Proposal for the Establishment of the Life and Environmental Sciences (LES) Bylaw Unit (formerly the School of Natural Sciences bylaw unit)

1. Justification of the unit in terms of campus and University-wide academic needs, and potential contribution of the unit to campus and University-wide goals.

Life & Environmental Sciences (LES) brings together a broadly experienced faculty with a common interest in interdisciplinary research and education in natural and human-impacted Earth systems. A strong asset of our academic unit is the mix of disciplinary strengths that are brought together to address important inter- and multi-disciplinary questions that underlie the complex functioning of ecological and environmental systems.

2. A description of the relationship of the academic unit to existing or planned degree programs.

Faculty in this unit primarily support two graduate groups, Environmental Systems (ES) and Quantitative Systems Biology (QSB), two undergraduate majors, Biological Sciences (BIO) and Earth Systems Science (ESS), and a minor degree program in Environmental Science and Sustainability. Faculty in this unit may also contribute to other graduate and undergraduate degree programs. We are committed to student training and education at both graduate and undergraduate levels in the critical and quantitative study of interdisciplinary life and environmental sciences. In addition, we support the scientific literacy and critical thinking of all students at UC Merced through the delivery of general science education courses on a variety of topics related to life sciences, the environment, and sustainability. Faculty research interests in our unit have natural links to research and education in management, environmental health sciences, and environmental engineering. Therefore, our unit supports interdisciplinary hires in other bylaw units that contribute to research and graduate or undergraduate programs in these complementary areas.

3. A statement of the unit's objectives.

Our overall strategic goal is to promote leading-edge research and education that addresses fundamental and applied problems associated with the environment and its sustainability at the intersection of biological, physical, and chemical sciences. Because the scope of research across the environmental sciences is broad and multi-faceted, our research and educational priorities focus on the following strategic areas:

- Research in the interrelated biotic and abiotic factors that regulate the structure and functioning of terrestrial and aquatic ecosystems, and responses to changing climate and anthropogenic pressures.

- Basic and applied research in the molecular, chemical, biochemical, and physical processes underlying the sustainable use of water, air, soil, and living resources over a range of spatial and temporal scales.

- A gene-to-ecosystem perspective for understanding the interactions among organisms and the environment, and the use of evolutionary biology and ecological principles in the study and management of resources and ecosystems.
4. A statement describing the impact of the new unit on other campus units and/or programs.

In 2011, faculty in the School of Natural Sciences (SNS) not associated with this unit voted to leave the SNS bylaw unit and create four new bylaw units. The faculty remaining in SNS are proposing this bylaw unit for all faculty in SNS who chose not to join the new bylaw units that were created in 2011.

5. A statement regarding possible administrative overlap with other existing campus units.

The LES unit is the personnel and administrative home for faculty working broadly within the life and environmental sciences. It is one of five bylaw units within the SNS and complements the thematic areas of the other units (Applied Math, Chemistry and Chemical Biology, Molecular and Cell Biology, and Physics). Faculty within LES share responsibility with other SNS units for the delivery of the undergraduate Biological Sciences major, and with faculty in the Schools of Engineering (SOE) and Social Sciences, Humanities, and Arts (SHAA) for the delivery of the undergraduate Earth Systems Science major and the Environmental Science and Sustainability minor. Faculty in LES belong to both the Quantitative Systems Biology graduate program, administratively under the SNS, and the Environmental Systems graduate program, administratively under the SOE. In the future, we hope that LES will have affiliation with the development of academic programs in Management related to interdisciplinary environmental research and education.

6. A statement of the unit’s governance, including
   a. Unit bylaws
   b. Policies and procedures for academic appointments and promotions
   c. Organizational chart showing delegation of authority and responsibilities
   d. A description of the unit’s administrative structure

See below.

7. A statement regarding the method of consultation with students and faculty and their appended comments.

A request for comments on the proposal to establish the LES bylaw unit was sent to bylaw and graduate group chairs, curriculum leads in NS, school faculty chairs, and school deans, with a request to disseminate to their constituencies. One comment was received. A copy of the request memo, the comment received, and response to the comment are appended below.

**LES Faculty (as of 3/01/2012)**
Andres Aguilar
Michael Beman
Asmeret Asefaw Berhe
Michael Dawson
Benoit Dayrat
Carolin Frank
Teamrat Ghezzehei
Stephen Hart
Lara Kueppers
Peggy O’Day
Samuel Traina
Life and Environmental Sciences (LES)
Unit Bylaws

I. Membership and Duties

1. Academic Senate members of the unit may hold the titles of Professor, Associate Professor, Assistant Professor, full-time Senior Lecturer with Security of Employment, full-time Lecturer with Security of Employment, full-time Senior Lecturer with Potential for Security of Employment, full-time Lecturer with Potential for Security of Employment (LPSOE) (Regents Standing Orders 105.1).

