

# Environmental Studies Review

**March 2008**

**Report of the Review Panel  
Environmental Studies Program  
Sir Wilfred Grenfell College  
Memorial University of Newfoundland**

The Environmental Studies review panel consisted of the following members:

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The panel was greatly assisted in its planning, deliberations and assessment by Ms. Joan Bessey, Centre for Institutional Analysis and Planning.

## **Introduction**

The aim of the Academic Program Review (APR) process is to assess, through on-site consultations and background documentation, the quality and suitability of academic endeavours. The APR is regarded as formative; an opportunity for the unit to work collegially to improve its program of study. The review also provides a basis for further program development and for making resource decisions.

The review panel received extensive background materials including detailed procedures for the academic review of the Environmental Studies program at Sir Wilfred Grenfell College. These guidelines under the authority of Senate provided the four reviewers with various forms of advice prior to the site visit. The panel had before it the Self-Study Review of the B.A. Degree Program conducted by the Environmental Studies Program completed in May 2005. This study is a reflective, critical and analytical self-study that was the outcome of active involvement of the faculty, staff and students and represents the starting point and the basis for the review process. The panel also received a number of other documents including the Final Report of the Committee to Review the Academic Administrative Structure of December 15, 2006, and the 2003 Report of the Review Panel of the B.S. Degree Program in Environmental Science.

During an intensive three day period, November 1-3, 2007, the panel undertook its on-site review. The panel followed the practices for such reviews as outlined in the Procedures for the Review of Units and Programs, and met with:

- faculty members from the Environmental Studies Program, the Environmental Science Program, the Division of Social Sciences, the Division of Science, and the Division of Arts;
- students and alumni from the Environmental Studies and Environmental Sciences programs;
- senior administrators of the College.

Herein, the panel presents its final major conclusions and recommendations. It is anticipated that information gained from the review and the resulting recommendations will significantly strengthen the unit's program and ultimately facilitate the decision making processes and strategic direction of the institution.

The panel notes it received valuable feedback from all participants in the review process, however, it was particularly struck by the open and frank exchange between the panel and students. It was clear to the panel that SWGC students have a passion for their program but at the same time have serious concerns on a number of issues. These concerns are reflected under the appropriate sections that follow in the report.

## **Background – Environmental Studies at Grenfell**

Environmental problems such as global climate change, acid rain, decreasing biodiversity, deforestation, and overpopulation are increasingly affecting the well-being of humanity and threatening the viability of many of the earth's ecosystems. The aim of the Environmental Studies program is to encourage students to critically examine and develop a broad yet integrated understanding of environmental issues, problems, and possible solutions. To achieve this, the program has a substantial common core of courses that will provide students with a liberal background in Environmental Studies. As well, students will choose from one of two areas of concentration, *Environmental Perspectives*, or *Outdoor Environmental Pursuits*. The Environmental Perspectives concentration will provide students with the means to develop a deeper and more comprehensive theoretical understanding of environmental problems. The Outdoor Environmental Pursuits concentration will provide students with practical experiences and outdoor skills that respect fragile wilderness environments; and at the same time, broaden the breadth and focus of students' understanding of their natural environment.

## **Environmental Studies Program**

The Environmental Studies program was approved in 1999. The program is generally sound and effective and well suited to a liberal arts and science institution. Moreover, it draws strongly on the local landscape and sense of place. Nevertheless, the program faces a number of challenges and deficiencies, several of which require immediate attention by the unit and by administration. The review panel identified a number of key issues under which specific topics and recommendations are presented. Key issues include (I) Curriculum, (II) Facilities, (III) Relationships with other Programs, (IV) Links to Communities, and (V) Program Distinctiveness. Detailed treatment and concomitant recommendations related to these issues follow:

### **1. Curriculum**

#### **1.1 Course content – overlap, coordination, duplication, first year course**

There is, particularly among students, both recognition and a concern that the Environmental Studies program suffers from a degree of overlap in courses, a lack of coordination and duplication. Some students were concerned that a number of topics were covered in several different courses. This, of course, is not necessarily problematic as the same subject may be examined from several points of view. This is especially the case in interdisciplinary programs where a topic such as sustainable forests or climate change needs to be addressed in terms of the basic science, the ethical dimensions, the economic dimensions and public policy considerations. However, on some specific topics the overlap and duplication in the program appeared to be excessive.

One former student felt that the “program needs to draw from a greater base of professors”. This student reported that 30% of her Grenfell education was with one professor and 55% was with just three professors. In cases like this it would be difficult to avoid some overlap.

It is important for the program and the faculty in it, to work to be sure that overlaps and excessive duplication are avoided. In this effort special attention should be paid to avoid overlaps among courses within the unit and between environmental science and environmental studies where some students might be taking both. A casual approach to coordination and excessive duplication can have serious consequences for the program.

**Recommendation 1:** Faculty and chairs in both Environmental Studies and Environmental Sciences should regularly review the content of courses in a coordinated way, perhaps in an annual joint curriculum meeting where syllabi and topics covered are *comprehensively* reviewed and discussed.

As the Tourism and Resource Management degree programs progress a similar process of consultation will be necessary for courses in these new programs that cover material that relates to environmental studies and environmental sciences subjects. After further discussions with faculty, staff and students, the review committee came to the conclusion that all four degree programs, which, all in their own way, deal with the environment should be brought together and coordinated to the mutual benefit of all four still largely autonomous programs. It was suggested that the title “School of the Environment” could give an added impetus to the College as a “centre of environmental excellence” and could potentially serve as a marketable brand to enhance recruitment for the college as a whole as well as the four programs.

