



Academic Business Plan to create a Department of Environment and Sustainability

This proposal describes the vision for a Department of Environment and Sustainability within Harpur College to house the existing Environmental Studies degrees as well as possible new graduate programs. The creation of the department meets growing student demand, serves as a tenure home for dedicated faculty, and establishes a base for scholarly inquiry. It lays a foundation for faculty and students to have a distinct space to pursue research and studies on the intersection of human and natural systems with a focus on applied solutions. This approach differentiates the new department from other fields in its intellectual neighborhood by educating sustainability change-makers, who can “*help societies and governments solve pressing technical, management, and policy problems involving natural resources, environmental quality, and social justice.*”¹

Context

- The Environmental Studies/Science Program is the eighth largest major in Harpur College. (See Table 1.)
- 22nd largest environmental studies program among U.S. universities and colleges²
- From 2021-2025, green hiring grew almost 8%, twice as fast as the share of workers with those green skills.³

**Table 1 - Top Ten Majors in Harpur by number of students
(Fall 2025)**

1. Biological Sciences	1,310
2. Psychology	1,020
3. Economics	739
4. Integrative Neuroscience	596
5. Philosophy, Politics & Law	516
6. Mathematical Science	368
7. Political Science	296
8. <i>Environmental Studies/Science</i>	226
9. English	218
10. Art & Design	206

Why a Department?

First, we describe the rationale for the creation of the Department of Environment and Sustainability from intellectual, organizational, and curricular/scholarly perspectives. Second, we report the results of discussions with neighboring departments that took place over the past four years. The third section describes our plan for diversity and inclusivity. Appendix I describes the early stages of consultation with other academic units from the 2022-2023 academic year as well as includes comments from Spring 2024. Appendix II is the financial plan narrative.

¹ Clark, S. G., Rutherford, M. B., Auer, M. R., et al. (2011). College and University Environmental Programs as a Policy Problem (Part 1): Integrating Knowledge, Education, and Action for a Better World? *Environmental Management* 47(5), 701–715.

² Integrated Postsecondary Education Data System (<https://nces.ed.gov/ipeds/>)

³ LinkedIn (2025, November) *LinkedIn Green Skills Report 2025*. <https://economicgraph.linkedin.com/content/dam/me/economicgraph/en-us/PDF/2180-global-green-skills-report-v04.pdf>.

Section 1 – Justifications for a New Department

1a. Organizational Justification

The creation of a new academic department fits Environmental Studies and its professors into the institutional bureaucracy of Binghamton University, which is crucial for seven main reasons.

- A. Protect faculty.** Faculty are traditionally housed in a department, where they participate in governance, achieve tenure, secure grants, and build community. Faculty are now berthed in the Environmental Studies Program, which is an unusual arrangement. Becoming a department would regularize tenure berths to a standard recognized across Harpur College and the university.
- B. Recognize faculty grants.** The Research Foundation neither recognizes programs as places for grants to be awarded nor identifies programs as a location to return Faculty & Administrative (F&A) monies. The new department would allow research-active faculty situated there to fit into the bureaucracy of the university and the foundation – with the department’s portion of the F&A supporting future research.
- C. Attraction of faculty.** A dedicated department signals to potential faculty that they have a secure home from which they can conduct their research, write grants, and teach their classes.
- D. Eliminate the double service burden for program faculty.** Traditionally, faculty members involved in the Environmental Studies Program hold tenure berths in different departments. This results in faculty having service obligations in their home departments as well as whatever work they can do for Environmental Studies. For dedicated faculty, this situation has resulted in the inequitable and unrecognized doubling of service load. The core faculty berthed in the new department would carry the service burden. Affiliated members could contribute in curricular or scholarly ways as they wish.
- E. Allow for faculty self-governance.** In addition to faculty members with contractual or tenure berths in Environmental Studies, many other faculty members from around campus participate in the program’s decision-making. Although supportive, not all are immersed in program details and, therefore, they make decisions without the information or priorities of core faculty. A Department of Environment and Sustainability would have a core faculty, who would be responsible for shaping the academic and intellectual growth of the unit.
- F. Recognize the need for resources.** Despite the growth in students and faculty, the Environmental Studies Program remains under-resourced in ways unique to programs. Many departments are under-resourced, but programs have organizational barriers to resources in terms of faculty leadership, staff support, and space allocation. This structural inequity may go unnoticed for programs, which are housed and supported by a department. However, Environmental Studies has acted independent of significant department support for years. The creation of the Department of Environment and Sustainability would allow for the allocation of resources in line with a unit of more than 200 majors and research active faculty.
- G. Have a more relevant name.** The department’s name and cohesive focus will be important to students entering the job market and faculty presenting their research. The Department of Environment and Sustainability as a name better reflects the reality recognized by many private companies, universities, non-profit organizations, and local governments.

1b. Scholarly and Curricular Justification

Six curricular and scholarly imperatives drive the need for the degrees and faculty in the Environmental Studies Program to reorganize into a Department of Environment and Sustainability.

- A. Allow for faculty focus.** While environmental studies began as the intersection of classes across several different departments, the field has evolved into its own discipline with a rich body of work focused on the scholarship and pedagogy of key problem-solving competencies. The creation of a department allows Binghamton University to build an intellectual reputation in this growing area and provide students with a comprehensive education.
- B. Development of a dedicated graduate program.** Over the course of five to ten years the new department could develop of a small graduate program to offer master's and PhD degrees. Students would be trained to be change-makers at the intersection of the natural/human interface. PhD students would support faculty research and supply professors to universities around the world. A graduate program will also make the new department more attractive to potential faculty members.
- C. Coordinate interdisciplinary research.** Environmental Studies has always been and will continue to be an inclusive program. The department will grow as an interdisciplinary hub for professors who seek to work with faculty or students at the interface of human and natural systems.
- D. Provide for course consistency.** Departments providing courses to an interdisciplinary program historically have not always realized the importance of their classes to the program. With their own needs and priorities, contributing departments have changed course offerings without the impact on Environmental Studies understood or taken into account. The new department will offer core and integrative coursework that remains consistent over time. It will not duplicate offerings in other departments, but provide a framework and guidance so students can weave a diversity of courses from other units into an integrated education.
- E. Create a cohesive presence for students.** Rather than core faculty scattered in different departments, professors and staff will be co-located physically and socially. A department would allow us to build community in every sense of the word.
- F. Develop a department-related student group.** A Department of Environment and Sustainability will provide the administrative support and resources to develop a department-related student group to aid in governance, student activities, course feedback, and alumni outreach.

1c. Intellectual Justification

Originally, the Environmental Studies Program at Binghamton University emerged from the teaching and service of faculty in various departments, whose classes were woven together to form the degrees. This 'quilt of classes' approach to interdisciplinary majors was common across universities. The field has moved beyond a collection of disciplines in conversation with one another to an integrated area of study that provides for deeper understandings.² Over time, environmental studies evolved into a globally recognized discipline with its own journals, conferences, associations, and university departments. (See Table 2 for examples of journals that integrate natural, social, and policy science in this area.)

As it evolved, environmental and sustainability studies progressed past focusing on human impacts on nature to a more integrative study of the natural, social, cultural, and political systems involved in measuring,

² Öberg, G. (2010). *Interdisciplinary Environmental Studies: A Primer* (1st ed.). Oxford, UK: John Wiley & Sons Ltd.

understanding, managing, and adapting factors at the human/natural interface.³ Environmental studies research has an applied component that often requires conversations with non-academic participants.⁵ The discipline continues to reshape its strong empirical and theoretical foundations in interdisciplinarity, human/natural relationships, and problem solving, especially with regards to academic programs and rigorous assessment. Such a project requires the ability to synthesize knowledge across disciplines and stakeholder groups collectively.^{4,5} One of the field’s main bodies, the Association of Environmental Studies and Sciences, described in its initial newsletter that the association came together “from the start as a community of environmental scholars and scientists, not a confederation of disciplines.”⁶

Table 2 - Environmental & Sustainability Journals (examples)

Current Opinion in Environmental Sustainability

Discover Sustainability

Environment, Development and Sustainability

Global Environmental Change

Journal of Environmental Studies and Sciences

Regional Environmental Change

As an illustration, the current research areas of focus in Environmental Studies are:

- food systems and biotechnology
- human/natural interactions around pastures and grasslands, water resources
- environmental history and humanities
- governance of and networks around natural resources management at local, national, and international levels
- measuring sustainability
- environmental justice

This intellectual foundation is also evident in the ways that colleges and universities around the nation describe sustainability and environmental studies on their websites. A handful of these are excerpted below.

Yale University

“The central intellectual challenge of Environmental Studies is to combine the knowledge and diverse perspectives offered by the humanities, social sciences, and natural sciences in order to help solve the diverse environmental problems that we face today.”

University of Colorado, Boulder

“The Environmental Studies undergraduate major is focused on training students rigorously in the multiple dimensions of environmental change through courses that integrate scientific understanding of human-environment interactions, practical responses to environmental problems, and the values that shape our decisions and behavior.”

Georgetown University

Environmental Studies “emphasizes science, policy, and the humanities in equal parts to help cultivate critical and constructive perspectives on emergent environmental issues.”

³ Vincent, S., Rao, S., et al. (2017). *Scope of Interdisciplinary Environmental, Sustainability, and Energy Baccalaureate and Graduate Education in the United States*. National Council for Science and the Environment: Washington DC.

⁴ Proctor, J. D., Bernstein, J., & Wallace, R. L. (2015). Introduction: Unsettling the ESS curriculum. *Journal of Environmental Studies and Sciences*, 5(2), 195–199.

⁵ Wallace, R. L., & Clark, S. G. (2018). Environmental studies and sciences in a time of chaos: Problems, contexts, and recommendations. *Journal of Environmental Studies and Sciences*, 8(1), 110–113.

⁶ AESS Newsletter 1(1), Summer 2008, p. 2 (author unattributed).

University of Wisconsin

“In Environmental Studies, students imagine, analyze and invent innovative solutions to help bring about a more equitably sustainable world. They join a vibrant community drawn from the natural sciences, social sciences and humanities, united by a shared interest: addressing urgent environmental issues.”

University of Cincinnati

“Environmental Studies students are intentional in seeking an understanding of the ecological, historical, ethical, and cultural contexts of environmental problems...They know that science alone will not provide solutions, since problem solving is a social and political process.”

The new Department of Environment and Sustainability will solidify at Binghamton University this transformation to an applied discipline researching and teaching about solving challenges at the natural/human interface. The department will be positioned to build an intellectual and pedagogical reputation in this field of study.

Section 2 - Integrating with other academic units

As an interdisciplinary field, the new department will work closely, as it currently does, with numerous other departments, where various collaborative specialties are found. The history of discussions with four departments (Anthropology, Biological Sciences, Earth Sciences, and Geography) goes back to 2022 and is described in Appendix 1 of this document. At a Faculty Senate meeting in November 2022, members of three units (Biological Sciences, Earth Sciences, and Geography) expressed concerns about the departmentalization with regards to resource allocation among units, disciplinary overlap, and potential for class duplication.

To discuss these concerns, the Environmental Studies director met with the chairs and faculties of the three units. Additionally, the four units together met with Harpur College's Dean Celia Klin. These meetings resulted, as described below, in the coordination agreements. (Additionally, to aid the implementation of these agreements between Biological Sciences and the new Department of Environment and Sustainability, those two units crafted a "Distinguishing Disciplines" document to illustrate to the dean's office and future leaders the delineation between the two units. It is included as part of the Biological Sciences letter.)

