

# Two-Year Progress Report

## School of Environment, Resources & Sustainability (BES, MES, PhD)

### May 2019

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#### **Background**

This progress report provides an update on the BES, MES, PhD programs delivered by the School of Environment, Resources and Sustainability (SERS), formerly known as the Department of Environment and Resource Studies (ERS)<sup>1</sup>.

The final version of the augmented self-study was submitted to the Associate Vice-President Academic, and Associate Provost, Graduate Studies [now Associate Vice-President, Graduate Studies and Postdoctoral Affairs (AVPGSPA)] in February 2015. The reviewers stated that “SERS’ interdisciplinary and transdisciplinary research on environmental issues is clearly recognized at the national level. Students can have either a Science or Arts focus - thereby diversifying the students in the program. The flexibility of the SERS program is one of its most defining and attractive features. This diversity is positive for the program, moreover, the co-op option, strong faculty, and a unique hands-on program results in high-quality applicants.”

The Final Assessment Report was approved by Senate Undergraduate Council and Senate Graduate and Research Council in September 2016 and was sent to Senate for information in October 2016.

#### **Recommendations**

1. A review of the undergraduate program by SERS faculty should be undertaken to identify core courses, as well as identification of courses in areas of specialization to SERS. Advice to students regarding taking courses within these specializations should be discussed.

#### **Response**

COMPLETED: This set of actions has been completed as of the date of this report by the Director and Undergraduate Studies Committee, which is comprised of four faculty members, an undergraduate student representative and a staff administrator. All of SERS (all voting faculty members, cross-listed adjuncts who have voting rights, staff

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<sup>1</sup> The name change became official January 4, 2016.

members, undergraduate student representatives on the School Council, and graduate student representatives) vetted four iterations of the course review.

During a day-long retreat in April 2016, there was a unanimous vote to adopt course changes, backed with a summary and action plan relevant to the cyclical seven-year review; these documents were provided to the University of Waterloo Quality Assurance team. The only change since then is updating the specializations as courses change across campus and ERS 401 is planning a further course name change effective fall 2019. The course is to be called Translational Ecology, reflecting both the internal mission of SERS and the international attention SERS received for being a leader in this specific area.

Students have been provided with documents and guidance on the courses available in each of the areas of specialization.

2. Propose a name change to School of Environment, Resources and Sustainability (SERS) – as it better reflects the mandate, transdisciplinary approaches, and aspirations of the program. The SERS website should also be updated with advice and options to SERS undergraduate students with possible options of joint degrees, as well as to options of certificates.

**Response**

COMPLETED: The Board of Governors approved the name change as of November 2015, and the change became official January 4, 2016. The [SERS website](#) was revised by the SERS Director, Associate Directors and three staff members. The Director reallocated staff tasks and time, reducing basic clerical functions in favour of increased media communications via the University of Waterloo web space, Twitter, and Facebook. As of September 2018, these changes were concomitant with an increased number of undergraduate applicants and acceptances (between 95-100 students) in Fall 2017 and again in Fall 2018. There is a small increase in number of international students as well.

3. Establish an informal academic advisors' event in the first-term of the fall that would allow students to ask a variety of questions concerning degree options. Consider inviting your Departmental Student Council to organize such an event.

**Response**

COMPLETED: This event has been ongoing for nearly 5 years. Dr. Quilley and Dr. Collins served as advisors through July 2018 followed by Dr. Collins and Dr. Murphy.

4. Consider alternative options for mounting field-based courses such as collaboration with other environmental programs.

**Response**

COMPLETED (IN A MODIFIED FORM): Plans were readied to do this with other universities, the province and other partners, and the package was ready to be submitted to Environment (ENV) Faculty Council in fall 2018. However, the change in provincial government in summer 2018 halted all plans as provincial government partners also are no longer allowed to participate. SERS pivoted further to our other partnerships with non-government organizations (NGOs), the private sector, and Federal agencies. Plans are being made to partner even further with [rare Charitable Research Reserve](#), [Parks Canada](#), and [Walker Aggregates](#) as well as the [Society for Ecological Restoration, Ontario Chapter](#). Engagement with local and provincial First Nations governing bodies and individuals have deepened and the SERS course on First Nations is co-led by a First Nations scholar and leader, [Dan McCarthy](#), who is well respected by First Nations' partners.

Implementation of these plans depends largely on the provincial government. The timeline will be slow-walked and could be anywhere from 12 to 24 months at best.

5. Investigate a number of modes to provide a sense of community among the graduate students, particularly additional student space. Reviewers suggested that SERS strengthen student and faculty engagement and a unit-wide culture by building their own traditions such as weekly seminar series, creating a graduate student society, hosting special events (e.g., Iron Chef Competition at UVic).