**Recommendation 2:** To strengthen the image of the Environmental Studies program and other related programs, a general title should be given to the four degree programs that deal with the environment in their own particular way; Environmental Studies, Environmental Science, Resource Management and Tourism as well as the ancillary environmental research centres connected to the college. The name “The School of the Environment” is one suggestion. This could be done without impinging on the individual autonomy of the separate programs. However, it will require a high level of cooperation and coordination among units and partners.

### **First Year Introductory Course**

An important curricular issue that arose in conjunction with discussions regarding links between Environmental Studies and Environmental Science (addressed more broadly elsewhere) concerned first year courses. There was an element of dissatisfaction among some students regarding the value of the introductory course. It was also felt by some not to be the sort of course that would necessarily attract the undecided student to pursue Environmental Studies. The reviewers also thought that an early exposure to some of the scientific aspects of the study of the environment should be available to potential first year Environmental Studies students. Environmental Studies students are not required to take first year Environmental Science, and likewise, Environmental Science students do not have to take first year Environment Studies. It is our view that students should take both courses. It has long been the case, for instance at Trent University and elsewhere, that there is a single combined year-long introductory course taught by a mix of Environmental

Science and Environmental Studies faculty that gives students a sense of the whole of the subject area. Environmental Studies students should be familiar with the basics and the language of Environmental Science. Furthermore, a revamped introductory course along these lines would serve as a means of recruitment of students into either of the two programs.

Greater cooperation between Environmental Studies and Environmental Science was a recommendation of the Environmental Science review and a review of the first year courses might be a useful opportunity for cooperation on a substantive matter.

**Recommendation 3:** Undertake a cooperative review of first year offerings and requirements with the Environmental Science program with the view of introducing a comprehensive first year course or twinned half-courses for students of both programs.

## 1.2 Course availability/scheduling

Both students and faculty mentioned several issues regarding course availability and scheduling. In its current form, the program lacks adequate offerings and flexibility to ensure that students complete their program in a normal four-year timeframe. Especially problematic was the fact that the 2<sup>nd</sup> year course in GIS, a required course, has only been available in alternate years making it especially difficult for students that had transferred into the program to complete their degree requirements. Ways around the problem have sometimes been offered to students on an individual basis, but students actively want to get the course as part of their degrees, but do not want to return for another winter term to take this one course to complete their degrees. One former student suggested that use be made of the GIS facilities at the College of the North Atlantic to ease the problems involved with the GIS course.

Concerns also arose from students who were forced into particular options by timetable issues. Some students mentioned, in particular, that they would have preferred a different selection of upper year courses but could not get the mix that they preferred sometimes across the science-studies line. The broad concern about insufficient third and fourth year course options is addressed below under the heading ‘3000 – 4000 level course options’ – addressing that concern might help to solve this problem.

**Recommendation 4:** The Environmental Studies unit should offer required courses every year, especially the 2<sup>nd</sup> year GIS course which students want to take and which provides a skill central to the program. The unit should publish a timeline of courses that are to be offered in the following two or more years to aid students in planning their studies.

**Recommendation 5:** Care should be taken to avoid timetable conflicts especially among courses in Environmental Studies and Environmental Science that students might want to ‘cross over’ to take. The Chair of the unit should address this matter within the unit and during the coordination meetings with the Chair of Environmental Science noted under recommendation 1 (above). Input from the Registrar’s Office is recommended.

### **1.3 3000-4000 Level Options**

An additional course problem arises out of the limited number of 3000-4000 level options that are available. Within the current program the choice of courses is limited and students must take 6 out of 7 courses from the list. This is often very difficult to do given the likelihood of timetable conflicts or situations where a particular course is not available in a particular term. In effect the list of courses is too short.

A number of courses should be added to this list. A member of the Historical Studies program presented the reviewers with a proposal to offer a course in Environmental History. This would be easy to implement because a course with this title already exists in the Memorial University calendar, History 3030. There are number of Environmental Science courses that would be particularly relevant to students in this program. Provided they have the prerequisites or appropriate waivers, they could take any of the following ENVS 3072 (Comparative Marine Environments), ENVS 3110 (Flowering Plants), ENVS 3130 (Freshwater Ecology), ENVS 3131 (Impacted Terrestrial Ecosystems), ENVS 3811 (Analytical Ecology). There is also a course titled Earth Science 3811 (Paleontology). There are also relevant courses in Tourism; Tourism 3010 (Issues in Ecotourism), Tourism 3100 (Resource Evaluation and Tourism Activity Impact Assessments), Tourism 3210 (Interpretation of Natural Resources) and Tourism 3900 (Global issues and Tourism). Added to this is Sustainable Resource Management (SRM) 3002, (Biodiversity). All of these courses are appropriate for a graduate from an Environmental Studies program.

**Recommendation 6:** There should be additions made to the course options at the 3000-4000 level. This can be offered through the wide range of valuable courses that are already in the calendar in related programs.

### **1.4 Research Methods Course**

There was wide agreement in a discussion with Environmental Studies faculty that a course in research methods would be a very useful offering. It would be especially helpful for students prior to undertaking their research essay. The course would need to include methods that went beyond statistics to include research design, methods to determine appropriate research question(s), and approaches to the acquisition of data and information synthesis. Input would be necessary from a number of arts and social science disciplines relevant to environmental studies.

**Recommendation 7:** Environmental Studies should explore ways to offer a course in Research Methods designed specifically for Environmental Studies.

### **1.5 Honours Program**

There was considerable interest on the part of students in the availability of an Environmental Studies Honours degree. Students were very aware that Environmental Science students had this

option, but they did not. Several options exist to address the interest of students wishing to pursue an Honours program. The Institute of Biodiversity and Ecosystem Science (IBES) offers funding support to SWGC honours students. Similarly, a growing research agenda at SWGC offers potential for topics that can be addressed through faculty research, the Centre of Environmental Excellence (CEE) or other partnerships.