Coordination agreements

- The Harpur College Dean's Office will hold joint curricular planning meetings between the four units as requested. (Not every unit has to attend every meeting as these can be coordination between any pair of units or all four.)
- The Harpur College Dean's Office will facilitate discussions to assist academic advisors recognize the differences between departments, so that students interested in potentially overlapping areas are directed to the appropriate majors and minors.
- The major, under the new department, will eliminate its track structure. The current structure relies heavily on classes offered by Biological Sciences, Earth Sciences, and Geography. In addition to reducing demand on other units, the change will help ensure that students are best matched to their major. This process has already started within the Environmental Studies Program.
- As discussed, the Environmental Studies Program has eliminated the restrictions placed on minors for taking classes. This restriction is a remnant of a time when the major had no faculty of its own and therefore fewer classes. Lifting the barrier should ease the ability of students who major in other areas to minor in Environmental Studies.
- The Dean will facilitate discussions about faculty hiring in areas of shared interest. And, it will help develop appropriate search committees and representation from appropriate units. The units will communicate directly with each other about hiring plans in overlapping areas in order to facilitate the best hiring that complements research and teaching in each unit.

As a result of these discussions and agreements, the three units dropped their opposition to the creation of the Department of Environment Sustainability. The three letters from the units indicating that they no longer oppose the creation of the Department of Environment and Sustainability follow.



Harpur College of Arts and Sciences

Department of Biological Sciences

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January 30, 2026

Dear George,

We greatly appreciate the time and effort you put into our discussions last Fall about intellectual overlap between Biological Sciences (BIO) and the proposed department of Environmental Studies (ENVI). In past years, BIO was unable to support your proposal for departmentalization. Our units have many shared interests, with nuanced differences in our perspectives and approaches. We therefore wanted to ensure that guardrails were developed to both ensure the very best outcomes for our students, and to roughly define the boundaries of our disciplines for resource allocation such as faculty hiring. Over the last several months, those discussions have led to the following outcomes:

- The Dean has agreed to hold annual joint curricular planning meetings with BIO and ENVI to help reduce overlap in courses. Cross-listing will be used routinely for classes that can be beneficial to students in both units, and we will work to avoid redundancy in non-cross-listed classes.
- The Dean has agreed to facilitate discussions as needed with academic advising to help advisors recognize the differences between foci of the two units, such that students interested in overlapping areas are directed to the appropriate majors and minors for their interests.
- ENVI will eliminate the four 'tracks' within their major, and they are currently working out details of a revised major with SUNY. The 'ecosystems' track previously relied heavily on BIO classes, and attracted many students whose interests more closely matched biology. Eliminating tracks and making ENVI a more interdisciplinary major will help attract students that are the best match for the major.
- ENVI will eliminate the restrictions placed on its own minors for taking ENVI classes. This will make it easier for a student to major in BIO and minor in ENVI when that is the appropriate decision based on a student's interests.
- The Dean has agreed to facilitate discussions about faculty hiring when proposals involve areas of shared interest, and will work with both units to develop search committee representation that is commensurate with the potential for overlap. To aid in this process, members of ENVI and BIO have recently created a document that 1) describes the potential for intellectual overlap, 2) provides a table with examples of research programs that could potentially create conflict, and 3) gives a proposed

process for dealing with those areas. Both units will make good faith efforts to follow the guidance and spirit of this document during the hiring process.

With these plans and agreements in place, The Department of Biological Sciences discussed and voted on our support for ENVI departmentalization on November 21, 2025. The discussion was lengthy, and it is clear that a number of our faculty remain concerned about future conflict. After considerable deliberation, and with the support of the ecologists on our faculty that have worked to secure these agreements, I would characterize the outcome as **cautiously supportive**. The vote to support ENVI departmentalization with the agreements reached was positive, with 18 'yes', 4 'not supporting, but not obstructing', 1 'no', and 0 abstentions.

Our goal has been to reduce intellectual overlap and potential competition, and instead build and highlight areas where we can, and do, complement each other. We are optimistic about the future potential of collaboration between our units, and appreciate your willingness to enter discussions about these potentially contentious topics.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Sobel". The signature is fluid and cursive, with the first letter of the first name being a large, stylized 'J'.

James M. Sobel
Associate Professor and Chair
Department of Biological Sciences

Distinguishing Disciplines: Results of Discussions between the Department of Biological Sciences and the Environmental Studies Program

The Department of Biological Sciences and Environmental Studies Program (ENVI) have been in discussions about intellectual overlap during ENVI's efforts toward departmentalization. Our programs have a lot in common, and we are optimistic about the prospects of working together toward shared goals. However, we have also found some areas that have led to contention, and we therefore met to discuss ways that we can build in loose guardrails that we hope would benefit current and future administrators. Ecology is the broad subject that causes the most potential conflict, and we want to ensure that the future of both departments is planned such that we complement, rather than compete with, each other in this area. In particular, we would like to make progress on faculty hiring plans, and help guide decisions that are made when overlap might occur. Our goal was to draft a non-binding document that summarizes a plan for dealing with intellectual overlap, with some examples that would guide current and future administrators.

On September 15, 2025, three members of the Department of Biological Sciences and two members of the Environmental Studies Program met to initiate this discussion, and we drafted guidance for faculty and administrators on determining which areas of expertise align with which academic unit.

Some areas of expertise fall largely in one unit or the other. In Table 1 below, we list examples of various expertise areas and whether they primarily align with the Department of Biological Sciences or the Environmental Studies Program. However, some areas are more complicated and might be found in either unit depending on perspective. If the research perspective is solution-, management- or societal response-oriented, then it typically falls within Environmental Studies. If the research perspective investigates organisms, interactions among organisms, or interactions between organisms and their environment (including human-impacted environments), it generally sits in Biological Sciences. The key to classifying a research program will often be the response variables that are the focus of research, and the emphasis of a specific researcher's approach. Table 1 contains some examples of when these more complicated areas of expertise might fall in one unit or the other.

Following this guidance will not always be straightforward. For example, a researcher in Environmental Studies may collect fundamental observations on organismal and ecosystem processes as a starting point for projects focused on addressing solutions. While specific projects may therefore be biological in nature, as long as the researcher has a research portfolio with a preponderance in environmental themes, they would be a good fit for that unit. Similarly, a researcher in the Department of Biological Sciences could focus their study on organismal or ecosystem patterns and processes within a landscape that has experienced significant human-induced perturbation, and their findings could have major implications for strategies that would help mitigate an environmental problem. However, as long as the majority of their research focuses on measuring biological responses, they would be a better fit for Biology even if they have some involvement in implementing solutions to environmental problems (e.g. as a broader impacts activity).

Because these fields share so much common ground, it is important that communication occur between the Department of Biological Sciences and the Environmental Studies Program on a variety of fronts. Indeed, characterizing a specific research program into one or the other unit will require expertise in these areas, so it is crucial that faculty from both perspectives are able to voice their opinions. Toward this end, we have developed the following process for avoiding overlap when recruiting new faculty:

- We will make efforts to write job descriptions that avoid vague language, and will include specific details that make the distinctions between units clear.
- As agreed with Dean Celia Klin, when a faculty hire is proposed with potential for overlap, both units will be consulted, and a search committee with representation from both units will be developed. We will strive for committee membership that is commensurate with the difficulty in distinguishing between units. In Table 1, Restoration Ecology is one example where a candidate may fit into either unit depending on their focus. Potentially problematic areas like this should

not be avoided, but it is crucial to hear from both units in these cases. Search committees will be instructed to be aware of the issues described here, and all efforts will be made to invite candidates that fit the originating unit’s mission.

- We will avoid choosing search committee members from alternate units that may have difficulty in having their voices heard. For example, if only a single committee member from an alternate unit is selected for a committee, they will not be a junior faculty member.
- Search committee members from alternate units will be informed about this process, and the intent will be made clear. We want to avoid significant overlap and encourage complementary of research programs, but we do not intend to decide where respective research strengths should be for another unit. Each unit maintains their own priorities and autonomy.
- In searches within areas of anticipated overlap, both units will be involved in the interview process. Candidate itineraries and seminars will be scheduled in collaboration, and on campus interviews will include meetings where both units are able to interact with the candidate. The originating unit will be responsible for reaching out to the chair of the alternate unit to make sure potential overlap has been communicated, and the alternate unit will be given the opportunity to **provide a statement of support or dissent for each candidate**. Because search committee will be instructed to be more mindful of potential overlap, we expect statement of dissent to be rare.
- Because it is not always predictable what kinds of candidates will apply to a specific position, there may be unanticipated overlap in the candidates that are finalists for a position. Potential overlap will be communicated to alternate units as soon as possible as selections are being made, and steps described above will be followed if it is deemed necessary.

Table 1. Unit most likely to host particular expertise

Expertise Area	Unit most likely to host	Clarifying examples
Behavioral Ecology	Biological Sciences	
Adaption (genetic / evolution at organism level)	Biological Sciences	
Evolutionary Biology	Biological Sciences	
Genomics / Molecular Ecology	Biological Sciences	
Microbial Ecology	Biological Sciences	
Quantitative Ecology / Biostatistics	Biological Sciences	
Theoretical Ecology / Modeling	Biological Sciences	
Agriculture / Food Systems	Depends upon area of focus	BIOL: organismal outputs, genetics, ecosystem functions, climate impact on crops and livestock ENV: agroecology, food justice, crop-climate feedback loops

Expertise Area	Unit most likely to host	Clarifying examples
Conservation Biology	Depends upon area of focus	BIOL: biodiversity measures, ecosystem functions ENV: management and facilitation of ecosystem change
Disease Ecology	Depends upon area of focus	BIOL: host–pathogen dynamics including humans ENV: public health, animal to human transfer, environmental changes that impact disease vectors
Ecosystem Ecology	Depends upon area of focus	BIOL: ecosystem functions, nutrient cycling, carbon cycling ENV: management of ecosystems, impacts on people, communication about systems
Environmental Chemistry	Depends upon area of focus	BIOL: impact of chemicals from natural or human sources on organisms and ecosystems ENV: identify, monitor, and manage the sources of pollution, its behavior in the ecosystem, and its effects on ecosystems and human health
Population & Community Ecology	Depends upon area of focus	BIOL: fundamentals of how organisms interact with other organisms and abiotic environment ENV: applied restoration, land-use planning, , applied ecology of agricultural or horticultural systems, management of natural resources
Restoration Ecology	Depends upon area of focus	BIOL: measure impacts on organism, restoration as a lens to boost basic ecological understanding ENV: applying and monitoring a management practice, assessing effectiveness of the restoration, community engagement
Urban Ecology	Depends upon area of focus	BIOL: studying wildlife and organisms across rural-urban gradients and how they react, studying ecosystem responses ENV: human–nature dynamics, enhancing ecosystem services, human reactions to organisms
Social Adaptation (Human adaptation, behavioral change, resilience)	Environmental Studies	
Environmental Education	Environmental Studies	
Environmental Justice / Equity / Ethics	Environmental Studies	
Environmental Policy	Environmental Studies	



Department of Earth Sciences

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11.08.2025

To:
Faculty Senate Executive Committee
Binghamton University

From:
Alex Nikulin, Chair
Department of Earth Sciences

Dear Members of the Faculty Senate Executive Committee,

I am writing to provide a formal statement of non-opposition regarding the proposal to departmentalize the Environmental Studies Program. The faculty of the Department of Earth Sciences have had the opportunity to review and respond to the most recent materials provided by the Environmental Studies Director, including the updated vision statement, mission statement, and commitments for future coordination. No concerns or objections were raised during this review period.

Our department recognizes that Environmental Studies has articulated a clear strategic direction focused on interdisciplinary education, sustainability, and community-engaged scholarship. These priorities complement the existing strengths of Earth Sciences and do not present areas of conflict with our current academic, instructional, or research programs. The proposed departmental structure appears designed to strengthen governance, clarify student advising pathways, and support the continued development of their curriculum.

We also appreciate the written commitments included in the Environmental Studies documents, which emphasize maintaining open communication, resolving any areas of overlap constructively, and continuing the collaborative relationships that already exist between our units. These commitments provide a strong foundation for ongoing cooperation, particularly as both programs play important roles in educating students engaged in environmental and earth system studies.

