UNIVERSITY OF WINDSOR UNIVERSITY PROGRAM REVIEW (UPR) REPORT ON: GREAT LAKES INSTITUTE FOR ENVIRONMENTAL RESEARCH Graduate Programs February 2018

EXECUTIVE SUMMARY

Review Preparation

In preparing this document, the Program Development Committee reviewed the following: Great Lakes Institute for Environmental Research's (GLIER) Self-Study (SS) (October 2015), the report of the external reviewers (ER) (February 2016), the response from the Director (Dir) (September 2016), and the response from the Dean (DR) (January 2017) to the above material. The external reviewers were: Dr. Tillmann Benfey, Department of Biology, University of New Brunswick, Dr. Pat Chow-Fraser, Department of Biology, McMaster University, and Dr. Abdul-Fattah Asfour, Department of Civil and Environmental Engineering, University of Windsor.

Graduate Programs

GLIER offers a MSc in Environmental Science and a PhD in Environmental Science.

Enrolments

Graduato

	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017
MSc Full-Time	24	29	26	30	33
MSc Part-Time	0	0	0	0	0
PhD Full-Time	13	13	13	14	14
PhD Part-Time	0	1	1	0	0

Human Resources

Faculty/Instructors

Tenure/tenure-track faculty (jointly appointed with a	15 (including the Director of GLIER and 1 vacant
Department)	position)
AAS Learning Specialist III	1
Faculty members involved in graduate program delivery	15

Full/Part-time Staff

Secretary to the Director	1
Animal Care/Field and Safety Technician VI	.5
Environmental Genomics Technician VII	1
Electron Microscope Technician VII	1
Organic Analysis Lab Coordinator VII	1
Metals Laboratory Technician V	1

FINAL ASSESSMENT REPORT (with Implementation Plan)

Significant Strengths of the Programs

GLIER offers internationally-recognized and high-quality graduate education delivered by internationally-recognized faculty with well-funded and strong research records. (SS, p.68, ER, p.7)

Through integrative and multidisciplinary programming, including "unparalleled hands-on access to advanced

research instruments and equipment", and dedicated and supportive faculty and staff, students are provided with an exceptional learning environment and student experience. (ER, p.2,3,5,7,9) "The emphasis of multi-disciplinary approaches, use of shared (core) research facilities, and the mixing of research groups when assigning student office space are all evidence of a commitment to the development of professional and transferable skills by GLIER students." (ER, p. 8)

GLIER was commended by the External Reviewers as being "one of the most cohesive, collaborative, and productive group of researchers working on environmental issues in a Canadian University." (ER, p.6)

Opportunities for Program Improvement/Enhancements

The External Reviewers' report was very favourable toward GLIER and its graduate programming and supports. The reviewers identified few opportunities for program improvements. Those identified are captured in the recommendations listed below.

IMPLEMENTATION PLAN

Recommendations (in priority order)

(Final recommendations arrived at by the Program Development Committee, following a review and assessment of the External Reviewers report, the Director's response and the Dean's response.)

Recommendation 1: That GLIER submit curriculum maps, course-level learning outcomes and assessment methods for each of its courses that clearly correspond to the program-level learning outcomes. [Program-level learning outcomes for each of its graduate programs that clearly correspond to the University's stated "Characteristics of a University of Windsor Graduate" were approved in 2015.] Agents: Department Council, Head, CTL, Vice-Provost, Teaching and Learning Completion by: Fall 2019

Recommendation 2: That GLIER, working with the Faculty of Graduate Studies, identify and pursue opportunities for increasing the number of applications to GLIER graduate programs from international students who hold external funding.

Agents: Director, GLIER Graduate Committee, Dean of Graduate Studies, Dean of Science Completion by: Fall 2021

Recommendation 3: That GLIER investigate, identify, and report on reasons for the rate of withdrawal from the PhD program, with the goal of reducing attrition. **Agents:** Director, GLIER Graduate Committee **Completion by:** Fall 2019

Recommendation 4: That GLIER organize Statistics workshops and develop an orientation program at the beginning of term to introduce new students to equipment and services of the core facilities. **Agents:** Director, GLIER Graduate Committee **Completion by:** Fall 2019

Recommendation 5: For the sake of reporting and celebrating achievements, that GLIER establish a mechanism to track and make available statistics on publications stemming directly from MSc and PhD theses and on successes of GLIER students with respect to scholarships and conference/publication awards. (ER, Recommendation 6) **Agents:** Director **Completion by:** Fall 2019

Recommendation 6: That the Director of GLIER meet with the Dean of Science and the Provost to clarify questions relating to reporting structure, with the overall goal of maintaining the multidisciplinary nature of the research and graduate programs; and that the Director provide a summary report of this meeting(s). **Agents:** Director, Dean of Science, Provost **Completion by:** Fall 2019

Recommendation 7: That the Director of GLIER develop a plan, in consultation with the Dean of Science and the Provost, to acquire additional office and lab space to accommodate the anticipated new students and faculty who will join GLIER assuming success with the CREATE, CFREF and/or Research Network grant applications; and that GLIER provide a summary report of the plan and its implementation, in its next update. **Agents:** Director, Dean of Science **Completion by:** Fall 2019