**Recommendation 8:** Environmental Studies should explore the possibility of an Honours degree. As additional courses and faculty, as noted above and elsewhere, are added this should become increasingly feasible. One possibility is to have faculty resources for honours programming emerge by combining (integrating) supervisory capacity and course offerings from several disciplines (e.g. Environmental Studies, Environmental Science, and General Science). In addition, the new Bachelor of Resource Management degree and the Tourism program offer potential for additional supervision and guidance. Finally, to assist with the development of an honours option, the unit should endeavor to engage and utilize faculty members recently hired to advance an environmental policy institute at SWGC.

### **1.6 Skills Certification.**

Students in outdoor pursuits presently qualify for the Canadian Association of Nordic Ski Instructors (CANSI) level 1 track and telemark in cross country skiing, Basic Avalanche Skills and Greencheck GPS skills. Instructions for these are included in Environmental Studies 2220 and are taught by the course instructor. No kayaking or canoeing skills qualifications are taught because there are no qualified personnel available locally. Students are required to have CPR qualification and that is done with the local Red Cross. Of special value to students would be a wilderness first aid course. This intensive program is taught locally, but not at a time that is convenient for most students.

**Recommendation 9:** A qualification in kayaking, especially sea kayaking would be a valuable addition as would wilderness first aid certification. The Canadian Red Cross has a 20 hour wilderness and remote first aid course. This is an option that could be considered. The college should be actively involved in searching for qualified personnel for these programs or should help current personnel gain instructor status for such courses.

### **1.7 Outdoor Pursuits**

Students enrolled in the outdoor environmental pursuits concentration normally complete two 2000 level courses, that involves kayaking and canoeing and wilderness camping. The other involves winter activities such as cross country skiing, winter camping and winter survival techniques. At the 3000 level there is an expedition course taken in the summer semester over a two week period. Enrollment is adequate in the 2000 level courses but only a few students avail of the 3000 level course. Students in the environmental perspective concentration expressed concern that they were not always able to do any of these courses. Some said it was because of timetable clashes and, in the case of the 3000 level course, they did not have the prerequisites, notably the other two outdoor pursuit courses. Although it is not required of their program they felt they needed some sort of field experience.



This whole issue was summed up well by a graduate of the program, who wrote:

Environmental Studies should start with a love for the wilderness. A big part of being an advocate of the environment is enjoying being out in it...Outdoor activity courses should not be limited to skills development, but should teach appreciation of outdoor activity, love of adventure and love of nature.

**Recommendation 10:** The expedition course should be modified so it can be available to all students with an interest in the environment. A modification of the present 3000 level course would widen its appeal and availability. The prerequisites for the current course could be waived, especially the winter activities and the instructors would need then only need to assure that participants have basic water safety skills, if water activities are involved.

**Recommendation 11:** The unit should consider widening the scope of outdoor pursuits and include field trips that would broaden the student experience of environmental studies. Proposals are now being developed at the college for field trips in developing countries such as Jamaica and Belize. These should be supported to foster a North-South link for Grenfell and to provide students with a more holistic and global appreciation of key environmental issues. Locally, means should be sought to make more use of the Bonne Bay Marine station, an asset underutilized by SWGC.

## **1.8 Relevance – skills, ethics, philosophy, environmental thought**

Some students expressed doubts about the relevance of some of their courses to their future employment. The committee concluded that there was a reasonably good mix of courses that impart a set of skills (GIS, Outdoor Pursuits, and the opportunity to take environmental science courses where lab and field skills are learned) and courses that take more of a critical academic overview of environmental concerns. Students have a reasonable desire to look ahead to how they might earn a living after school and want to have specific capabilities to offer employers. There was a general view that some form of work-study opportunity would provide students with a more valuable experience and an improved sense of future employment relevance. This is elaborated in the section on 'Links to Communities' rather than in 'Curriculum'.

Some of the attributes that students tend to overlook are broad knowledge, the ability to think critically and assess complex information, and the ability to write and to speak in public. Perhaps courses could give more opportunities to develop these skills and instructors could be clearer in pointing out their practical value. One graduate of the program suggested that there be more emphasis put on problem-based learning in Environmental Studies courses.

One course in particular that students wanted was forestry or forest science. Although a Forestry Program no longer exists at the college, the Resource Management degree retains two courses from that program in its list of electives: Forestry 3000 (Sustainable Forestry) and Forestry 3200 (Forest Management and Policy). Environmental Studies students should be able to take these courses if they are offered. Alternatively, the reviewers thought that the possibility of a non-technical forestry issues course taught by one or several people on the staff of Natural Resources Canada (Canadian

Forest Service) should be explored. If Natural Resources Canada, which is located on the campus, is not able to offer this course, then other organizations on the campus or in the Corner Brook region should be investigated.

A number of students raised concerns with the content and relevance of the Environmental Ethics course. In particular, some felt that they had trouble with the course because they had no or little background in Philosophy. The reviewers believe that all students studying the environment should have some background in philosophical, ethical, cultural and spiritual thought relating to the environment. This can be offered in various ways. For example, some schools of the environment offer a course in environmental thought and this could be an option at Grenfell College.

The reviewers agreed that not all students are comfortable studying classical western philosophy, but some do and find it enjoyable and rewarding. At the same time, some students are interested in studying environmental attitudes, spiritual traditions or reflecting of their own personal relationship with the natural world.