Based on our review and the absence of faculty concerns, the Department of Earth Sciences does not identify any objections or impediments to Environmental Studies moving forward with departmentalization. We anticipate that the positive and collegial relationship between our departments will continue, and we remain committed to supporting the broader academic mission of Harpur College and the University.

Please let me know if any additional information would be useful to the Committee.

Sincerely,

A handwritten signature in black ink, appearing to read "A. Nikulin", with a horizontal line extending to the right.

Alex Nikulin
Associate Professor of Geophysics and Department Chair
Department of Earth Sciences
Binghamton University - The State University of New York



Department of Geography

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January 27, 2026
Department of Geography
Binghamton University

Dear Members of the Faculty Senate:

On behalf of the Department of Geography, I write this letter at the request of George Homsy, Director of the Environmental Studies program at Binghamton University. The Environmental Studies program has proposed becoming a department in order to provide a more secure tenure home for faculty, ensure faculty representation, allow for faculty self-governance, and better enable the recognition and administration of faculty grants.

Following a discussion and vote at a faculty meeting, the Department of Geography expresses a neutral stance with respect to the proposed departmentalization of Environmental Studies. The departmentalization proposal outlines a number of potential benefits and opportunities for the program and its faculty, while also acknowledging concerns related to the missions, curricula, and resources of other academic units. Over the past several years, Geography faculty have engaged Environmental Studies colleagues in discussions concerning curriculum overlap (which still remains our top concern), resource allocation, and the maintenance of Environmental Studies as a genuinely multi-/interdisciplinary enterprise. These issues are acknowledged in the proposal itself and have been the subject of ongoing conversations among Environmental Studies, Geography, Earth Sciences, and Biological Sciences. While the proposal notes that such concerns may arise regardless of whether Environmental Studies exists as a program or a department, Geography faculty have also observed that several of the proposal's stated objectives may be addressed through strengthened coordination, communication, and governance mechanisms within the existing structure.

In recent months, representatives from Geography and Environmental Studies have continued these conversations and explored ways in which overlap between our units can be productive and synergistic rather than duplicative and competitive. We believe that more intentional course planning, shared research initiatives, and regular faculty engagement can enhance multi-/interdisciplinary collaboration and better serve the teaching and research mission of the university. Such outcomes will require sustained effort and mutual transparency, but recent joint activities between faculty in our units demonstrate the promise of this approach.

Sincerely,

A handwritten signature in black ink, appearing to read "T. Pingel".

Thomas J. Pingel
Associate Professor & Department Chair
Department of Geography
Binghamton University

Section 3 - Diversity plans for faculty hiring/retention and students

DEI Statement: Diversity and inclusivity are essential to Binghamton University’s Environmental Studies Program and will continue to be to the new department. Environmental challenges are complex, place-based, and deeply intertwined with social, economic, and political systems, which means that those who participate in research, policy design, and decision-making shape outcomes. Environmental harms such as air pollution, water contamination, climate-related disasters, and urban heat disproportionately impact low-income communities and communities of color. Inclusive approaches can ensure that these inequities are identified and addressed rather than overlooked. Moreover, integrating multiple ways of knowing, including community-based knowledge and Indigenous ecological knowledge, strengthens environmental studies and science as well as fosters foster innovation and creativity, which are critical for developing effective responses to emerging problems. Finally, broadening participation in environmental fields improves the workforce by expanding the talent pipeline, cultivating culturally competent leaders, and ensuring that research agendas and policies reflect the diversity of the societies. All faculty and staff find ways to promote diversity and inclusion in the classroom, in research, and in our day-to-day duties.

Statistics: The most recent student diversity data provided online by Binghamton University’s Office of Institutional Research is from the Fall 2023. In Table 3, we compare this data to the university and New York State.

Table 3 – Diversity of Environmental Studies & Science Students compared to university and New York State			
	Environ. Studies Fall 2023 N=280	Binghamton University Fall 2023 N=18,454	New York State U.S. Census 2020 N=20,201,249
Female	57.5%	51.9%	51.1%
Hispanic or Latino	8.9%	11.7%	19.5%
Am. Indian or Alaskan Nat.	1.5%	0.0%	0.7%
Asian	6.1%	15.8%	9.6%
African American	1.1%	4.7%	14.8%
White alone	75.4%	50.2%	55.2%

As of Spring 2026, our faculty consists of four women, four men, and one non-binary person. All faculty and staff are white except for one woman who is South Asian.

Goal: Better align our unit’s student diversity with that of Binghamton University and New York State.

Undergraduate student diversity efforts: The Environmental Studies Program is and the new Department of Environment will be committed to recruiting and retaining a diverse student body and supporting student success through research opportunities, mentorship, partnerships, and community engagement. Among the key initiatives we will pursue are to:

- Encourage participation in the university’s McNair Scholars Program, enabling first-generation and underrepresented students to conduct environmental research with faculty mentors;
- Promote student involvement in the Louis Stokes Alliances for Minority Participation (LSAMP) program, which supports students from underrepresented groups through mentoring, research, and workshops;

- Fund undergraduate research opportunities within the new department, which go beyond university programs, and reserve some of these opportunities for students from disadvantaged groups so that students from a wide range of backgrounds can participate in faculty-led research and fieldwork;
- Fund scholarships for students from disadvantaged groups to attend our existing winter session and summer session field studies programs, which take students to the Everglades, national parks, and White Mountains;
- Ensure that previously described field studies programs remain accessible to students of all abilities;
- Collaborate with the Educational Opportunity Program (EOP) to co-sponsor events such as the Career Diversity Expo and introduce EOP students to environmental courses, internships, and career pathways;
- Encourage student participation in the university's New Student of Color Mentoring Program, which helps incoming students build relationships with mentors and peers to build community and support retention;
- Promote engagement with campus support resources such as the Multicultural Resource Center, The Q Center, and the University Interfaith Council, which provide community, programming, and leadership opportunities for students from diverse cultural, religious, and identity backgrounds;
- Encourage students to participate in the Promise Scholars Initiative, which supports first-generation, low-income, rural, and transfer students through mentoring, cohort programming, and academic resources;
- Encourage and fund participation in national conferences and professional meetings by students from disadvantaged backgrounds, including those hosted by the Association for Environmental Studies and Sciences and the Ecological Society of Americas;
- Promote student engagement with diversity-focused environmental programs such as Ecological Society of America SEEDS Program (Strategies for Ecology Education, Diversity and Sustainability), which supports underrepresented students interested in ecology;
- Connect students from disadvantaged backgrounds with internship and leadership opportunities through organizations such as the Student Conservation Association;
- Introduce students to and encourage participation in professional networks such as Minorities in Agriculture, Natural Resources and Related Sciences and Society for Advancement of Chicanos/Hispanics and Native Americans in Science;
- Organize talks and networking events with Environmental Studies alumni from underrepresented backgrounds, which will allow students to learn about career pathways and build professional connections;
- Continue co-sponsoring alumni events such as the Environmental Change Agent Alumni Panel organized by Harpur Edge and encourage participation every year by an alumni from an underrepresented group;
- Co-sponsor and encourage participation in campus events that support students from underrepresented groups, such as the Binghamton Men of Color Summit and similar programs by student organizations;
- Partner with regional urban high schools to introduce environmental studies through guest lectures, campus visits, and outreach activities that highlight environmental careers and sustainability challenges;
- Collaborate with the Assistant Director for Native American and Indigenous Student Initiatives on outreach and programming that supports recruiting and retaining Indigenous students interested in environmental studies;
- Develop partnerships with youth-focused environmental organizations such as Black Girl Environmentalist to highlight inclusive pathways into climate and environmental leadership; and
- Encourage students to participate in environmental justice and sustainability programming across campus, helping them connect their academic studies with broader social and environmental challenges.

Graduate student diversity efforts. In the years ahead, a new Department of Environment and Sustainability may develop a graduate program. For these future graduate students, we would seek to...

- Implement expedited application review to identify promising applicants and initiate early dialogue with prospective students from historically underrepresented groups;
- Encourage promising candidates to apply for fellowships such as the SUNY Diversity Fellowship Program or the Clark Fellowship, which both provide funding and teaching releases to support research productivity;
- Recruit through national diversity-focused networks, including Society for Advancement of Chicanos/Hispanics and Native Americans in Science, and Minorities in Agriculture, Natural Resources and Related Sciences, and the American Indian Science and Engineering Society;
- Participate in graduate recruitment events and career fairs at Minority Serving Institutions and HBCUs;
- Develop pipeline partnerships with regional institutions that enroll diverse students, such as CUNY City College, which offers in different aspects of majors in earth system science;
- Recruit through organizations that connect diverse students with environmental careers, such as WE ACT for Environmental Justice and Black Girl Environmentalist;
- Encourage graduate students to apply for fellowships, including the NSF Graduate Research Fellowship Program and the EPA Greater Research Opportunities Fellowship (when available);
- Provide departmental research and travel funds to supplement support from the Graduate School, ensuring that students from disadvantaged backgrounds can conduct fieldwork and attend professional conferences;
- Develop a multi-layered mentorship system in which each graduate student, including those from underrepresented groups, receives guidance not only from a primary advisor but also from additional faculty mentors, advanced graduate students, and alumni working in environmental careers;
- Promote participation in diversity-focused professional programs, such as the Ecological Society of America SEEDS Program (Strategies for Ecology Education, Diversity, and Sustainability), which provides mentoring and career development for underrepresented students;
- Create graduate student affinity groups and peer networks for students from underrepresented backgrounds to help reduce isolation and strengthen community within the program;
- Organize networking events with diverse alumni working in environmental careers, providing students from disadvantaged backgrounds with mentorship and career guidance;
- Track recruitment, retention, and graduation outcomes for students from historically underrepresented backgrounds to ensure the program is meeting diversity and inclusion goals;
- Conduct periodic climate assessments among graduate students from disadvantaged groups to identify barriers to success and improve the inclusiveness of the program; and
- Coordinate closely with diversity initiatives across Binghamton University to ensure graduate students have access to the full range of institutional support resources.

Faculty diversity efforts. To increase the diversity of its faculty and to retain faculty from underrepresented groups, the new department will...

- Distribute job postings widely through diversity-focused academic and professional networks, including the Society for Advancement of Chicanos/Hispanics and Native Americans in Science, Minorities in Agriculture, Natural Resources and Related Sciences, and American Indian Science and Engineering Society;

- Circulate job announcements through national diversity faculty recruitment platforms, including Diverse: Issues in Higher Education, Insight Into Diversity, and the Higher Education Recruitment Consortium;
- Share job announcements with graduate programs that train environmental scholars from underrepresented backgrounds, including at Howard University, North Carolina A&T State University, and UC Riverside;
- Align hiring and retention practices with the diversity priorities outlined in the strategic diversity plan of Harpur College of Arts and Sciences, including commitments to recruiting diverse faculty, supporting career advancement, and ensuring inclusive academic practices;
- Develop structured mentoring teams for junior faculty, pairing them with senior faculty within the department and across interdisciplinary programs at Binghamton University to help them navigate promotion expectations, research funding opportunities, and professional networks;
- Encourage participation in professional development programs offered through the National Center for Faculty Development and Diversity, which provides training on writing productivity and grant development;
- Connect early-career faculty from underrepresented backgrounds with national mentorship initiatives, such as those offered through Society for Advancement of Chicanos/Hispanics and Native Americans in Science and Ecological Society of America;
- Support faculty participation (and reserve funding for faculty from underrepresented groups) in career development programs, including the American Council on Education Fellows Program and the Environmental Leadership Program;
- Encourage faculty to pursue collaborative research with regional partners, including the New York State Department of Environmental Conservation and environmental nonprofits working on environmental justice;
- Assist new faculty, especially those from traditionally disadvantaged groups, in developing competitive proposals for federal research funding, including NSF, EPA, and NOAA programs;
- Create opportunities (e.g. workshops, colloquia, and networking events) for faculty from underrepresented groups to engage in community-building within the department, across campus, and with nearby institutions;
- Ensure equitable access to mentoring and promotion support, including transparent expectations for tenure and promotion and regular progress reviews for junior faculty, especially those from underrepresented populations;
- Encourage faculty participation in campus diversity and inclusion initiatives, including programs coordinated through diversity offices and faculty development centers at Binghamton University;
- Engage with doctoral training networks that support diverse environmental scholars, including programs affiliated with Ecological Society of America and Association for Environmental Studies and Sciences; and
- Encourage graduate students and postdoctoral researchers from underrepresented backgrounds to pursue academic careers, building a long-term pipeline for future faculty recruitment.

