University of Maryland Center for Environmental Science

Self-Study Design

Prepared for the Middle States Commission on Higher Education

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University of Maryland Center for Environmental Science

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Section 1: INTRODUCTION and OVERVIEW

Knowledge is Our Best Natural Resource

The University of Maryland Center for Environmental Science unleashes the power of science to change the way society understands and manages the environment. Our scientists conduct cutting-edge research to solve today's most pressing environmental problems and to train the next generation to guide our state, nation and world toward a more sustainable future.

History and Overview

The University of Maryland Center for Environmental Science (UMCES) traces its origin to the founding of the Chesapeake Biological Laboratory (CBL) at Solomons, MD in 1925. As such, CBL is the oldest permanent, state-supported marine laboratory on the east coast of the United States. The evolution of UMCES as a geographically dispersed, academic institution within the University System of Maryland (USM) is traced in the Milestones for UMCES table below. The Center for Environmental and Estuarine Studies (CEES) was established in 1973 and included CBL, the Appalachian Laboratory (AL) and the Horn Point Laboratory (HPL). The UMCES name was adopted by legislation in 1997. Recent expansion in 2010 added elements of the Institute of Marine and Environmental Technology (IMET) to UMCES. The Maryland Sea Grant College was placed under UMCES administration in 2000. Each addition has added diversity and depth to the Center. The diversity of disciplines and the locations of laboratory units across the State have allowed UMCES to conduct highly successful, inter-disciplinary research and education programs in environmental sciences that are globally eminent while responsive to the needs of the citizens of Maryland.

Milestones for UMCES

1925: Chesapeake Biological Laboratory established (Solomons, MD).
1941: Department of Research and Education created as independent state agency (legislative act). CBL included in the Department.
1961: Natural Resources Institute (NRI) created to incorporate the previously independent Department of Research Education into the University of Maryland (legislative act). Appalachian Laboratory established (Frostburg, MD).
1973: Center for Environmental and Estuarine Studies (legislative act, 1975), Horn Point Laboratory established (Cambridge, MD). Two NRI field laboratories closed.
1997: University of Maryland Center for Environmental Science (legislative act to change name).
2000: Maryland Sea Grant College Program (College Park, MD) placed under UMCES administration.
2010: Institute of Marine and Environmental Technology reorganized as partnership among UMCES, University of Maryland Baltimore County and University of Maryland, Baltimore (Baltimore, MD).

2013: UMCES authorized to award joint graduate degrees and post-baccalaureate certificates (legislative act). UMCES initiated actions to gain accreditation through MSCHE and was granted Candidate status in November 2013.
2014: UMCES awarded its first joint MS and PhD degrees.

Institutional Identity

For the past 53 years, UMCES has operated as an institution within what is now the University System of Maryland (USM). UMCES is one of twelve institutions in the USM. It has a rich tradition of excellent research, education, and public outreach related to natural resources and the environment, conducted under its enabling legislation. The administrative structure of UMCES and its institutional connection to the USM are illustrated in Figure 1. UMCES operates under the laws of Maryland as codified in both the Natural Resources Article (Md. Code Ann. Com. Law §§3-401, 3-402 and 3-403) and the Education Article (Md. Code Ann. Com. Law §§10-101 and 12-104) to "conduct a comprehensive program to develop and apply predictive ecology for Maryland to the improvement and preservation of the physical environment, through a program of research, public service, and education."
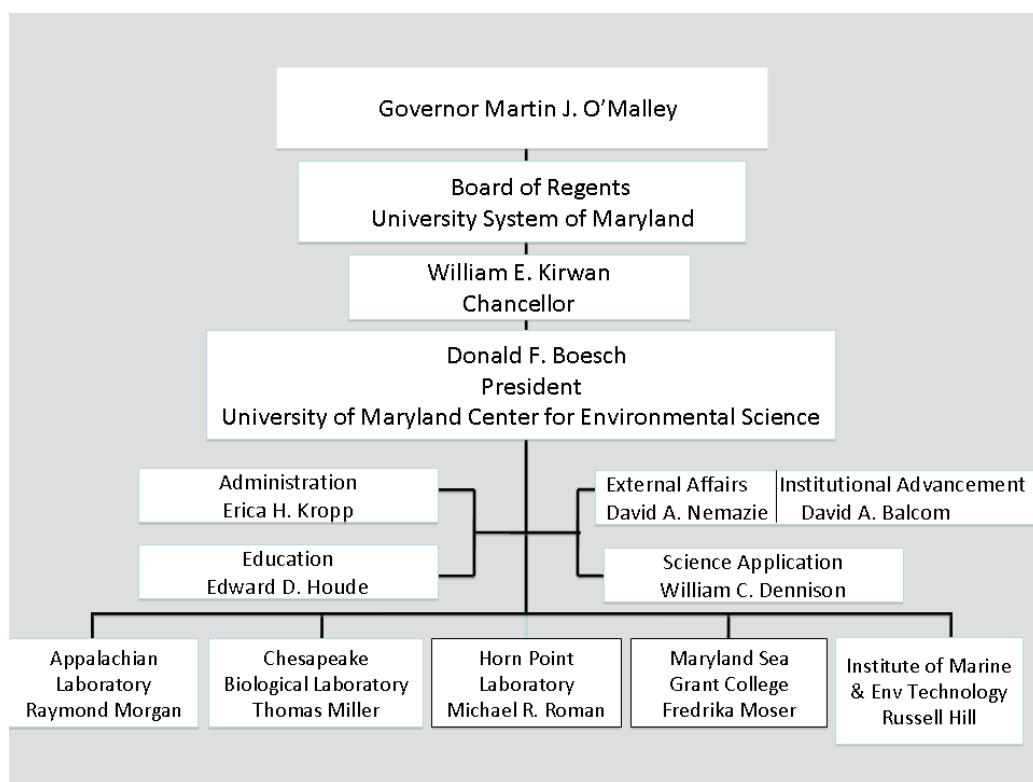

Figure 1. Administrative structure of UMCES within the University System of Maryland.