Two possibilities are currently available at Grenfell College. Philosophy 2809 (Environmental Ethics) takes the traditional approach to the study of environmental thinking. An alternative approach is provided in Religious Studies 3880 (Spirituality and the Earth), which follows a historical, cultural and psychological approach to human encounters with the environment. These courses have some common topics.

**Recommendation 12:** Faculty advisors should make clear to students that a broad environmental education does provide a basis for gaining usable skills to critically evaluate issues, make ethical decisions, gather evidence, and express themselves orally and in writing in a clear and coherent way. Some kind of work-study opportunity might be introduced that would allow them to more fully appreciate this and to gain a better sense of opportunities that might be available to them in the future.

**Recommendation 13:** Students should be required to take Philosophy 2809 or Religious Studies 3880. This would not prevent students from taking both courses. In which case, one of the courses would be taken as an elective, or it could help fulfil the requirement for 42 credit hours from a list of courses. Instructors of these two courses should regularly consult to ensure that key themes in environmental thought are covered, but without undue overlap.

**Recommendation 14:** Strong consideration should be given to developing a course in Environmental Thought that covers major topics and approaches to understanding human relationships with the environment.

## **1.9 Work/Study Options**

Many students seemed to have a strong need to get a better sense of possible future careers related to their studies. They also had a real interest in making some connection with environmental organizations on the campus, in the community, in the region and in the rest of the province. A

full-scale cooperative program might be difficult to incorporate into Environmental Studies at SWGC given the administrative costs of such a program. Also, the additional required studies would add to the length of the degree program, or a reduction in the number of courses taken. Furthermore, the limited range of full-time employment opportunities nearby mitigates against such a concept. However, a more modest work/study option might be possible and could effectively meet the same needs. Internships and student placements are available from a number of non-academic units on campus (e.g. IBES, CFS) and could be better utilized by students.

**Recommendation 15:** The Environmental Studies Program should explore the possibility of developing a for-credit work-study course option for students in their third or fourth years (or taking advantage of summer employment between third and fourth years). One possibility would see students doing work (either for pay or as volunteers) during a school year with environmentally-relevant organizations on campus or in the Corner Brook area under the supervision of an Environmental Studies faculty member. Students would submit a course plan in advance that included a proposal and a reading list relevant to the work they would be doing and submit a written report at the conclusion of or following their work experience. This sort of approach could be adapted to include relevant summer employment after third year with the proposal submitted and approved near to the end of third year and the report submitted early in the autumn term.

## 2. Facilities

The quality of the Environmental Studies program rests largely with its human resources. However, excellence in teaching such a program can only be achieved with equipment and facilities that allow faculty and staff to fulfill their full potential. There is a consensus among faculty, staff and students that the library facilities at Grenfell represents a key resource for the program and currently provides excellent service to the program. In contrast, there is a serious deficiency in basic equipment in support of the program. Complicating this issue is the lack of adequate storage space for boats, skis, and related outdoor training equipment. The lack of storage space for equipment is highly problematic and exceeding costly because of high maintenance due to degradation of equipment. Moreover, basic equipment (e.g. lifejackets, wetsuits) is often lacking and much of what is available is outdated, deficient or does not meet safety standards. The program has not been able to routinely replace, upgrade or acquire suitable equipment in support of its mandate. Technologically, the program is also seriously deficient with few dedicated GPS units, lack of light/mapping tables, lack of a satellite radio(s), and inadequate lab facilities.

Kayaking, skiing and other outdoor activities require suitable and safe means of transportation for students, staff and equipment. At the present time there is no one suitable vehicle available for even a relatively small group of students and gear to get to the outdoor training sites.

Among the needs identified by students was a dedicated project or meeting space for Environmental Studies. This is further exasperated by the lack of a genuine student centre at Grenfell. Many students felt disenfranchised and noted that other units or disciplines (e.g. psychology, science) have allocated study or project space for students. There is a sense among

students of Environmental Studies that they represent a second level priority and that their program is not considered by administration of equal value.

**Recommendation 16:** A systematic plan for acquiring and upgrading equipment should be developed and implemented on an annual basis. Priority should be given to safety equipment. Moreover, equipment needs should be identified as a priority item in Grenfell's annual budget submission.

**Recommendation 17:** The administration of SWGC should make provision for dedicated storage space to house and maintain equipment associated with Environmental Studies. If space is not identified within current College plans, then Environmental Studies should take steps to construct a facility in support of its program.

**Recommendation 18:** It is highly recommended that a project room or meeting room be identified and assigned to Environmental Studies students. Avoiding the perception of double standards among the student population is essential to the health and success of the program. The Chair of the program along with members of the unit should act as strong advocates on this issue.

### **3. Relationship with other Programs**

#### **3.1 Relationships to other Social Science Degree Programs**

There are a number of courses in other degree programs at SWGC that cover material related to environmental studies. The Bachelor of Resource Management (BRM) degree has required courses in biodiversity and environmental law while the Tourism degree has courses in ecotourism and interpretation of natural resources.

The panel considered these courses to have a natural fit into the Environmental Studies program. In particular, Tourism 3210 (Interpretation of Natural Resources), seems to fulfill the need that many who met with the panel were asking for. The course deals with the interpretation of rocks, fossils, plants, animals, birds, weather, geomorphology etc. Both students and faculty saw the need for more exposure and familiarity with these aspects of the natural environment. This course could become an essential element in the program especially for those following the outdoor pursuits option.

Many Environmental Studies graduates have found positions in tourism related activities. Tourism 3010 (Issues in Ecotourism) seems to be ideally suited for students in the program.