Appendix I – Evidence of consultation with related units and commentary from those units

Text from Section 2 of previous version of plan

Given the interdisciplinary nature of Environmental Studies and the need for undergraduate students to take classes across numerous departments, a framework for communication was set out in a meeting of chairs of neighboring academic units. This meeting was called by the Faculty Senate Executive Committee on February 16, 2024 and attended by Norah Henry (Geography), Jay Sobel (Biological Sciences), Wei Xiao (Economics), Gregory Robinson (Political Science), Peter Knuepfer (Earth Sciences), and Komla Dzigbede (Public Administration). The meeting identified a number of concerns including the need for ongoing communication and the viability of the new department given its size.

It is important to note all of the concerns raised have nothing to do with the creation of a new department, which is about changes needed to fit faculty and students into the bureaucracy of the university. Also, the Environmental Studies Program has been around since the 1970s. No one has raised concerns over the past half century. Environmental Studies has been hiring faculty specifically for the program for more than ten years with 6.5 faculty berthed in the program and another hire on the way. No one has worried about any of these issues until now.

Most of the concerns stem from misunderstandings of the Environmental Studies Program and lack any supporting data or evidence. In any case, the transition of the program to a department does not impact these concerns, valid or not. The change is literally a technical adjustment that protects faculty, supports students, and builds the intellectual reputation of Binghamton University in this area. It better positions core faculty to address any valid concerns and continue to build a strong program.

2a. Framework for ongoing communication among units already underway

As a result of the February 2024 meeting, Environmental Studies has agreed to and regularly engages in discussions with Biological Sciences, Geological Sciences, and Geography, all of whose chairs expressed the most concern about coordination. At two subsequent meetings in spring and summer of 2024, the department and program leaders agreed to meeting every semester to discuss course offerings and avoid overlaps that result in the inefficient use of teaching resources. This builds on previous efforts where, for example, ecologists in Biological Sciences and Environmental Studies coordinated the schedules of related offerings, while Geography, in conversation with Environmental Studies, has eased the path for students to learn geographical information systems (GIS) skills eliminated the previously duplicated offerings of introductory courses in Environmental Studies.

With regards to faculty hiring, professors in environmental studies focus on the human/natural interface through an applied lens and an eye towards revealing solutions to environmental challenges. This is a requirement for environmental studies faculty. Other units may hire people that fit this, but they do not have to. As appropriate, we will bring relevant faculty from other units onto search committees to help with hiring in specific areas, which is already standard operating procedure between Environmental Studies and other units.

2b. Concerns about Department Viability

Department Size. One concern raised is the viability of a small new department. The new unit would be small, but it would be so regardless of whether it remains an independent program or becomes a department. Also, by count of faculty FTEs (Fall 2023), Environmental Studies is tied with Africana Studies and Earth

Sciences in size and is only one FTE smaller than Sociology, German and Russian Studies, and Middle Eastern and Ancient Mediterranean Studies. A new lecturer is starting this fall and the Harpur Dean's office has authorized Environmental Studies to hire an associate professor in a search that is underway. These two hires will bring us up to 8.5 faculty members.

Availability of senior mentors. One major advantage of a new department is a creation of a unit that allows faculty to grow as colleagues with a shared focus. However, with three assistant professors, concern was raised about the ability to mentor junior faculty with only two senior faculty members (a full professor and an associate professor). To remedy this, the Harpur Dean's office authorized hiring an associate professor who will start in Fall 2025. This hire provides the new unit with an important balance between junior and senior faculty members for mentoring purposes. We also seek mentors in Environmental Studies at other institutions and in related disciplines at Binghamton University.

Tenure and review process. Another concern raised was the conducting of promotion and tenure reviews. As is common in small departments, these will be conducted by special personnel committees made up of faculty in the new department and others across the college with relevant experience. The Environmental Studies Program already has promotion and tenure guidelines for both research and teaching faculty. An assistant professor and an instructor are up for contract renewal this year and special personnel committees have already been formed.

Previous Appendix I starts here

The Environmental Studies Program collaborates mainly with four departments: Anthropology, Biological Sciences, Earth Sciences, and Geography. Discussions with each unit took various forms during the approval process for this proposal.

Anthropology. Consultation with the Department of Anthropology took the form of a series of informal discussions with the chair, Dr. Rolf Quam, over the series of several months as part of other meetings regarding personnel and classes. During a meeting on November 22, 2022, Dr. Quam expressed that he recognized the need for a Department of Environment and Sustainability and that he supported the creation of the department. Dr. Quam expressed his willingness to continue collaborations with cross listed courses as well as on the Evolutionary Studies minor now and after departmentalization. When asked for an email comment for the record, Dr. Quam wrote back on January 25, 2023: "I'm writing in my capacity as the chair of the Anthropology Department here at Binghamton University to state my support for the creation of a new Department of Environment and Sustainability. Based on previous conversations with you, my understanding is that the Department of Anthropology and the new department will continue to cooperate as they do now." The complete email from Dr. Quam is below.

From: Rolf Quam rquam@binghamton.edu
Subject: Statement of Support for Department of Environment and Sustainability
Date: January 25, 2023 at 5:47 PM
To: George Homsy ghomsy@binghamton.edu

RQ

George,

I'm writing in my capacity as the chair of the Anthropology Department here at Binghamton University to state my support for the creation of a new Department of Environment and Sustainability. Based on previous conversations with you, my understanding is that the Department of Anthropology and the new department will continue to cooperate as they do now.

Sincerely, Rolf Quam

--

Rolf Quam
Professor, Chair
Department of Anthropology
Director of Evolutionary Studies (EvoS) Program
Binghamton University (SUNY)
Binghamton, NY 13902-6000 USA

Office Hours (Spring 2022): Wed. 10:00 AM-Noon or by appointment

Office: Science I, Room 137 (Chair's office)
Office phone: (607) 777-4701

Zoom Personal Meeting Room ID: 315-249-2121
Zoom URL: <https://binghamton.zoom.us/j/3152492121>

Biological Sciences. After an informal discussion with the (now former) chair, Dr. Karin Sauer, during a meeting about other matters, Dr. George Homsy (Director of Environmental Studies) was invited to present the departmentalization proposal to the faculty of the Department of Biological Sciences at their regular meeting. That presentation took place on February 10, 2023. Dr. Homsy went to the meeting with another Environmental Studies faculty member, Dr. Sara Velardi. The main concern expressed by the faculty was that the creation of a new department would compete for resources with the Department of Biological Sciences. Dr. Homsy explained that Environmental Studies already hires faculty into the unit based on criteria set out by the Harpur College Dean's Office causing no change in this aspect of the relationship. This concern emphasizes the need for communication and collaboration between Biological Sciences and the new department in order to ensure hiring in a complimentary, not competitive manner.

A second concern was the duplication of courses and the potential that students might not participate in the coursework and labs of Biological Sciences faculty. We discussed that, by its very nature, the study of the environment and sustainability is and must remain an open and interdisciplinary endeavor with continued contributions from many units.

On March 12, 2023, Dr. Sauer sent a supportive, follow-up memo from the faculty. In this document, the department states that it understands the motivations for becoming a department in principle and "[w]e

furthermore believe that departmentalization will provide the necessary support and infrastructure that is currently lacking - its current and future T/TT faculty to be successful.”

The document also raised important questions about undergraduate curriculum, intellectual overlap with Biological Sciences, resource allocation, and the lack of a graduate program. Such questions are relevant to and ripe for examination by any academic unit – new or mature. While most have been addressed in this proposal, the questions (and answers) will evolve over time and with continued input from our partner departments. This memo from the Department of Biological Sciences is on the following two pages.

Another memo was provided to the Faculty Senate Executive Committee after the meeting at which stakeholders had the opportunity to present their cases. This memo accompanied similar memos from Geography and Earth Sciences. The three memos and the responses are included at the end of this section.

Memo from Department of Biological Sciences



Harpur College of Arts and Sciences

Department of Biological Sciences

PO Box 6000

Binghamton, New York 13902-6000

607-777-2438, Fax: 607-777-6521

Dear George

Thank you for visiting the Department of Biological Sciences and sharing your thoughts and proposal on the departmentalization of ENVI with our faculty.

We have compiled below our thoughts and concerns.

Currently, Biology faculty have good relationships with many faculty in the ENVI program, and we wish to continue this relationship. Given the interdisciplinary nature of the ENVI program, we believe it will be essential for ENVI to maintain conversations and relationships with other departments that have earth and environmental science faculty, and not create a silo. The interdisciplinary nature is important as students in this program need to take many classes in other departments. Creating a silo would do a disservice to students - to not interact with and take courses from the research-active faculty that do environmental science research in other departments at BU (for example, Ecologists in Biology and Geologists). Having said this, we understand ENVI's motivations – in principle - for becoming a department. We furthermore believe that departmentalization will provide the necessary support and infrastructure that is currently lacking - its current and future T/TT faculty to be successful.

Justification for departmentalization. ENVI and the potential Department of Environment and Sustainability (DES) will continue offering a B.A. in Environmental Studies and a B.S. in Environmental Science. While we are not concerned that these tracks are being offered, we are confused and concerned about ENVI/DES offering these tracks when based on the name of "Department of Geological Sciences and Environmental Studies" and its proposed name change to "Department of Earth Sciences and Environmental Studies", one would assume that these tracks would be housed within the current Department of Geological Sciences and Environmental Studies. If the departmentalization of ENVI and its new name aims at clarifying its position and morphing into cohesive program in an intellectually distinct and growing field, we do not believe that this is being accomplished. We therefore encourage ENVI to work with faculty in Geology to address this overlap and to indeed develop a plan for departmentalization that enables DES to be intellectually distinct.

UG curriculum. The proposal lacked a strategic plan how the UG curriculum will be handled once ENVI is a department. As is, it is clear that ENVI will continue to rely heavily on courses offered by two departments, Biological Sciences and Geological Sciences and Environmental Studies. This raises serious concerns about resource allocation and pressure on cross-listed courses. Additionally, it is unclear how ENVI's new major would impact our BIOL courses. We have not seen any description of the major that ENVI envisions. Also, we are concerned that there will be pressure to cross-list courses, and if so, which ones. For example, of ENVI's four proposed BA/BS tracks, 'Ecosystems' has the most direct overlap with Biology, and their students would continue to need to take several of our courses, including the high enrollment core BIOL 355 (Ecology).

Memo from Department of Biological Sciences (continued)

Intellectual overlap and (ine)quality. It is clear that they see Ecology as a field that falls within their disciplinary boundaries. However, **they have provided no strategy for limiting overlap between their proposed department and Ecology within the Biological Sciences.** We only need look at two current job openings to see the potential for unresolved internal competition. We have a job opening for a tenure track Assistant Professor in 'Conservation Ecology', while they have a tenure track Assistant Professor position in 'Ecosystem Science.' These openings have attracted an overlapping group of candidates. We in Biology are looking for a research productive colleague, consistent with our goals as an R1 university. We are also looking for someone asking **what are fundamentally biological questions.** They too are seeking a biologist (ecosystem ecology is a traditional sub-field of ecology in general), but they are recruiting someone that will participate in something much more like an R3 undergraduate focused teaching position (with limited space and startup for research). Indeed, google sheets shared widely on social media about candidate job search experiences show evidence of confusion about these two positions. Their questions are the same as we should be asking: what kind of institution are we, and/or what kind of institution do we want to be? We won't become the kind of R1 state supported powerhouse that we are often told to aspire to by undermining our own reputation among young scientists. It is therefore essential that ENVI needs to distinguish itself from Biology (especially the ecology) and eliminate this overlap as well as the inequality.