2. Members are expected to participate regularly in unit administration and service.

II. Administration

1. The Chair is appointed by the Dean of the School of Natural Sciences in consultation with the faculty in the unit. The Chair shall exercise duties specified in APM-245 that are delegated to the Chair by the Dean.

2. The Chair will oversee all academic personnel (AP) matters, including but not limited to faculty recruitment, appointments, and advancement for all professorial titles (tenured, tenure-track, adjunct and visiting) and lecturers with security of employment (LSOE) or potential security of employment (LPSOE).

3. The Chair may delegate responsibility for faculty recruitment, appointments, and advancement cases to other members of the unit.

4. If the Chair believes that there is insufficient expertise within the unit to prepare a case for promotion (assistant to associate professor, associate professor to professor, professor step V to step VI, or professor step IX to above scale), a review committee may be formed that includes external, non-voting members.

III. Committees

Unit members may constitute ad hoc committees as needed to accomplish the work of the unit. Any functions specifically prohibited from delegation by University or Division bylaws, or by the Academic Personnel Manual, may not be delegated to a committee.

IV. Meetings

Meetings will be held at least once per semester. Notice of meetings must be distributed to all members prior to the meeting, and agenda items must be solicited. Minutes of meetings shall be distributed to all members within ten days of the date of the meeting.

V. Voting and Parliamentary Procedures

1. All Academic Senate members with appointments in the unit have equal voting rights in unit matters other than personnel actions.

2. Unit matters other than personnel actions requiring a vote must have a 50% quorum present, or
in the case of an electronic vote, at least a 50% response by unit members. Approval of non-
personnel actions requires a majority of the votes cast. Votes to abstain do not count.

3. Procedures for voting on personnel actions will be reviewed and updated annually in
accordance with policies of the UC Merced Academic Personnel Office.

VI. Amendments

Enactment, amendment, or repeal of the bylaws requires a two-thirds vote of the unit members.

b. Policies and procedures for academic appointments and promotions

Voting Policies and Procedures AY 2011-2012 (enacted Nov. 2011)

1. The School of Natural Sciences¹ is a single Bylaw 55 unit and faculty in all disciplines within
the School¹ have the same rights and responsibilities to discuss and vote on personnel cases in
any discipline.

2. Only faculty members who hold appointments in the School of Natural Sciences¹ may
participate in case discussions.

3. Faculty of all ranks (including emeritus faculty) participate in discussions and vote on all
appointments, merits, and promotions.

4. Case analyses and accompanying materials for all personnel cases are posted at least three full
business days before the case is discussed by the faculty.

5. Faculty members who cannot be present for the case discussion may provide written comments
to the AP Chair or to another faculty member to be read at the case discussion.

6. Faculty members have at least two full business days to cast their votes following the case
discussion. Voting is performed electronically via a secure web site. Any faculty member may
request a paper ballot in lieu of voting electronically, but such requests must be received in
writing by the Academic Personnel Analyst prior to the start of the voting period.

7. Allowable faculty votes for personnel cases are: "yes", "no", or "abstain". Faculty choosing to
abstain from a vote should provide a comment on why they are abstaining, which will be included
in the transmittal letter. No comments are allowed for yes or no votes.

8. The transmittal letter contains a tally of the votes and a summary of the faculty discussion. It is
posted for faculty review for at least two full business days before it is sent on to the Dean.
Should any faculty member inform the AP Chair during the review period that the transmittal
letter does not properly reflect the faculty discussion, the AP Chair revises the transmittal memo
and posts the revised version for another two full business days. Should disagreement persist, any
faculty member has the right to attach a minority report to the transmittal letter.

¹ Now Life and Environmental Sciences.
c. Organizational chart showing delegation of authority and responsibilities

![Organizational Chart]

*Life and Environmental Sciences*

- Dean
  - School of Natural Sciences
- LES Chair
- Faculty
- Faculty Committees
  - Faculty Representatives

*d. A description of the unit’s administrative structure*

The LES unit is administratively within the School of Natural Sciences. The unit Chair will report to the Dean of SNS. As stated in LES bylaws, the Chair will be responsible for personnel actions of the unit, and for other duties described in APM-245 assigned to the Chair by the Dean. The School will provide administrative support to the unit. The LES faculty may form committees of the unit as needed, and elect or appoint faculty representatives on behalf of LES to School, Division, or University committees, task forces, or other Senate or administrative bodies. Requests to form faculty committees, or for representatives to committees, should be made to the LES Chair, who will consult with faculty.