Work with the Dean's office to obtain necessary funds to purchase/lease suitable vehicles*
- *As this involves travelling to areas close to campus on tasks that have the potential to benefit the community, involve CCE in discussions and possible collaboration*
- *Work with CI Foundation for support through donor funding*

4. Comment: The distinctiveness of the ESRM program from that of other CSUs and elsewhere is noted by external reviewers and in the self study, with specific mention of course work in restoration ecology and ESRM's interdisciplinary focus. (ESRM Self Study, p. 21, external review, p. 1

Commendations:

- *These features define the program's uniqueness and illustrates its resourcefulness and entrepreneurial abilities.*
- *This uniqueness will serve to underscore the program's growth. Students and faculty will be attracted nationally and internationally.*
- *The fact that ESRM is "embedded in the STEM field" (self-study p. 21) shows that it is truly interdisciplinary in nature – also in the spirit of the CI mission.*

5. Comment: The University's commitment to environmental sustainability provides a special connection to ESRM. As noted in the external review (p. 5), there are many opportunities for ESRM capstone students to undertake campus-based fieldwork and advance University green-campus goals.

Commendations:

- *At recent Physical Master Planning Committee meetings where discussions were held regarding improvements/modifications to the CI landscape, all parties involved (the Committee, the landscape consultant, OPC, ESRM faculty) supported the proposal by ESRM faculty to create links for learning experiences between this forthcoming project and ESRMs students.*

Element II: Achieving Educational Outcomes

1. Comment: Curriculum requirements and expectations for learning are appropriate. Especially after its 2008 curriculum rewrite, ESRM has solid curriculum as a program strength. Students get a strong science background and also get solid professional skills, including GIS, writing, research, field work, and team-working skills. "A key strength of the program is the incredibly dedicated and expert faculty, both tenure track and lecturers." (External review, p 2)

Commendations:

- *The program should continue its excellent work in this area.*

2. Comment: With respect to documenting student learning, ESRM has identified program outcomes and provides information from a 2006 critical thinking course on learning achievement. (Self-study, p 24 to 28). But regarding course and program learning outcomes, there is little evidence that course outcomes have been refined with respect to assessability and linked to program outcomes.

Recommendations:

- *Perhaps with the assistance of Faculty Development, ESRM review its course learning outcomes and map these outcomes to its seven program outcomes.*

3. Comment: Regarding learning outcomes and data analysis, there is impressive evidence of ESRM's having developed an assessment plan and the self-study correctly cites WASC's positive analysis of CI programs being aligned to outcomes. (Self-study, p. 29-33) However, there is little evidence of assessment results, either at the course or program level.

Recommendations:

- *ESRM continue developing an assessment of both program and course learning outcomes, linking the two, and identifying ways of making assessment data available.*

4. Comment: Regarding the timeliness of degree attainment, the self-study documents show that an ESRM student completes the degree in about the same times as CI students as a whole (p 36-7). As a small major, the issue was brought up whether enough classes from the catalog were offered in a given semester. External reviewers made recommendations on this (external review p 6).

Recommendations:

- *Given its size, ESRM carefully monitor course availability. Perhaps it could develop and publish a 2- year course sequence directed at program completion.*

5. Comments: Concerning involvement of students in curricular activities:

- The program has a well-equipped computer classroom and AV support (such as turning slides into digital format) which allows students to engage in hands-on activities in their course work;
- The program has a wet lab;

- Students take field trips both in the county (Santa Monica Mountains, Channel Islands National Park, local wetlands) and to locations in other states and countries (New Orleans, Mexico) to expand their curriculum; (External review, p 2)
- There are multiple community connections which provide opportunities for students to do service learning in the community, a core value of CI.

Recommendations:

- *Program should be allowed to acquire vans. Field trips are an essential part of the program. Multiple cars create potential danger for students.*

6. Comment: With respect to advising and academic support, students receive constant attention throughout the program and good advising. Students consistently report the excellent communication between themselves and the professors.

Commendations:

- *Faculty rapport with students is a critical program strength, and it should continue its excellence in this area.*

7. Comments: Concerning Articulation, Transfer, and Retention:

- The Chair is a board member for all three local community colleges which results in direct contact and articulation with the ESRM program and opportunities for transfer students;
- The program has a formal relationship with the National Parks Service and has a community advisory board, which results in career opportunities for students.