Concern regarding resource allocation for ecology. We all know that the university has limited resources, and if two departments both ask for resources to support ecology, there will be winners and losers. Our ecologists (notably Kirsten Prior, Weixing Zhu, and previously Jessica Hua) have interacted with the Environmental Studies program routinely. There is clearly intellectual overlap, and we should be open to continuing that mutually beneficial arrangement but we also see a need for defined boundaries.

Moreover, while the Environmental studies department has hired some good research faculty recently, these faculty are sitting in an undergraduate program that lacks the infrastructure and resources (such as PhD programs) compared to research-active environmental scientists at BU. If hiring in the Envi. program (or a new department) competes with hiring faculty in the successful R1-level science departments - is not conducive to the mission of maintaining and growing as an R1 University. To maintain strong environmental science research at BU, research resources (i.e., new hires) will currently be more successful in existing successful programs with infrastructure. For example, regarding the hiring of ecologists at BU, it is good that they may hire them in Envi. to help build the program. However, this should not come at the cost of hiring ecologists in the Biological sciences that have better infrastructure and already run an R1-level program. [the resource concern is not currently be the case, but it could be a concern in the future.]

Grad program. No detailed strategic plan was provided. Specific concerns are based on ENVI only proposing a MS track which would create a disadvantage to its research active faculty, and how ENVI will provide trained teaching assistants for their courses. Additional concerns were raised how only having MS students negatively affects research productivity and competitiveness. Additional concerns addressed the pool of available graduate applicants with an interest in ecology.

Geography. Consultation took place initially during a meeting with the department chair, Dr. Norah Henry, on March 6, 2023. The main concerns were the potential duplication of courses and the desire to increase communication between the units. Dr. Homsy described the need to provide a communications framework in order to maintain the same collaborative efforts over coursework that currently exist. Both agreed that regular communication would benefit both departments. Discussions about potentially duplicative GIS courses have been resolved; through communication, which will continue. Dr. Henry agreed to circulate the departmentalization proposal to other faculty and relay relevant feedback. None was received.

Another memo was provided to the Faculty Senate Executive Committee after the meeting at which stakeholders had the opportunity to present their cases. This memo accompanied similar memos from Biological Sciences and Earth Sciences. The three memos and the responses are included at the end of this section.

Earth Sciences. Consultation with the Department of Earth Sciences took numerous forms. A number of the members of the department sit on the Environmental Studies Program Committee and consultation started with them informally. On December 9, 2022, an Environmental Studies faculty meeting was dedicated to discussing departmentalization. Via an invitation to the Department Chair, the meeting was opened to members of Earth Sciences, who were not also members of the Environmental Studies Program Committee. Four people from the Department of Earth Sciences attended; all four were affiliated with Environmental Studies.

The biggest concern raised was that a new department would compete for resources. It was discussed that Environmental Studies already hires faculty when the case for such can be successfully made to the dean's office. A concern was also raised about the relative lack of senior faculty, a problem faced by many new units. A third concern focused on the ability of the new unit to deliver the degree, and it was discussed how Environmental Studies delivers the degree now in collaboration with many units and that such interdisciplinary relationships will continue.

When asked for any additional written comments from the Department of Earth Sciences for inclusion in this proposal, two sets of comments subsequently arrived. An April 2023 letter from the Director of Graduate Studies, Dr. Jeff Pietras, had been inadvertently left out of previous versions of this proposal. (Dr. Homsy apologizes for that oversight.) Others notes from a meeting with Earth Sciences faculty was also provided by outgoing department chair, Dr. Peter Kuepfer. The comments and concerns raised are dealt with here. The full text of both documents are provided below. (The Pietras letter included 12 pages of attachments, which were printouts from the Environmental Studies website showing the courses needed for each major. Those are not included, but can be found at: <https://www.binghamton.edu/environmental-studies/undergraduate/> and then clicking on the menu on the right side to find the BA and BS degrees.)

Another memo was provided to the Faculty Senate Executive Committee after the meeting at which stakeholders had the opportunity to present their cases. This memo accompanied similar memos from Geography and Biological Sciences. The three memos and the responses are included at the end of this section.

Pietras letter – April 16, 2024 Dr. Pietras raises four points.

Concern (unnumbered): Lack of personal invitations to Earth Science graduate and undergraduate directors to December 9, 2022 meeting.

Response: The Environmental Studies Director emailed the chair of Earth Sciences on November 22, 2022 about the meeting with an invitation to all members of the faculty.

Concern 1: Counting of majors and program's reliance on courses from other departments.

Response: (1) As occurs across the university, majors are counted for the unit in which the student declares the major. (2) Many students use classes from various departments to fulfill requirements and the dean's office approach to resource allocation does not vary based on unit. (3) The addition of new faculty in Environmental Studies has already decreased the reliance on other units somewhat, although as an interdisciplinary unit, we will always count on classes from other departments.

Concern 2: Faculty research given lack of graduate program.

Response: (1) Many units across the university have vibrant research programs without graduate students. (2) Courtesy appointments are viable for researchers who need them. For example, the Harpur dean's office has already provided a graduate student line to Biological Sciences to support a graduate student for an Environmental Studies faculty member. The courtesy appointment has no required service to Biological Sciences, though that faculty member does participate in some meetings. (3) Another faculty member already has an arrangement to supervise graduate students in Anthropology. (4) Part of our strategic planning process is discussing and arriving at agreement for creating a graduate program and the timing of such a program.

Number 3: Duplication of faculty

Response: As we describe earlier in this document, professors in environmental studies focus on the human/natural interface through an applied lens offering solutions. Other units may have professors that promote solutions to environmental challenges at the human/natural interface, but we must recruit such people. If we seek to hire someone in an area that might be adjacent to another department, we will consult with appropriate departments and bring relevant faculty onto search committees. This is already standard operating procedure between the Environmental Studies Program and other units.

Notes from Department of Earth Sciences meeting of January 2023

Concern: Lack of a strategic plan in place

Response: A strategic plan is underway. We started crafting it at a faculty and staff retreat held in July 2024. In Fall 2024, the team agreed upon a mission and vision as well as an initial set of strategic priorities. Details will be added and implementation will take place over the months and years ahead. A strategic plan is important at this moment because we are growing in terms of student and faculty numbers. It would be important even without departmentalization and, therefore, is a separate matter.

Concern: Potential for duplicative hiring

Response: As discussed in the response to the Pietras letter and earlier in this document, the new Department of Environment and Sustainability will hire the people needed to teach the classes and advance the research – as it is doing now. These hires will focus on research and teaching at the human/natural interface with an applied approach to solving environmental challenges, which is a different focus than hires in neighboring units. Hiring will be additive and complementary to existing faculty in the Environmental Studies Program as well as neighboring departments. Other units will be consulted as appropriate to help review candidates and serve on search committees as is the current practice.

Concern: Counting of students in units and distribution of classes

Response: This concern is similar to the one discussed above in the Pietras letter and the response is the same. Majors are counted a certain way across the university and creating a new department from a program will not change that; many programs use classes from a variety of departments; and new faculty decrease the reliance on other units somewhat. This last point is particularly true of the gateway courses described in this concern. While other units do provide important courses, Environmental Studies faculty have increasingly focused on gateway classes and capstone classes as well as those in their area of expertise. As part of the strategic plan, we are also reviewing curriculum to make sure that our student have the courses they need to advance regardless of the track in which they sit.

Concern: Power dynamics and faculty development

Response: As mentioned in the Pietras letter and the comments on our business plan, power dynamics are not unique to Environmental Studies and it is unclear from the Earth Science notes why this would be any better or worse in a program or department. The referenced instance of junior faculty discomfort have never been brought to the attention of anyone in Environmental Studies; this would have been useful in the discussion here or, more importantly, in remedying a concern. As a point of information because there is an unclear reference made to rank: two junior faculty members will have their contracts renewed this year. A new associate professor is being hired into the unit. There exists already a full professor and an associate professor. (The latter has a joint appointment, but spends 95% of time in Environmental Studies). There

are also two pre-contract renewal assistant professors and one lecturer in the unit. Any concerns can be brought to the Environmental Studies leadership, but can also be brought to the Harpur Dean's office for discussion.

Letter from Jeff Pietras, Director of Graduate Studies, Earth Sciences



DEPARTMENT OF EARTH SCIENCES

PO Box 6000
Binghamton, NY 13902-6000
607-777-2264

April 16, 2023

To: Core Faculty of the Environmental Studies Program

I was sent a copy of the "Academic Business Plan to create a Department of Environment and Sustainability within Harpur College" on March 21st, 2023. I certainly support your efforts to provide a high-quality academic experience to students in Harpur College in the discipline of Environmental and Sustainability. Reading this document, I do have a comment and a few questions that I would like to have addressed. First, I would like to point out that neither the Director of Undergraduate Studies nor the Director of Graduate Studies in the Department of Earth Sciences (previously the Department of Geological Sciences and Environmental Studies) were personally invited to the meeting mentioned to have occurred on December 9th, 2022. I find this to be a major oversight on your part. This proposal is a significant change to our shared department. Surely a personal invitation to the entire leadership team of the Geological Sciences program was in order. I also noted that "additional written comments" were requested, but "none were provided". Since I didn't know about the meeting, and only received the proposal on March 21st, 2023, that statement is very misleading. Please consider this letter my official written comment. I would appreciate it being included in the proposal. I have three critical concerns regarding departmentalization.

1) Counting of undergraduate majors: I am basing the following comments on the attached degree requirements that I downloaded from the Environmental Studies website. Students in the Earth Systems Specialization-BS have the option to take up to 11 GEOL courses and only 4 ENVI courses. Students in the Ecosystems Specialization-BS have the option to take up to 10 BIOL courses and only 5 ENVI courses. Students in the Earth Systems Specialization-BA have the option to take up to 9 GEOL courses and only 4 ENVI courses. Students in the Ecosystems Specialization-BS have the option to take up to 9 BIOL courses and only 4 ENVI courses. How will these majors be counted? Will these be ENVI majors, or will they be split 50/50 with GEOL or BIOL? Counting of majors is a critical metric used for the allocation of resources. It is such an important metric that you show the growth of majors in the Environmental Studies Program as Figure 1 in your proposal. This is a critical question that needs to be addressed in your proposal, by the Dean of Harpur College, and by Harpur College Council. I don't think that Harpur College would want to set a precedent where one department can create a degree track where students can take more than twice as many courses from a single different department than their own.

2) Faculty Research: I fully support the need for departmentization which will allow faculty to apply for external funds. However, the proposed department does not have an MS or PhD research program. Where will graduate students be housed who are affiliated with externally funded research? Will faculty need to request courtesy appointments in other departments that confer graduate degrees? If so, will this potentially lead to double service? I noticed that "Eliminating double service" was addressed in your proposal and the use of MOU's can begin to address this concern. However, MOU's for undergraduate curriculum needs are very different than MOU's in regard to graduate research.

Letter from Jeff Pietras, Director of Graduate Studies, Earth Sciences (continued)

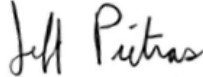
2

3) Duplication of Faculty: Due to the interdisciplinary nature of Environment and Sustainability there will always be some overlap in the academic and research focus of faculty in the proposed department and other departments in Harpur College. How will Harpur College avoid significant overlap? Will there be a process in place for other departments to participate in discussions regarding hiring proposals where significant overlap may occur. I will point out that the ongoing faculty searches in the Environmental Studies Program and the Department of Biological Sciences for faculty members in the field of ecology appear to have had significant overlap. In fact, some applicants applied to both searches. So, while we may say duplication or reallocation of resources into the proposed department is not the intention, it is already happening.