**Response**

IN PROGRESS: SERS increased events that fostered earlier opportunities for networking and community building amongst students (e.g. get-togethers during Orientation week, unit-wide potlucks and meet-and-greets during terms, more alumni visits, more discussions during our monthly ERS Salon). The students have indicated, during standing committee meetings and retreats, that these changes have been positive. The incomplete part is space allocation; however, in September 2018, the Dean announced that SERS will be allocated some space in EV1, floor 2 west. With the addition of research-based clusters and more graduate space - SERS expects that much of the student space issues will be resolved.

6. The faculty should seek additional lab space for equipment and storage needs for the SERS program.

## Response

IN PROGRESS: There is still an issue with locked-down dry storage on a permanent basis – though the Dean did free up some space in EV2 for that purpose on a lend-lease basis (which is appreciated). In terms of wet lab space, Dr. Trant’s lab is now online. The recent relocation of the Centre for Teaching Excellence from EV1 to East Campus provided an opportunity to further address ongoing and future space needs. Additional office space in EV1, near the former CTE suite, was provided for SERS personnel.

SERS identified many of the same issues that were highlighted by the external reviewers. In addition to the recommendations above, SERS added the following:

- i. The messaging of SERS needed to be clearer and consistent not only in social media and the web, but it must also permeate recruitment and course content. This has been COMPLETED as of September 2018 (see the various social media feeds and the overhauled website).
- ii. The departure of a key faculty instructor created a gap in some teaching areas around community (city/town/neighbourhood) scale sustainability but is also an opportunity to explore possible alternatives for this position with the Dean such as local governance/community-based sustainability with a focus on teaching experiential education. This is PARTIALLY IN PROGRESS as the Dean is proposing several initiatives that should lead to SERS and ENV (as a whole) being able to fill these gaps and expand into the areas indicated. One recent ENV level hire (Dr. Nugent) is 20% housed in SERS and some of his teaching filled these gaps, hence this is PARTIALLY COMPLETED.
- iii. SERS took on the delivery of ENVS 200 and offered to do the same for ENVS 195 (for which the Dean’s Office hired dedicated ENV level staff). There may be some room to consider how to deliver other ecologically-based courses as a better package, in consultation across the Faculty of Environment and outside ENV. SERS is also a key developer of an online course in Sustainability, open to students outside of ENV. This is IN PROGRESS; the online Sustainability course has SERS participating but it was agreed that ENV would lead on a cross-Faculty mounting of this course. It was agreed ENVS 195 would remain with the Dean’s Office and a new hire at that level means a Continuing Lecturer has filled that role. SERS completed and began delivering (winter 2019) an online introductory course in [Environmental and Sustainability Assessment](#). The packaging of ecologically-based courses has been tightened in SERS and with the hire of Dr. Barbeau as a Continuing Lecturer in SERS, the plans for the cross-ENV and cross-UW packaging is in development (Dr. Barbeau is starting these plans in fall 2019; she has been busy with the online course and redesigning the spring term field courses after UW and ENV ended the lease with the Huntsville facility).

iv. SERS continues to fine tune its social media use, especially when it comes to alumni relations, but also with its current and potential students. With increased competition for students - internal and external - SERS has increased work with the recruitment group on strategies to get more applications to their undergraduate and graduate programs. The fine tuning continues but this has really been COMPLETED (see our social media pages/accounts). There are demographic constraints on recruiting more students into SERS but thanks to the Associate Dean, Undergraduate Studies, SERS has met or exceeded its undergraduate target the last 2 years. The PhD program is robust but demographics and competition with universities that fully fund Master's students is making it difficult to meet the MES/MRP targets. SERS is doing a review of the MES/MRP and plans to submit a bold revamp in winter 2019.

**Updated Implementation Plan**

	Recommendations	Proposed Actions	Responsibility for Leading and Resourcing (if applicable) the Actions	Timeline for addressing Recommendations
1.	A review of the undergraduate program by SERS faculty should be undertaken to identify core courses, as well as identification of courses in areas of specialization to SERS. Advice to students regarding taking courses within these specializations should be discussed.	COMPLETED though SERS will continue updating information, e.g. SERS is modifying the 'specializations' guide and modifying ERS 401 so the name reflects the ERS mission better (new name is Translational Ecology)	Associate Director - Undergraduate Studies monitors this and leads the Undergraduate Studies Committee for the same purpose.	COMPLETED though SERS will continue updating information, e.g. SERS is modifying the 'specializations' guide and modifying ERS 401 so the name reflects the ERS mission better (new name is Translational Ecology). Timeline: complete, first offering Winter 2020 (S. Murphy)
2.	Proposed name change to School of Environment, Resources and Sustainability better reflects the mandate, transdisciplinary approaches, and aspirations of SERS.  The SERS website will be updated with advice and options to SERS undergraduate students with possible options of joint degrees, as well as to options of certificates etc.	COMPLETED. Name change has been School of Environment, Resources and Sustainability (SERS) since 2016, officially.  Website was updated.  No further actions.	Director and Associate Directors  Revised by the three SERS staff members and the SERS Director and Associate Directors.	The Board of Governors approved the name change as of November 2015, and the change became official January 4, 2016.  COMPLETED – no further actions. The updated SERS website: <a href="https://uwaterloo.ca/environment-resources-and-sustainability/">https://uwaterloo.ca/environment-resources-and-sustainability/</a> .
3.	Establish an informal academic advisors' event in the first-term of the fall term that would allow students to ask a variety of questions concerning degree options. This will be organized in conjunction with ERSSA (the School's undergraduate student association)	COMPLETED. SERS Increased allocation of staff (Patti Bester) and professor (Drs. Collins and Quilley) time so that there are more academic advisors for students (especially 1 <sup>st</sup> year) to answer questions about options and paths.	Directors and Associate Directors  SERS Communications team is tasked with developing the information and materials needed for this and related purposes	COMPLETED – no further actions needed other than monitoring and swapping personnel as sabbaticals occur.