There is no course in Environmental Studies that covers the legal aspects of environmental issues. The new degree program in Sustainable Resource Management has a course in environmental law (SRM 4003). This, too, should be added to the options available to Environmental Studies students.

The panel often heard that students in the program did not get enough exposure to courses that give them a relevant scientific approach to the environment. It would seem that the new course in the BRM degree on biodiversity (SRM 3002) would move towards remedying this concern. This

important aspect of the study of the environment would give more exposure to the scientific understanding of the environment.

Allowing environmental studies students to take these courses by waiving or adjusting the prerequisites would widen the range of 3000 and 4000 level courses in the program. It would also provide a stronger enrollment in all of these courses. This will benefit the other two degree programs and would be appropriate in a proposed “School of the Environment”.

**Recommendation 19:** Tourism 3210, 3010, SRM 4003 and 3002 should be included under the heading “Environmental Studies Concentrations” for both the Environmental Perspectives Concentration (2,a) and the Outdoor Environmental Pursuits Concentration (2,b,ii).

### 3.2 Relationship to Environmental Science

Both the self study review of the Environmental Studies program of May 2005 and the external review of the Environmental Science program of December 2003 addressed the issue of the relationship between Environmental Studies and Environmental Science. The external Environmental Science review made a particularly strong statement. Recommendation 3 states: “it is inappropriate that environmental programs at Grenfell College of MUN involve two disconnected units: environmental studies and environmental science. Given the limited availability of such critical resources as highly qualified personnel, space, and equipment, it would be much more appropriate to house all environment-related teaching under a single roof, which might be named “The School of the Environment””. In particular the report recommended that “the Principal of Grenfell College should initiate a process to advance the integration of all environment programs under a single interdisciplinary unit tentatively named the School of the Environment”. The present panel is not aware that any such process has been put in motion.

During interviews with faculty, staff and students, the panel frequently heard calls for some kind of closer relationship with the Environmental Science program. It was recognized that students need more scientific knowledge and understanding related to the environment. However, students could not always avail of the courses and teachers in the environmental sciences to further that end.

It was also expressed that there was a feeling of disconnect between the BA and BSc programs in the environment. The two units work very little together. One contributor called for more integration among similar programs and a streamlining of similar programs to avoid “spreading ourselves too thinly”.

**Recommendation 20:** The college administration should continue to work towards breaking down barriers that exist between Environmental Studies and Environmental Science. A concerted effort should be made to integrate or align environmental programs so that SWGC can harness its full potential. Much discussion and planning is needed among the various units. In particular, Chairs of Environmental Science and Environmental Studies in collaboration with colleagues in Tourism and SRM programs should aim to jointly develop an environmental agenda

for SWGC. This agenda should strive to integrate teaching and research interests to take advantage of all available assets.

### **3.3 School of the Environment/Centre for the Environment**

Over the past year plans for more autonomy for Grenfell College have moved ahead and Grenfell administration is involved with various levels of government and the administration in St. John's towards that end. It seems that Grenfell will soon be a position to make its own decisions regarding the structure of programs in Corner Brook. Should there then exist a strong feeling amongst interested parties that a Centre for the Environment or School of the Environment would be a viable way for supporting and promoting the strengths of the College, then the new autonomy for the college would facilitate such a move.

**Recommendation 21:** The college administration should, in the near future, establish a "Centre/School for the Environment" as an umbrella structure that will bring together all interested and relevant parties at the college, both academic and research institutes, to present a cohesive group for Grenfell College as a centre of environmental excellence.

### **3.4 Relationship with non academic units at Grenfell College.**

Located on the Grenfell campus are several units related to the study of the environment. These include the Canadian Forest Service, a sector of Natural Resources Canada, the Institute for Biodiversity Ecosystem Science and Sustainability (IBES), the Centre for Environmental Excellence (CEE), the Atlantic Salmon Federation, and the Atlantic Coastal Action Plan of Environment Canada. Moreover, an Environmental Policy Institute is under development at Grenfell. In addition, long-standing relationships exist between SWGC, the Model Forest and the Bonne Bay Marine Station (BBMS). The new community mandate taken by the Model Forest and the new Strategic Plan under development by the BBMS offers new possibilities of engagement for Environmental Studies.

Since 1998, Grenfell has forged a strong teaching and research link with the Canadian Forest Service (CFS) of Natural Resources Canada. In 2007, a Memorandum of Understanding was signed between CFS and Grenfell to provide a framework for stronger cooperation. Under this MOU, research scientists located on campus at the CFS occasionally participate in seminars and offer lectures in Environmental Studies, however this resource appears underutilized. Strong potential exists for students to be mentored in CFS research labs, to complete independent projects, to develop case studies, and to generally gain a deeper appreciation of the science-policy link. CFS resources could be a valuable component in future Honours and/or graduate programming for the unit.

IBES assists with research in broad areas of natural resource conservation, management and sustainability. Specific areas of interest to environmental students are sustainable development, ecological economics, population ecology, human dimensions of natural resource management and land use planning and design.

The role of the government funded CEE is to build on the region's environmental base, bringing together forestry, wildlife, tourism, information technology and environmental capacity. The goal is to establish a long-term strategy to harness all existing programs, infrastructure and human resource assets under an environmental umbrella to advance research and development opportunities.

Grenfell is currently investigating the establishment of an Environmental Policy Institute. With the help of special government funding the college has created two tenure track positions to teach and conduct research in comparative public policy and environmental policy analysis and valuation in such areas as forestry, fisheries, land use planning, and related areas.