As always, my number one concern is with our students. They are best served by strong departments across Harpur College. I believe my concerns noted above point to the potential unintended consequence of strengthening Environment and Sustainability while weakening other departments.

I look forward to your thoughts.

Sincerely,

A handwritten signature in black ink that reads "Jeff Pietras". The signature is written in a cursive style with a large, prominent "J" and "P".

Dr. Jeffrey T Pietras,
Associate Professor
Director of Graduate Studies
Dept. of Earth Sciences

Comments on proposal and “business plan” for Department of Environment and Sustainability from Department of Earth Sciences

The faculty of the Department of Earth Sciences met in January 2023 to discuss the proposal to transition the Environmental Studies Program into the Department of Environment and Sustainability, and some additional discussions occurred over the following months. While there are a variety of opinions among the Earth Sciences faculty, the overall view is that, given that the ES Program has chosen to separate itself from what was formerly the Department of Geological Sciences and Environmental Studies, we are focused on improving our own program and moving it forward to serve students interested in studying the earth sciences.

However, there are some significant concerns about the DES proposal that have been expressed by some of our faculty, including two former directors of the Environmental Studies Program and our newer faculty members. Chief among these are the lack of a strategic plan; the existing and likely future duplication of faculty hiring between DES and existing departments; the lack of formal agreements between the proposed department and the academic units on which the environmental studies majors depend for most of their courses, both in terms of agreements regarding course offerings and counting of majors; and the power dynamics among the very junior tenure-track faculty and non-tenure-track adjunct faculty and the part-time senior faculty who lead the program. Several of these points were brought forward at the time of the Harpur College Council approval of the department proposal, and it is noteworthy that most of the HCC members from departments with long-standing relationships with the ES program voted against moving the department proposal forward.

Planning (or lack thereof)

The DES document provides vision statements for the program and a strong argument for the development of environmental studies and sciences as an emerging interdisciplinary academic field. However, we are concerned that the proposal does not include enough detail needed to ensure a successful transition from a program to department status. Several faculty from contributing programs stated this concern about lack of detail during the December 2022 ENVI meeting in which a draft version of the DES document was discussed. The Jan 2023 version of the revised DES document has not alleviated many of the concerns from Earth Sciences (and other contributing programs) about the formation of DES and the impacts on their departments.

A major concern is that a strategic plan was not in place before the DES document was concocted. This strategic plan could have provided guidance to better inform interested parties about how DES would sustain existing strategic partnerships, and document present faculty strengths (and weaknesses) to guide future hiring and related curricular needs. One of the challenges in developing departments in interdisciplinary fields like environmental studies is how to meld scholars from disparate backgrounds into a coherent unit, and this is certainly something that can/should be addressed in strategic planning. Instead, the proposal simply indicates that strategic planning will occur in the future. This seems to many of us to be putting the cart before the horse, something that we believe should be considered carefully at the University level before this or any other department is established.

Potential for Duplicative Hiring

Due to the interdisciplinary nature of Environment and Sustainability there will always be some overlap in the academic and research focus of faculty in the proposed department and other departments in Harpur College. Nonetheless, many of our faculty (as well as those of other departments) have expressed concern over the potential for duplicative hiring or redirecting positions to the new department. Indeed, the 2022-23 searches in the Environmental Studies Program and the Department of Biological Sciences for faculty members in the field of ecology appear to have had significant overlap, with some applicants having applied to both searches. So, while we may say duplication or reallocation of resources into the proposed department is not the intention, it is already happening.

Recent hiring in the Environmental Studies Program has been strategic in some cases, opportunistic in others, in what has often been an ad hoc process. Several of our faculty have expressed concern that the approach that has been taken in recent hiring decisions and efforts to retain junior faculty have shifted the program away from environmental sciences, which remains the interest of the majority of the undergraduate students in the program.

Will DES officially support faculty hiring in other programs that benefit the various tracks (through for example extensive cross-listing of courses), or does DES plan to try to get those future hires shifted directly to DES? The language in the proposal argues about the importance of having a departmental structure so that faculty in DES could control their curriculum, while also stating that it doesn't seek to duplicate hiring from other departments. Arguably the recent history of hiring speaks otherwise; the record of hiring in the Environmental Studies Program in recent years raises concerns about a future department hiring disciplinary faculty at the expense of existing departments as DES attempts to offer more of its own curriculum. The conflicting indications in the proposal are of great concern.

How will the formation of DES ensure that the many contributions of faculty from other departments, including Biological Sciences, Earth Sciences, Economics, Philosophy, and Political Science (to name a few) to the past and present success of the ENVI program are supported in the future? At the least, we would expect the proposal to recognize the importance of reaffirming relationships rather than simply assuming they will continue as they have.

Curriculum Concerns

The wide diversity of subdisciplines and fields of expertise that are encompassed by the fields of environmental studies and environmental sciences, as well as the interests of current ES students, are reflected by the range of tracks or “specializations” that are offered in the major. How will DES ensure that the content of the core “gateway to the major” courses in ENVI covers the background needed to succeed in all of the tracks? Recent changes in the environmental studies curriculum have occurred using a process outside of the bylaws of the current Environmental Studies Program, so we have some concerns about future intentions. To what extent does the proposed department plan to work with other departments that provide most of the courses used by Envi majors?

For example, students in the Earth Systems Specialization-BS have the option to take up to 11 GEOL courses and only 4 ENVI courses. Students in the Ecosystems Specialization-BS have the option to take up to 10 BIOL courses and only 5 ENVI courses. Students in the Earth Systems Specialization-BA have the option to take up to 9 GEOL courses and only 4 ENVI courses. Students in the Ecosystems Specialization-BS have the option to take up to 9 BIOL courses and only 4 ENVI courses. Our point is not to suggest that we would not welcome DES students into our GEOL courses; we not only welcome the current Earth System students in our courses, assuming they have the prerequisites, but also invite them to lectures and other activities along with the Geology majors. We have two points, however. First, if Envi majors are taking as many geology courses as a Geology major, shouldn't the Department of Earth Sciences be credited for supporting these majors? Yes, they're Envi majors, but shouldn't they be also formally credited to our department? The same is true for a number of other departments. When ES was a program that wasn't competing with departments for resources, this was less of an issue. Second, as noted above, the proposal assumes that relationships with other programs will remain as they are, but that is an assumption that hasn't been validated with agreements. The administrative leads for ENVI need to initiate and pursue official MOUs with other departments about these and other matters to ensure needed long-term collaboration with other departments. The MOU could codify an answer to the following question: What is the future plan for DES to encourage and strengthen synergistic partnerships with departments that already contribute to the success of the current ENVI program?

The proposal also emphasizes that the establishment of a new department would allow the DES faculty to better deliver their curriculum. We wonder if this means that, in the future, DES envisions only its faculty offering “key intro” DES courses? Following are examples of “key gateway courses” for ENVI tracks that rely on the expertise of faculty from other departments:

Sustainability Track - ENVI/PHIL 149 Environmental Ethics & Policy (PHIL faculty) or

ENVI/GEOG 239 Environmental Planning & Policy (GEOG faculty)

Economics Track - ECON 160 (micro) or ECON 162 (macro) economics (ECON faculty)

Earth Systems Track - ENVI 201 Humans and Physical Environment (GEOL faculty used to offer this course but it seems that their physical processes expertise is “no longer needed”)

The DES plan did not include information about the substantial differences in the structure of the course offerings in the different tracks. For example, the Earth Systems track has a scaffolding design whereas the Sustainability track has a limited structure. How does the future department plan to balance such disparate expectations?

Power Dynamics and Faculty Development

A final point that particularly concerns our junior faculty is the power differential between the full-time junior and part-time senior faculty in the current program and proposed department. Our junior faculty are aware of a number of instances in which the first- and second-year tenure-track faculty in the Environmental Studies Program are uncomfortable arguing against decisions being made by program leadership. While this isn't unique to the Envi program, it is particularly acute given the lack of senior assistant or mid-career faculty in the program and the lack of engagement in decision making with the broader community of faculty who contribute to the current program. Given the proposed departmental governance structure, this is unlikely to improve with approval of a department.

Three memos submitted late to the Faculty Senate Executive Committee

A Faculty Senate Executive Committee meeting on September 24, 2024 was supposed to be the opportunity for all information from stakeholders to be presented about the creation of the Department of Environment and Sustainability. At that meeting, in addition to hearing from the Environmental Studies Program, faculty in attendance and speaking came from Anthropology, Biological Sciences, Earth Sciences, Geography, Public Administration, and the dean of CCPA. It was upon this information that the Faculty Senate Executive Committee was supposed to deliberate and vote.

However, following that meeting, the departments of Biological Sciences, Earth Sciences, and Geography sent coordinated letters to the Faculty Senate Executive Committee. The Environmental Studies Program was never given an opportunity to review this late material or respond before the FSEC vote. Our responses to the comments are summarized here. The letters follow in their entirety.

First, all three letters make stipulations about the Environmental Studies Program, student intentions, and educational outcomes without providing meaningful data or analysis. For example, the only data presented in the Earth Science letter is about their own graduates and has no relationship to Environmental Studies graduates. The charts in the Geography letter present Environmental Studies data from OIR, but do not relate the data to any point of analysis in the text of their letter (and have the tracks, dates, and totals wrong). The letter from Biological Sciences similarly tries to use the number of students in Environmental Studies tracks to divine student intentions, a stipulation with evidence or a causal link.

In response, we can present two relevant, though still incomplete, data-based understandings of the Environmental Studies Program. These are a survey of alumni (done before COVID) and last year's survey of graduating seniors. Our survey of graduates finds them in many different fields, including environmental planner, conservation officer, park ranger, environmental technician, environmental health and safety inspector, etc. Despite concerns of other units, nearly one-third go to graduate school. The survey does not provide enough answers, but it is concrete and related to the question raised about outcomes. Environmental Studies is preparing another alumni survey as part of our strategic planning process. We will do this at regular intervals and use the data to adjust curriculum and better understand outcomes. The survey of graduating students found that every student took part in research and many had multiple research experiences. Over a quarter had already secured a job in the environmental/sustainability field, three percent got a job unrelated to the environment, and one-third had been accepted to graduate school. The final 37 percent did not have plans for after graduation. Regardless of their immediate plans, almost two-thirds hoped to stay in the environmental / sustainability field in the years ahead.

Second, many of the contentions in the memos are based on misunderstandings or the misconstruing of an environmental studies degree. As previously described, environmental studies is an applied degree that integrates social and physical sciences as well as the humanities to create a greater understanding of the systems in which we live and are around us – and to push necessary changes. If a student wants to study the narrow definition of ecology, for example, described in the letter by Biological Sciences, then that student should be a biology major (or a double major). Similarly, if a student wants to become a hydrogeologist, petroleum geologist, or an environmental geologist, then a geology major or double major is appropriate. But for students that want to study and understand the greater systems around each of these niches, they correctly choose Environmental Studies. It is not about one degree being better or worse than the others. It is about students need the freedom to choose a major that aligns with their interests – and a growing number choose the perspective of Environmental Studies. As a point of information, the survey of graduating seniors found that nearly half started out at Binghamton University interested in majoring in Environmental Studies. Twenty percent found out about it while they were here, another 20 percent added it as a second major, and 17% switched to this major from another one.

The letter from the Department of Geography cherry-picks and misconstrues our intent with regards to the list of programs at other universities that we provide early in this proposal. We created this list simply to help readers understand the definition of Environmental Studies. We intend it to be a detailed analysis of these programs to say whether they are better, worse, or the same as ours. We would never change our curriculum based upon what we read on the web. Environmental Studies is spending months gathering and investigating actual data to find ways to develop a comprehensive plan to continually improve the program intellectually and pedagogically.