		Dr. Murphy replaced Dr. Collins July-December 2018 (Dr. Collins is on sabbatical); Dr. Murphy and Dr. Collins will fill these roles as of January 2019.	Directors and Associate Directors	
4.	<p>Consider alternative options for mounting field-based courses such as collaboration with other environmental programs.</p> <p>There should be more collaboration with other programs outside of the University of Waterloo on experiential learning.</p>	<p>COMPLETED/MODIFIED The provincial government change in summer 2018 halted inter-university plans. SERS expanded this initiative with non-provincial partners.</p>	<p>Director and Associate Directors; Dr. Barbeau helps lead here since she teaches many of the field-based courses in spring term.</p>	<p>COMPLETED/MODIFIED. SERS will keep expanding with non-provincial partners as there always will be ongoing opportunities.</p>
5.	<p>Investigate several modes to provide a sense of community among the graduate students, particularly additional student space.</p>	<p>COMPLETED. The space related office issues were solved, per the Dean. The events to build the traditions per the reviewers were launched in 2017 and have been successful.</p>	<p>Director, Associate Directors, SERS delegate to the Faculty of Environment Space Committee, SERS Communications Team</p>	<p>COMPLETED. No further action planned (other than to continue to schedule events and monitor for any needed changes)</p>
6.	<p>The faculty should seek additional lab space for equipment and storage needs for the SERS program.</p>	<p>Most current needs either COMPLETED or IN PROGRESS to be completed by January 2019; CaRE research group constraints not resolved, storage space still temporary</p>	<p>Director, Associate Directors, and SERS delegate to the Faculty of Environment Space Committee</p>	<p>SERS will continue to engage with ENV Dean for future lab and permanent storage space needs; CaRE lab needs not resolvable at present (current solution is to disperse work and use spaces for CaRE students with</p>

		and future wet lab space likely constrained.		collaborators at – per fall 2018 – 4 other universities or federal labs)
	The unit shall clarify and provide consistent messaging across communications platforms <sup>2</sup>	COMPLETED. SERS has clearer and consistent messaging in social media, the web, and recruitment materials and course content	Director and SERS Communications Team	SERS Communications team continues to update as needed but this is COMPLETED
	Increase FTE to compensate for loss of 1 FTE in teaching and research capacity in a specific area (community scale sustainability) <sup>3</sup>	Loss of FTE created an opportunity to explore possible alternatives for this position with the Dean such as local governance/community-based sustainability with a focus on teaching experiential education. PARTIALLY COMPLETED/PARTIALLY IN PROGRESS.	Director	COMPLETED in the sense that Dr. Nugent (ENV level hire but 20% anchored in SERS) fills some of these roles and IN PROGRESS in the sense that the Dean’s recent plans and initiatives should complete these ENV wide but focused in part on SERS. The hiring of SERS Continuing Lecturer Dr. Barbeau enhanced the environmental community sustainability courses. The Dean has indicated SERS is in line for a likely FTE hire though the looming budget constrains via the Province cloud the timeline.

The Department Chair/Director, in consultation with the Dean of the Faculty shall be responsible for monitoring the Implementation Plan.

<sup>2</sup> Note: this item was added by the program, in addition to the existing external reviewers’ recommendations

<sup>3</sup> Note: this item was added by the program, in addition to the existing external reviewers’ recommendations





Date of next program review: \_\_\_\_\_ 2021 \_\_\_\_\_  
Date

Signatures of Approval:

\_\_\_\_\_  
Chair/Director

\_\_\_\_\_  
Date

AFIW Administrative Dean/Head (For AFIW programs only) \_\_\_\_\_ Date  
\_\_\_\_\_  
Faculty Dean \_\_\_\_\_ Date

**Note:** AFIW programs fall under the Faculty of ARTS; however, the Dean does not have fiscal control nor authority over staffing and administration of the program.

\_\_\_\_\_  
Associate Vice-President, Academic \_\_\_\_\_ Date  
(For undergraduate and augmented programs)

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Associate Vice-President, Graduate Studies and Postdoctoral Affairs \_\_\_\_\_ Date  
(For graduate and augmented programs)