**Recommendation 22:** Students in the Environmental Studies program should be made more aware of the opportunities afforded by its partners. Opportunities should be made available for students to engage in undergraduate and graduate research projects and to consult with researchers working within these units. There is excellent opportunity for students at an early stage in their academic careers to be exposed to extra areas of interest and give them insights into the possibilities for future graduate studies. Indeed, there are few institutions of comparable size that have the competitive advantage of Grenfell because of co-location of such non-academic units. To date, students in Environmental Studies appear to have largely missed opportunities that exist on their doorstep!

**Recommendation 23:** SWGC administration should take steps to formalize its relationships with all its on-site partners.

**Recommendation 24:** Immediate steps should be taken by the unit to appoint CFS scientists and other qualified personnel in non-academic units as adjunct professors to Environmental Studies. A pro-active effort by the Chair of the program is required to initiate this process.

### **3.5 Graduate Studies**

In interviews with students the panel heard concerns that there was a lack of information about graduate studies. Grenfell College has no graduate program or officer on site so students have little chance to learn or plan for graduate school. Only one graduate student information session is offered annually at SWGC. Students wanted more information on graduate programs in their area as well as guidance on how to get funding for such programs. A few use the Research Office as a proxy for this service but many are not sure that the senior level courses they are taking towards their degree adequately prepare them for graduate studies. It was suggested that a notice board be set up to post information about graduate programs and funding opportunities and that at least one faculty member be identified as a resource person for students looking to pursue graduate studies. There is already a listserv set up for Environmental Studies at Grenfell College. Students asked that more use be made of it to disseminate material relevant to those looking to continue on to graduate school.

**Recommendation 25:** A faculty member with a strong research background should be assigned to be a graduate studies advisor and be responsible for posting both print and electronic material about graduate studies in environmental studies and related areas. Faculty should make students aware of visiting graduate students working under the auspices of IBES and the Forestry Centre and set up meetings between these students to discuss their research and their experience as graduate students.

**Recommendation 26:** The Chair should dialogue on a regular basis with the School of Graduate Studies (MUN) and keep the unit abreast of developments and opportunities arising within Graduate Studies at Memorial. Students should be encouraged to attend the annual information session at SWGC offered by MUN.

## **IV. Links to Communities**

### **4.1 Greening of the Campus**

During our review, students expressed strong interests in the ‘greening of the campus’. Projects devoted to making the Corner Brook campus more environmentally friendly, such as reduced consumption of resource intensive products, recycling of paper, development of no-waste programs and practices, purchase of recycled stationary and envelopes, etc., would not only improve environmental conditions, but also make available opportunities for project-based learning courses. The new long-term care facility on the campus is the province’s first “green building” and will meet LEED (Leadership in Energy and Environmental Design), guidelines and be eligible for LEED certification. This and other efforts at greening the campus would provide a source for projects in a revamped first year introductory course, address the students’ expressed desire for more option courses at the 3000 and 4000 and provide research topics for fourth year students

**Recommendation 27:** The committee recommends that ‘greening of the campus’ projects be supported both in volunteer/service clubs and through credited courses. Where appropriate, courses should contain applied projects involving campus sustainability. An initial phase of a campus greening program could be to secure support from senior university administrators and have them sign the Talloires Declaration. This is a ten-point action plan for incorporating sustainability and environmental literacy in teaching, research, operations and outreach at colleges and universities. It has been signed by over 350 university presidents and chancellors in over 40 countries ([http://www.ulsf.org/programs\\_talloires.html](http://www.ulsf.org/programs_talloires.html)).

### **4.2 Academic Communities**

We found students and alumni of the program wanted more connections with members of academic communities outside of SWGC. They wanted information to be made available on possible opportunities, (e.g., research, field projects, funding, and educational programs) that might



be helpful for further education or employment. We were encouraged by these comments and felt it revealed an enthusiasm for the program.

**Recommendation 28:** Establish an information bulletin board as a first step for resolving this concern. Longer-term possibilities include promotion of on-line academic interest groups and electronic networks.

## V. Program Distinctiveness

### 5.1 Pursuing a Distinctive Program

An interesting and important opportunity exists for invigorating a distinct approach for the Environmental Studies Program. In addition to being located within a small liberal arts and science college, the Environmental Studies Program's history of interdisciplinarity and its social science focus puts it in a good position to identify a distinctive approach for studying environments. As well, the program has achieved linkages with other programs in the college and with other institutions of higher education such as the College of the North Atlantic. Such links should be encouraged, better integrated and used to stimulate the articulation of a distinctive approach to the study of environments. The extent to which a synthesis of the two areas of concentration, Perspectives and Outdoor Pursuits, can be achieved is a challenge we believe merits attention.

**Recommendation 29:** A concerted effort should be made to identify a distinctive approach for the Environmental Studies Program. The responsibility for providing leadership in this effort lies with all members of the unit.

During the review, we heard a number of issues that would be associated with pursuing a distinctive approach to the Environmental Studies Program, or some of the implications of doing so. These include:

**Synthesis of Areas of Concentration and Integration of Programs:** The panel believes that the Outdoor Pursuits area is a special part of the Program. It appears to some academics to be more vocational than scholarly. We believe this not to be the case. Moreover, we believe it has the potential to provide an approach for a distinctive way to study environments. But, the potential needs to be actualized. A concerted effort should be made to articulate a pedagogy that would include traditional academic ways of learning with more experiential based approaches.

Some faculty raised the question of whether having two distinct areas of concentration, Perspectives and Outdoor Pursuits, is reasonable. Furthermore, three new programs, Sustainable Resource Management, Tourism, and Business Administration, have recently been established. It is important that the two areas of concentration and the three programs relate to each other in constructive ways. Courses in these programs should complement one another rather than duplicate each other. Members of the unit should take a strong leadership role in pursuing this.