Commendations:

- *Program strength is the linkages with state and national agencies. ESRM should continue the excellent work in this area.*

Element III: Developing and Applying Resources to Ensure Sustainability

1. Comment: The office of Academic Advising provides excellent support through its advisement services . (Self-study p 51) and Faculty Development provides support for faculty development activities (Self study p. 53)

Commendations:

- *ESRM should continue the excellent work of the academic advisement and departmental advisement, and the program should continue to identify and support faculty attendance at development activities within the department and the University.*

2. Comment: _ESRM enjoys excellent teaching space, with its GIS classroom (Self study, p 54), and in addition has strong technical support from well-equipped computer classroom and AV support and a new wet lab (External Review, p 1)

Recommendations:

- *ESRM continue to monitor size of GIS classroom space as the program expands in the future.*

3. Comment: ESRM has an active community advisory board and the communication between the program and the community board creates valuable linkages to agencies. (External review, p 6)

Recommendations:

- *As the program continues to grow, the chair and faculty should actively pursue new members with various areas of expertise for board membership.*

4. Comment: Faculty workload is governed by the California Faculty Association (CFA) agreement and is applied without bias (Self-study p 51). The External reviewers, however, judged that non-tenured faculty serve on too many committees and it recommends that the program reduce faculty service to one or two committees per semester. (External review, p 5).

Recommendations:

- *Even after the faculty committee revisions of fall 2009 the workload of non-tenured track committee members, in all programs, remains high. Specific to ESRM, many university committees find it valuable to have an environmental scientist. Support for non-tenured faculty members serving on one or two committees is recommended. Essential to this recommendation is the need to assess which committee work is benefitted by the program faculty.*

5. Comment: Our understanding is that the ESRM chair has a one course annual release. Key program projects, like course and program assessment, are difficult for the chair to find time to supervise. The external review (p 5) recommends an increased release time to allow the chair to pursue external financing and run the program.

Recommendations:

- *Suggest additional release time for the chair to administer the program. Find external sources, such as CERF funds, to allow the chair and a group of faculty to work on assessment activities for two to three days annually.*

6. Comment: External review (p 5) notes the assistance of Research and sponsored Programs (RSP) and University Advancement in seeking external funding and resources for the program, and program faculty can take the lead when the chair cannot.

Recommendations:

- *Continue to work with RSP and University Advancement in identifying grant opportunities and delegate to faculty members when chair cannot take the lead. Provide essential information to continue working on grant proposals when chair is unavailable.*

7. Comment: Faculty professional development is especially important in a small program, and in the light of the recent program focuses on restoration ecology and costal management (External Review, p. 5)

Recommendations:

- *Faculty professional development plans will benefit from the assistance of Faculty Development and Dr. Ed Nuhfer to reflect the scholarship needs of ESRM.*

Element IV: Creating a Learning Centered Organization

1. Comment: ESRM engages in program planning and it developed a strategic plan in fall 2008 (Self-study p. 18-21), which was approved by the dean. That plan identifies ESRM's vision for itself, program strengths, weaknesses, and opportunities, and identifies two and five year strategic objectives. External reviews gave ESRM a 3 of 5 on its assessment rubric.

Recommendations:

- *In its memorandum with the provost and dean, ESRM identify its strategic two and five year objectives, reflecting program, curriculum, resource, and assessment priorities.*

2. Comment: The external review recommends that ESRM have a 'well-defined means of assessment both of program and course learning outcomes . . . to develop and to include within future documentation.' (External review, p 3) It also recommends that ESRM develop an assessment cycle (p 4). The dean's memo regarding ESRM's self-study suggest that outcome data inform the program's curricular and strategic goals.

Recommendations:

- *That student outcome data at the program level be collected and used by ESRM faculty in identifying planning program improvements and resource requests.*

3. Comment: The program is and should reflect on directions for future growth. External reviewers advise that ESRM should prepare for program growth to 150 majors within the next five years (p 6). It notes that ESRM consider the implications of growth for advising, staff support, and in the longer term, tenure track faculty. They also note, as future program directions, that ESRM is considering sustainable agriculture and/or coastal management, perhaps as emphases or a graduate program.

Recommendations:

- *Recognizing budget constraints, ESRM, in conjunction with related disciplines, consider sustainable agriculture and/or coastal management as new program directions. It can ask whether these directions would complement faculty research and expertise and university mission goals.*