Third, the concern over resources seems to be an animating feature in each letter. As previously stated, Environmental Studies as a program already hires faculty as needs and resources allow. In fact, over the past few years Biological Sciences, Earth Sciences, Geography, *and* Environmental Studies have hired multiple new faculty. Environmental Studies will continue to be a collaborative partner using resources to push research and education forward. The letter from Biological Sciences seems to paint a picture of non-cooperation in hiring. However, we included a faculty member from biology on a recent hiring committee. We collaborated on a joint lecturer hire with Biological Sciences. We have, for years, worked with other units on hiring and will continue to do that because it makes sense – not because we are bound to an MOU as recommended in the letter. In the end, resource allocation cannot be dictated by departments, but is the purview of the dean and provost.

Fourth, despite the extensive description of Environmental Studies laid out in the Intellectual Justification section of this document, the letter writers seek to impose their own narrower definitions of environmental studies, which focus on their own curriculum and desired outcomes. The letter from Geography states that Environmental Studies covers the same scope – but without defining geography. The American Association of Geographers defines geography in terms of space and issues within space “that is to say, how their location and their connections to others over space contribute to their characteristics and impacts.”⁷ While there is a subfield as applied geography, it is just one subfield in an otherwise rich and important discipline. Geography is about space and that is an important differentiator from Environmental Studies. The Biological Sciences letter similarly leaves out pieces of its definition of “ecosystem ecology,” which *Nature* defines as the study of “the living and nonliving components within the environment, how these factors interact with each other, and how both natural and human-induced changes affect how they function.”⁸ This broad definition fits both programs. Biology majors might want to study how energy and nutrient flux processes work in forest systems, for example. Environmental Studies majors take that knowledge and figure out how to manage the physical, social, and political change in the forest system where humans may shift the energy and nutrient balance. It is not about one perspective being more correct than another, it is about different perspectives bringing a greater understanding. Rather than pick at definitions, which admittedly we just did, we need to figure out how multiple perspectives can work together.

All three letters seek to bind Environmental Studies to MOUs around hiring, classes, and intellectual overlap. Aside from joint appointments, such agreements seem not to be done, which is probably because, as described in the Biological Sciences letter, “these guardrails can be difficult to define.” Do we need guardrails to keep geographers away from economics? Historians away from political science? Biologists away from chemistry? Rather than carving up intellectual territory into unnaturally narrow silos, it would be better to build collaborations that examine issues from different perspectives, bring greater understanding to topics, generate more interdisciplinary grant money, and provide students with a comprehensive education that will enable them to be good citizens prepared to tackle issues a numerous levels.

The letters from which these concerns are drawn follow.

⁷ Raphael, Marily (2022) “Presidents Column: Geography and Geographers in a Changing World.” *American Association of Geographers website*. <https://www.aag.org/geography-and-geographers-in-a-changing-world/>, Accessed November 2, 2024.

⁸ Nature – Knowledge Project. *Library: Ecosystem Ecology*. <https://www.nature.com/scitable/knowledge/ecosystem-ecology-13228212/>, Accessed November 2, 2024.

September 27, 2024

Dear Faculty Senate Executive Committee:

The Department of Geography, with Biological Sciences and Earth Sciences, has engaged in two meetings with a representative of the Environmental Studies Program to discuss the Program's desire for Departmentalization. The outcomes of those meetings did not support the creation of an Environment and Sustainability Department due to questions regarding curriculum, outcomes, and resources. With this in mind, Geography understands why the Environmental Studies Program wishes to attain department status, but believes such an action should be undertaken only with a firm understanding of the multidimensional nature of the proposal and its impacts on existing units, now and in the future. We support intellectual growth and development, comprehend the changing nature of science, and the development of new scholarly approaches to investigation. Further, we simultaneously recognize that any respectable university would support an excellent Environmental Studies program. The development of an environmental studies program entails the development of both breadth and depth into multidisciplinary topics that reside in not one, but multiple adjacent departments. This creates potentially large problems because disciplinary content and approaches differ; student understanding of the nuances across and between disciplines may not reflect their true needs as they progress from freshmen to graduates. Together, the disciplinary content/approach and student understandings form dueling priorities for resources.

Thus, while Geography sympathizes with and supports the underlying goals of an Environmental Studies unit, we do not believe those goals can be met by approving the current proposal. We do believe that sustained discussions must occur to deal with our three major areas: 1) current and future overlap with existing departments, 2) student outcomes, and 3) faculty and other resources and allocations, as well as the concerns of our colleagues in the Departments of Biological Sciences and Earth Sciences. Without such advance discussions, we prime the College, the existing Departments, and any new department for continuous discontent and friction, which would be unwelcome, exhausting, and counter-productive. Below, we state our major concerns.

The description of the proposed new Department covers the same scope as Geography, notably, "focusing on...study of the natural, social, cultural, and political systems involved in measuring, understanding, managing and adapting factors at the human/natural interface" (p. 2, proposal). Geography's focus on this campus is on the human-nature interface, examining the natural, social and cultural components of the Earth. Our courses, for the last 50+ years have included physical geographic, urban-economic, and geo-spatial analysis of the human and natural environments, with a major emphasis in each area on Applied Geography. This Department created, through the vision and leadership of our then-Chair, the national movement that legitimized applied/community research, termed Applied Geography. However, scope does not reflect our sole concern.

Student outcomes, course sequence and structure present concerns, as well. One curriculum issue we see includes a large number of ES major courses, taught by other units, form the core of the major, placing great reliance on other Departments to supply major courses. We use as an example the Sustainable Systems track, with attention to the Environmental Planning subtrack. Here, of 5 permissible introductory methods courses (only 1 is required), 3 are taught in Geography (an additional 4 non-Geography courses are available, but only for a special subset of ES students). For the 5 required upper-level courses, students can select from 7 Geography courses (of the 12 approved courses). The approved courses for a lower-level environment course includes 2 Geography courses as choices. Thus, an ES major in the Environmental Planning subtrack of the Sustainable systems track can take 7 courses in Geography to fulfill the ES major requirements. We see this as considerable overlap.

We also have concerns about student outcomes. We are concerned that the courses that a student selects may not, in fact, prepare them for their desired goals of employment or graduate work. For example, a lower-level GIS class is unlikely to provide the necessary substance for students wishing to attend graduate school or attain their professional goals.

We believe student outcomes are important. We further believe that a greater science approach for the proposed Department would be of benefit to the student. We ask, Why is the proposed Department focus not more similar to the campuses identified on page 3 of the proposal? Boulder, Georgetown, Wisconsin and Cincinnati, for example, have science-focused programs, with Wisconsin requiring a dual major. We believe this approach provides a more cohesive and focused package for students, making them more competitive in their futures.

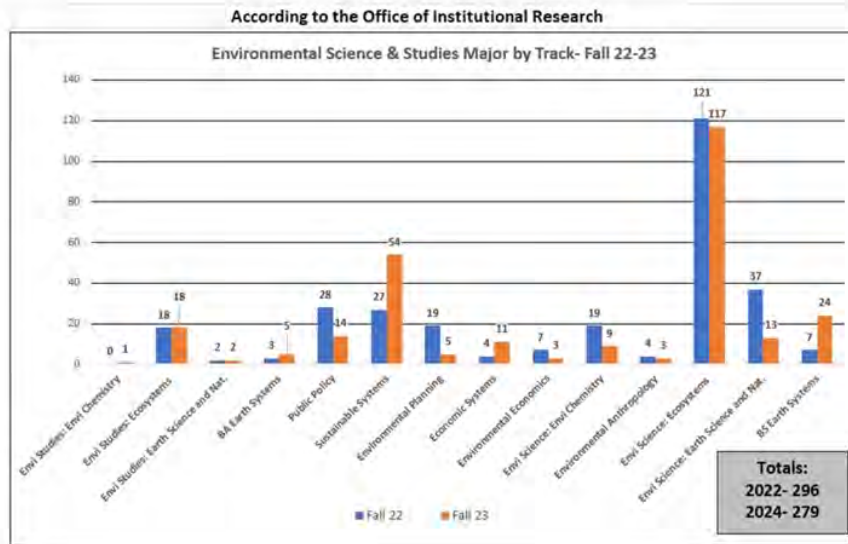
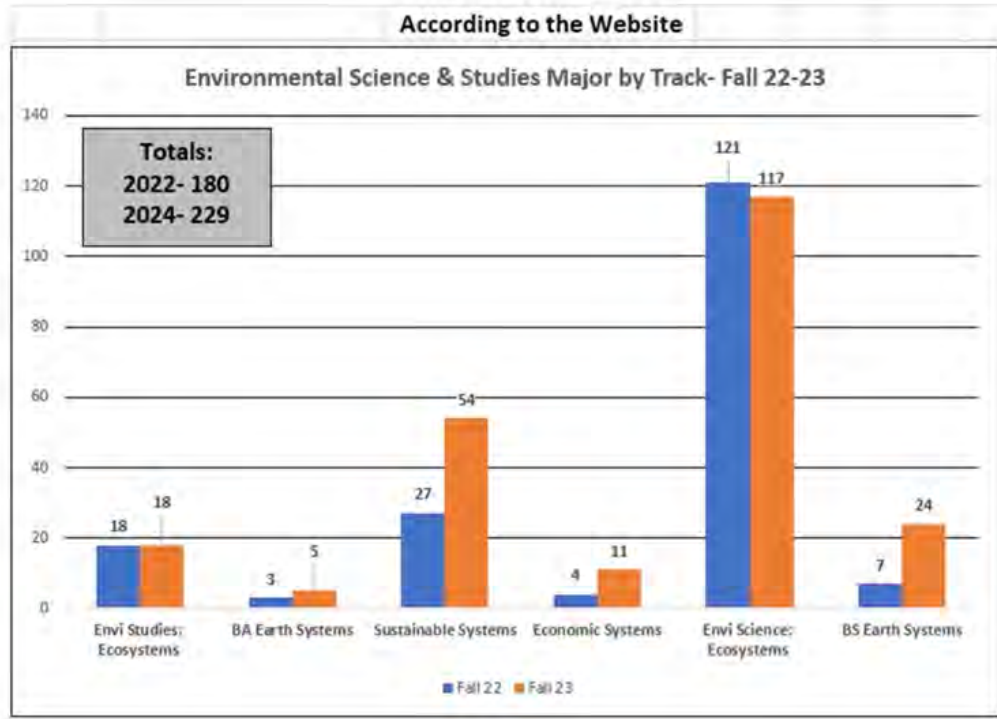
The Proposal, page 5, states that "...students can weave a diversity of courses from other units into an integrated education." This provides student choice, but also may lead inexperienced students to believe their selections are adequate for their later educational and employment goals. We believe that this is *not* the case. Students can opt for courses early in their educational careers that, while of valuable interest, do not provide the necessary background for more technical, advanced courses later in their educational programs. Lacking the time to take the basic courses, they miss the advanced ones, placing them at a competitive disadvantage for graduate school applications or employment.

Finally, as we examine the tracks for the proposed Department, we see quite a few that would seem to overlap with both Geography and other Departments. While we are unclear on the exact number of tracks in the proposed department, six tracks seem to exist, with several subtracks. So, for example, while we understood that Environmental Planning was no longer an ES track, it appears to continue as a subtrack under Sustainability Systems. If *this* understanding is correct, the resulting fourteen (14) tracks and subtracks would seem to be a considerable number of specialties/subspecialties. (See Figures, attached) Greater clarity on the track components and content should result with continued discussion aimed at ensuring that overlap and competition do not occur.

We also have concerns about resources and resource allocation, and course duplication. We would like a statement that clarifies the mechanisms that will enhance cooperation, while

eliminating duplication in GIS, remote sensing, and urban studies/planning. As active co-developers of the CCPA graduate program in Sustainability, we wonder what the development of a graduate program in a newly-formed ES/Sustainability Department would look like. Here, again, we are concerned with overlap.