**Recommendation 30:** Courses in the Perspectives and Outdoor Pursuits areas should be integrated with the new programs in Sustainable Resource Management, Tourism, and Business Administration. As well, courses from other institutions (e.g., College of the North Atlantic) should be more fully utilized and not duplicated within the program.

**Quality of Students:** The panel was impressed with the quality of Environmental Studies students. The review panel had an opportunity to engage with about 30 students in two sessions of an hour each. Students expressed a strong desire and commitment to return to their communities and to contribute to their development—especially with an environmental approach. They were also very enthusiastic about finding ways for improving their learning experiences in SWGC. The panel contends that Environmental Studies students bring something special to the college. With other students they participate in environmental issues at the college and many are regular participants in the college's Outdoor Club. The students believe strongly there is a need for an advocate for their interests and concerns. They are looking for a strong leadership of the program that would result in a proactive role in representing the program and their particular interests to the college community and administration.

**Recommendation 31:** Environmental Studies students should be recognized for their commitment to the program, enthusiasm and concern. They should be enabled to participate in discussions concerning the emergence of a distinctive approach to the Program and have their interests and concerns well represented by the administrators of the program.

**Increased Program Awareness:** The panel heard that there is inadequate awareness of the Environmental Studies program within the university and in the broader community. Some students said they were not aware of the Environmental Studies Program until after being at the college for some time. They would have benefited considerably if they had been aware of it earlier. We also heard that the information about the program was not readily available at the St. John's campus. Students who started their studies in St. John's reported that they obtained information about programs on the St. John's campus, but did not receive any information about SWGC.

**Recommendation 32:** Attention should be given to increasing awareness of the Environmental Studies Program within SWGC and also on the St. John's campus and in recruitment efforts that originate in St. John's. Similarly, the program should continue to be better highlighted within SWGC's recruitment activities domestically and internationally.

**Recruitment and Retention:** The ways that students are recruited is an issue for the Environmental Studies Program. Recruitment activities are reported to stress the Outdoor Pursuits concentration: images and text of the outdoors predominate, and outdoor environmental skills are emphasized. But some students are disappointed by the lack of training skills they are able to receive in the program. With the emergence of a more distinctive approach for the program, appropriate recruitment strategies will be needed. These strategies should reflect the inter-relatedness of the Perspectives and Outdoor Pursuits areas and the integration of the new programs.

**Recommendation 33:** New strategies for recruitment should be established that reflect the emergence of a more distinctive approach to the Environmental Studies Program. This new approach may well be attractive to students across Canada and internationally. It is recommended

that a careful review of the program take place among students, faculty and the SWGC recruiters with a view to creating a more accurate representation of the program. To this end, both the program webpage and promotional print material should always be kept up to date.

## **Appendix A**

### **Recommendations**

**Recommendation 1:** Faculty and chairs in both Environmental Studies and Environmental Sciences should regularly review the content of courses in a coordinated way, perhaps in an annual joint curriculum meeting where syllabi and topics covered are *comprehensively* reviewed and discussed.

**Recommendation 2:** To strengthen the image of the Environmental Studies program and other related programs, a general title should be given to the four degree programs that deal with the environment in their own particular way; Environmental Studies, Environmental Science, Resource Management and Tourism as well as the ancillary environmental research centres connected to the college. The name “The School of the Environment” is one suggestion. This could be done without impinging on the individual autonomy of the separate programs. However, it will require a high level of cooperation and coordination among units and partners.

**Recommendation 3:** Undertake a cooperative review of first year offerings and requirements with the Environmental Science program with the view of introducing a comprehensive first year course or twinned half-courses for students of both programs.

**Recommendation 4:** The Environmental Studies unit should offer required courses every year, especially the 2<sup>nd</sup> year GIS course which students want to take and which provides a skill central to the program. The unit should publish a timeline of courses that are to be offered in the following two or more years to aid students in planning their studies.

**Recommendation 5:** Care should be taken to avoid timetable conflicts especially among courses in Environmental Studies and Environmental Science that students might want to ‘cross over’ to take. The Chair of the unit should address this matter within the unit and during the coordination meetings with the Chair of Environmental Science noted under recommendation 1 (above). Input from the Registrar’s Office is recommended.

**Recommendation 6:** There should be additions made to the course options at the 3000-4000 level. This can be offered through the wide range of valuable courses that are already in the calendar in related programs.

**Recommendation 7:** Environmental Studies should explore ways to offer a course in Research Methods designed specifically for Environmental Studies.

**Recommendation 8:** Environmental Studies should explore the possibility of an Honours degree. As additional courses and faculty, as noted above and elsewhere, are added this should become increasingly feasible. One possibility is to have faculty resources for honours programming emerge by combining (integrating) supervisory capacity and course offerings from several disciplines (e.g. Environmental Studies, Environmental Science, and General Science). In addition, the new Bachelor of Resource Management degree and the Tourism program offer potential for additional supervision and guidance. Finally, to assist with the development of an honours option, the unit should endeavor to engage and utilize faculty members recently hired to advance an environmental policy institute at SWGC.

**Recommendation 9:** A qualification in kayaking, especially sea kayaking would be a valuable addition as would wilderness first aid certification. The Canadian Red Cross has a 20 hour wilderness and remote first aid course. This is an option that could be considered. The college should be actively involved in searching for qualified personnel for these programs or should help current personnel gain instructor status for such courses.

**Recommendation 10:** The expedition course should be modified so it can be available to all students with an interest in the environment. A modification of the present 3000 level course would widen its appeal and availability. The prerequisites for the current course could be waived, especially the winter activities and the instructors would need then only need to assure that participants have basic water safety skills, if water activities are involved.