We have recently begun to discuss these issues with the Harpur College Dean and we look forward to continued work on these topics to enhance student learning and preserving the integrity of existing Departments and their curricula.





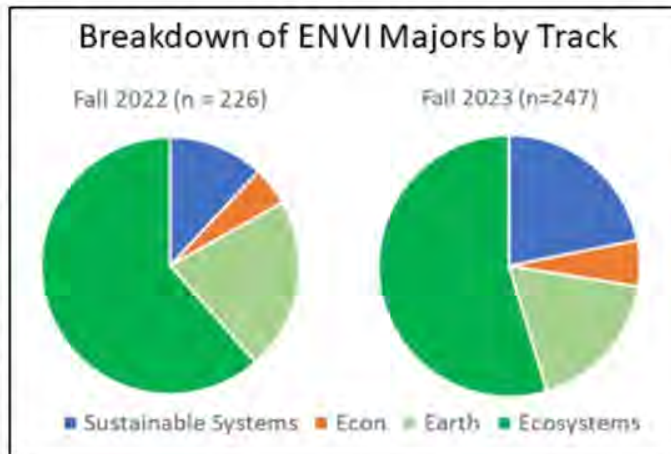
Harpur College of Arts and Sciences
Department of Biological Sciences
PO Box 6000
Binghamton, New York 13902-6000
607-777-2438, Fax: 607-777-6521

September 24, 2024

Dear Members of the Faculty Senate Executive Committee:

This document serves to further articulate the Department of Biological Sciences continued concerns about the proposed departmentalization of the Environmental Studies Program. First, we would like to be clear that we have no fundamental opposition to an Environmental Studies Department at Binghamton University. Environmental Science and Studies programs are not new in academia, and all of the ecology faculty in Biological Sciences are familiar with and regularly interact with ENVI programs at our peer institutions. For instance, SUNY-ESF is a national leader in this field, with “Environmental Science” being part of the institution’s name since 1972. Furthermore, we empathize with the difficulties that the interdisciplinary program faces in its current state, unmoored from an official departmental berth. As described in the recent meeting by Professor Homsy, an academic department focused around the specific dimensions of the social sciences and humanities that contribute to the critical link between the empirical environmental sciences and human society is a well-defined niche that would be complementary to several of the existing strengths of the university. Our current relationships and efforts with ENVI have helped to build and strengthen the program, showing our support and willingness to collaborate. However, we have serious concerns stemming from the discrepancy between this stated mission and the current BU ENVI undergraduate program in practice, as well as an apparent lack of willingness by the ENVI leadership to fully engage in important discussions about these matters with the affected departments on campus.

The social science-based program focused on policy making and the important work of translating applied environmental sciences to stakeholders represents a relatively small proportion of the undergraduate students enrolled in ENVI majors. The Environmental Studies Program maintains 6 separate tracks in its undergraduate degree program, ranging from BA degrees in Sustainable and Economic Systems to BS degrees in Ecosystems and Earth Systems. Over the last two academic



years, 78% of ENVI majors are enrolled in the Ecosystems (58%) and Earth Systems (20%) “science” tracks of the program (see Figure). Our concern is with the number of “Ecosystems” majors, which comprises the majority of the students in the program, and this track duplicates efforts of Biology majors interested in Ecology.

The growing number of overall majors is positioned front and center in ENVI's proposal for departmentalization, while the numbers show that the majority of these students are not directly seeking interdisciplinary environmental policy degrees. Rather, these students want **science degrees surrounding the environmental topics** they are clearly passionate about. The Ecosystems and Earth Sciences environmental science tracks duplicate efforts of existing departments, where strengths in those disciplines lie. Our primary concerns about how the tracking and duplication of sciences affects 1) Undergraduate student outcomes; 2) Resources and future hiring in disciplines of overlap.

1. Impacts on student outcomes

"Ecosystems" and "Earth Systems" tracks offer "science-light" versions of the ecology and earth-sciences training the students are seeking, with little structure to the specific requirements of the degree program. Importantly, the scope and rigor of these programs are not commensurate with either traditional ecology or earth-science training, nor the well-established Environmental Science programs at other institutions. The "Ecosystems" track attracts many students who think they are getting a degree in Ecology. Those that only major in ENVI Ecosystems (without a co-major in Biology) will find themselves lacking the scientific rigor that makes them qualified and competitive to enter PhD programs in Ecology (including applied ecology, related to Conservation or Natural Resource Management). Moreover, even students with excellent GPAs struggle to be competitive for entry level environmental science positions in the public and private sector against students with more comprehensive applied environmental science training from other established programs in New York State (such as SUNY-ESF).

All but one Ecology research labs are currently housed in Biology. Thus, many ENVI students seeking research experience are mentored by Biology faculty. We witness first-hand that some students with the ENVI Ecosystems only degrees are not as competitive for graduate programs, or other technical jobs, often lacking skills they may pick up on a more traditional science track. Furthermore, "Ecosystem Ecology" means something very specific in the field of Ecology (the subfield of ecology dedicated to energy and nutrient flux processes across large-scale systems). ENVI is not using the term this way, and students applying to Ecology graduate programs with an ENVI "Ecosystems" degree are met with confusion.

We believe that students that are interested in Ecology should be required to double major in Biology and ENVI, and students would often be well-served by a Biology major with an ENVI minor. Indeed, the current ENVI Ecosystems track includes the biology intro series, one of our core courses, and many of our upper level electives. It is extremely similar to a biology major with some chemistry requirements removed, one less core requirement, and the addition of ENVI 101 and 201. Many students are dual-majors or Biology majors with ENVI minors, as they recognize that the strength in Ecology (and the majority of classes and research opportunities) is in Biology. However, others do not make these connections until it is too late. We think that ENVI re-creating an Ecology track does a disservice to students, wastes resources, and does not leverage the strength in this discipline at BU. Better yet, rather than duplicating and creating "science-light" degrees, the ENVI program should consider removing tracks, so their niche is to educate students truly interested in the interdisciplinary policy and translation program, but not specialize on a discipline within that program that is taught elsewhere and more rigorously in other departments at BU.

2. Resources and faculty hiring

Intellectual overlap between faculty in Biology and Environmental Studies is somewhat inevitable. Ecology is the study of interactions between organisms and their environment, and it has long been an integral

sub-field of biology. Because human impacted environments are ubiquitous, many (maybe most) ecologists work on systems where ecological interactions have been heavily impacted by environmental issues. Global Change Biology is one of our departmental research strengths highlighted in the Department of Biological Sciences strategic plan, and it is an area where Biological Sciences and Environmental Studies have the most overlap. At least 1/3 of the faculty in our department contribute to this area. Our ecologists are leaders in their field, publishing their research in the top Ecology journals in the world, such as Ecology, Ecology Letters, and Molecular Ecology. Indeed, these are the faculty that teach the majority of undergrads in the ENVI Ecosystems track, and host them in their labs as independent study students.

This overlap creates potential competition for resources, so we have asked the leadership of ENVI to establish guardrails in the form of MOU's describing how faculty hiring will be handled. Ecologists tend to ask fundamental biological questions while working in impacted ecosystems, while those in environmental studies are often working at the human-environment interface to develop solutions for environmental problems. However, these guardrails can be difficult to define at times, and meetings intended to negotiate these agreements have unfortunately been unsuccessful. Biology has asked for increased representation on ENVI Ecosystems hiring committees, such that we can leverage our considerable expertise **to help identify candidates that are complementary to our faculty rather than redundant**. Formal agreements to further articulate these guardrails are essential to ensure that we don't waste resources in an institution of our size. Ideally, these agreements would be robust, such that they would serve current overlap issues and provide examples that help guide future leaders of each unit. Biology would be enthusiastic about interacting on future hires with these understandings in place, and we would welcome collaboration on joint hiring plans that would help produce synergies between our departments.

In summary, we sincerely thank the Faculty Senate Executive Committee for the opportunity to discuss our concerns surrounding departmentalization of ENVI. As the Dean's office indicated, we believe that coming to agreements on how to work together in the best interest of our students and the University's mission are important whether departmentalization happens or not. We very much look forward to those future discussions, and appreciate all involved for the thoughtful handling of these ongoing concerns.

Sincerely on behalf of the Department of Biological Sciences,

James Sobel
Chair and Associate Professor

Thomas Powell
Associate Professor

Kirsten Prior
Associate Professor and co-Director: NATCHANGE Natural Global Environmental Change Center

We believe that resolving these curricular issues before moving forward with departmentalization will ensure that students receive a well-rounded and rigorous education. Clear delineation of academic pathways will allow students to pursue their desired fields of study without inadvertently enrolling in programs that may not fully prepare them for future opportunities.

3. Faculty Hiring and Resource Allocation

The interdisciplinary focus of the proposed department presents an additional concern related to faculty hiring and resource allocation. Given the existing overlap between Environmental Studies and departments such as Earth Sciences, Biological Sciences, and Geography, there is a risk that competition for faculty positions and resources could arise. As mentioned earlier, this competition has already led to strain between academic units, with overlapping faculty searches causing confusion and tension.

Despite previous discussions with the leadership of Environmental Studies and Harpur College, these concerns have not been addressed in a meaningful way. To mitigate these concerns and prevent further strain, we strongly recommend that clear agreements on faculty hiring, resource allocation, and program responsibilities be established before the new department is created. These agreements should ensure that departments collaborate, rather than compete, and that resources are used efficiently to the benefit of all programs involved.

4. Counting of Undergraduate Majors

Another important consideration is how undergraduate majors will be counted, especially for students who complete the majority of their coursework in departments outside of Environmental Studies. Since the allocation of resources is closely tied to student enrollment figures, it is critical that these guidelines are clearly established. Ensuring transparency in how majors are counted will prevent future disagreements over resource distribution and will provide a fair system that recognizes the contributions of all departments involved in a student's education.

Conclusion

In conclusion, we recognize the drive to departmentalize Environmental Studies and understand the program's long-standing independence. However, it is essential that discussions, alignment, and agreement on key concerns are reached before moving forward with the proposal. Addressing these issues proactively, rather than during the process or relying on commitments to resolve them at a later date, will have a positive effect on all units involved. It will help avoid academic duplication, prevent contest over resources, faculty hiring, and majors, and ensure that all departments can collaborate effectively.

We thank you for your consideration and look forward to continuing this important dialogue.

Sincerely,

A handwritten signature in black ink, appearing to read 'A. Nikulin', with a horizontal line extending to the right.

Alex Nikulin, PhD

Associate Professor of Energy Geophysics and Department Chair

Department of Earth Sciences

Binghamton University - The State University of New York

Appendix II - Financial Plan

Overall, there is no request to central for additional funding as the transition to a department, in and of itself, will not cost additional money. Items described in budget for the unit's future are shown below and have been already accommodated by the Harpur Dean's Office.

Faculty: The creation of a department will not, on its own, require new faculty positions. However, as the major continues to grow in number of students, there will be subsequent need for new dedicated tenure/tenure-track faculty. Over the next five years, we expect to need to hire one new assistant professor and one new tenure-track instructor. At the same time, we anticipate transitioning from a unit heavily reliant on adjuncts to one that has more tenure-track professors and instructors. Also, to meet Roadmap Strategic Priority One ("Engage in path-breaking graduate education, research, scholarship and creative activities that shape the world"), we will need to focus new hires on research-active faculty in order to expand our research profile and to increase external funding. (Harpur Dean has made available faculty resources.)

Administrative support: Bringing our administrative support person from part-time to full-time. (Done)

Strategic planning: We will seek an outside facilitator to work with the department's faculty and other stakeholders to develop a strategic plan. (Work currently being done in-house)

Faculty leadership:

- Course release for an undergraduate director (Done)
- Standard support for a chair position in a department (i.e. moving from a director's 2-1 course load to a chair's 1-1 load)

Physical space:

- No space needs are required by departmentalization. In July 2024, the Environmental Studies Program moved to Science 2, which will now be the permanent home.