**Recommendation 11:** The unit should consider widening the scope of outdoor pursuits and include field trips that would broaden the student experience of environmental studies. Proposals are now being developed at the college for field trips in developing countries such as Jamaica and Belize. These should be supported to foster a North-South link for Grenfell and to provide students with a more holistic and global appreciation of key environmental issues. Locally, means should be sought to make more use of the Bonne Bay Marine station, an asset underutilized by SWGC.

**Recommendation 12:** Faculty advisors should make clear to students that a broad environmental education does provide a basis for gaining usable skills to critically evaluate issues, make ethical decisions, gather evidence, and express themselves orally and in writing in a clear and coherent way. Some kind of work-study opportunity might be introduced that would allow them to more fully appreciate this and to gain a better sense of opportunities that might be available to them in the future.

**Recommendation 13:** Students should be required to take Philosophy 2809 or Religious Studies 3880. This would not prevent students from taking both courses. In which case, one of the courses would be taken as an elective, or it could help fulfil the requirement for 42 credit hours

from a list of courses. Instructors of these two courses should regularly consult to ensure that key themes in environmental thought are covered, but without undue overlap.

**Recommendation 14:** Strong consideration should be given to developing a course in Environmental Thought that covers major topics and approaches to understanding human relationships with the environment

**Recommendation 15:** The Environmental Studies Program should explore the possibility of developing a for-credit work-study course option for students in their third or fourth years (or taking advantage of summer employment between third and fourth years). One possibility would see students doing work (either for pay or as volunteers) during a school year with environmentally-relevant organizations on campus or in the Corner Brook area under the supervision of an Environmental Studies faculty member. Students would submit a course plan in advance that included a proposal and a reading list relevant to the work they would be doing and submit a written report at the conclusion of or following their work experience. This sort of approach could be adapted to include relevant summer employment after third year with the proposal submitted and approved near to the end of third year and the report submitted early in the autumn term.

**Recommendation 16:** A systematic plan for acquiring and upgrading equipment should be developed and implemented on an annual basis. Priority should be given to safety equipment. Moreover, equipment needs should be identified as a priority item in Grenfell's annual budget submission.

**Recommendation 17:** The administration of SWGC should make provision for dedicated storage space to house and maintain equipment associated with Environmental Studies. If space is not identified within current College plans, then Environmental Studies should take steps to construct a facility in support of its program.

**Recommendation 18:** It is highly recommended that a project room or meeting room be identified and assigned to Environmental Studies students. Avoiding the perception of double standards among the student population is essential to the health and success of the program. The Chair of the program along with members of the unit should act as strong advocates on this issue.

**Recommendation 19:** Tourism 3210, 3010, SRM 4003 and 3002 should be included under the heading "Environmental Studies Concentrations" for both the Environmental Perspectives Concentration (2,a) and the Outdoor Environmental Pursuits Concentration (2,b,ii).

**Recommendation 20:** The college administration should continue to work towards breaking down barriers that exist between Environmental Studies and Environmental Science. A concerted effort should be made to integrate or align environmental programs so that SWGC can harness its full potential. Much discussion and planning is needed among the various units. In particular, Chairs of Environmental Science and Environmental Studies in collaboration with colleagues in Tourism and SRM programs should aim to jointly develop an environmental agenda for SWGC. This agenda should strive to integrate teaching and research interests to take advantage of all available assets.

**Recommendation 21:** The college administration should, in the near future, establish a “Centre/School for the Environment” as an umbrella structure that will bring together all interested and relevant parties at the college, both academic and research institutes, to present a cohesive group for Grenfell College as a centre of environmental excellence.

**Recommendation 22:** Students in the Environmental Studies program should be made more aware of the opportunities afforded by its partners. Opportunities should be made available for students to engage in undergraduate and graduate research projects and to consult with researchers working within these units. There is excellent opportunity for students at an early stage in their academic careers to be exposed to extra areas of interest and give them insights into the possibilities for future graduate studies. Indeed, there are few institutions of comparable size that have the competitive advantage of Grenfell because of co-location of such non-academic units. To date, students in Environmental Studies appear to have largely missed opportunities that exist on their doorstep!

**Recommendation 23:** SWGC administration should take steps to formalize its relationships with all its on-site partners.

**Recommendation 24:** Immediate steps should be taken by the unit to appoint CFS scientists and other qualified personnel in non-academic units as adjunct professors to Environmental Studies. A pro-active effort by the Chair of the program is required to initiate this process.

**Recommendation 25:** A faculty member with a strong research background should be assigned to be a graduate studies advisor and be responsible for posting both print and electronic material about graduate studies in environmental studies and related areas. Faculty should make students aware of visiting graduate students working under the auspices of IBES and the Forestry Centre and set up meetings between these students to discuss their research and their experience as graduate students.

**Recommendation 26:** The Chair should dialogue on a regular basis with the School of Graduate Studies (MUN) and keep the unit abreast of developments and opportunities arising within Graduate Studies at Memorial. Students should be encouraged to attend the annual information session at SWGC offered by MUN.

**Recommendation 27:** The committee recommends that ‘greening of the campus’ projects be supported both in volunteer/service clubs and through credited courses. Where appropriate, courses should contain applied projects involving campus sustainability. An initial phase of a campus greening program could be to secure support from senior university administrators and have them sign the Talloires Declaration. This is a ten-point action plan for incorporating sustainability and environmental literacy in teaching, research, operations and outreach at colleges and universities. It has been signed by over 350 university presidents and chancellors in over 40 countries ([http://www.ulsf.org/programs\\_talloires.html](http://www.ulsf.org/programs_talloires.html)).

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