UMCES is the smallest of the twelve USM institutions. In September 2014, UMCES included 50 tenured and tenure-track faculty members (including two librarians), 22 senior research faculty members (including two agents), and 15 research scientists

(doctoral level appointments, non-faculty). The total number of UMCES employees, excluding hourly employees and graduate students, was 264 in September 2014. The numbers of graduate students (MS and PhD) in the Marine-Estuarine-Environmental Sciences (MEES) Graduate Program, the primary home of UMCES graduate students, has ranged from 71 to 116 in the period 2002-2013, and presently is 83.

Although geographically distributed (Figure 2), UMCES is a single, unified institution of the USM. Each of its four laboratories is administered by a Director, who is responsible for faculty and scientific staff, facilities operations, and fiscal administration. The UMCES Center Administration is located primarily in Cambridge and operates under the President and Vice Presidents for Administration, Institutional Advancement, and Science Applications. The office of the Vice President for Education is located at the Chesapeake Biological Laboratory in Solomons. The Vice President for Institutional Advancement is located at the IMET site in Baltimore. The Maryland Sea Grant Program and Director are located in College Park. Additional project support offices are in Annapolis. The President, Vice Presidents and Laboratory Directors are responsible for oversight and coordination of the laboratories, including graduate students, and representation to the USM. The UMCES President is a member of the Council of University System Presidents, with responsibilities delegated by the Board of Regents and Chancellor that are equivalent to those of Presidents of the other USM institutions.

Figure 2. UMCES is a geographically distributed campus of the University System of Maryland

UMCES MISSION

The University of Maryland Center for Environmental Science (UMCES) is a research, education, and service institution of the University System of Maryland (USM) and a world leader in the science of coastal environments and their watersheds. The Center's faculty advances knowledge through scientific discovery, integration, application, and teaching that results in a comprehensive understanding of our environment and natural resources, helping to guide the State and world toward a more sustainable future. As the responsible institution for administration of the Maryland Sea Grant College and

collaborative programs with other institutions, UMCES leads, coordinates, and catalyzes environmental research and graduate education within the University System.

UMCES faculty members advise, teach, and serve as mentors to graduate students enrolled in joint degree programs with USM institutions, particularly through the USM-wide graduate program in Marine-Estuarine-Environmental Sciences (MEES), in which UMCES has a leading role. UMCES also delivers its services through environmental science education programs for K-12 students and teachers, pertinent and timely information to the general public and decision makers, technology transfer to industries, and in collaboration with the Maryland Sea Grant College.

UMCES contributes to meeting the legislative mandates of the USM in numerous ways including: achieving national eminence as one of the world's premier research centers focused on ecosystem science; uniquely integrating research, public service, and education related to the sustainability of the environment and natural resources of Maryland and the Chesapeake Bay region; leading the USM's nationally ranked graduate program in marine and environmental science; recruiting and retaining a nationally and internationally prominent faculty; attaining research funding and private support in excess of its state support; promoting economic development; conducting outreach to state and federal agencies; and collaborating with other higher education institutions in Maryland in advanced research and graduate education.

A Continuously Evolving Institution

UMCES has periodically undertaken strategic planning to guide and improve its research and education programs. Four strategic plans were produced since 1993. The 2004 Plan *From Vision to Reality* was developed in conjunction with comprehensive and critical self-study, and included a review by an External Examining Committee. The 2012 Strategic Plan *Focus on the Future* builds on the UMCES strengths and includes five focus areas: 1) Genes to Ecosystems; 2) Human Welfare; 3) Energy Choices; 4) Water Security; and 5) Global Reach.

Each of the strategic plans has analyzed and assessed the strengths of UMCES, its accomplishments, requirements for improvement, and emerging needs in environmental sciences. The 2012 strategic plan explicitly addresses the commitment of UMCES to strengthen its profile in graduate education and commits UMCES to engage in the process to become a degree-granting institution. Additionally, other education goals are highlighted, including the intention of UMCES to develop non-degree, professional training and certificate programs in the marine and environmental sciences.

Education

The UMCES faculty has a long record of successful advising, teaching, and service as mentors to graduate students in USM institutions, especially through the System-wide

graduate program in Marine-Estuarine-Environmental Sciences (MEES). UMCES also delivers educational and outreach services through: 1) programs for K-12 students and teachers, 2) pertinent and timely information to the general public and decision makers, 3) technology transfer to industries, and 4) activities of the Maryland Sea Grant College, including a Research Experiences for Undergraduates (REU) program. UMCES is a partner in the National Oceanic and Atmospheric Administration's Living Marine Resources Cooperative Science Center whose mission is to prepare under-represented minority students for careers that support management of living marine resources.

UMCES was granted authority during the 2013 Session of the Maryland General Assembly (House Bill 268) to "award graduate degrees in marine and environmental sciences jointly with another public senior higher education institution and award post-baccalaureate certificates" [Md.Code Ann. Com. Law §3-403(a)(8)]. This milestone legislation followed several agreements and resolutions in 2012 that led to development of a joint degree within the MEES Graduate Program between UMCES and the University of Maryland, College Park (UMCP). These steps included authorization by the USM Board of Regents for UMCES to seek accreditation through the Middle States Commission on Higher Education (MSCHE). An Agreement between UMCES and UMCP defines the joint degree program.

UMCES laboratories and faculty advisors currently provide the academic home for 83 graduate students who are enrolled in four graduate programs in the USM: 1) the inter-institutional Marine-Estuarine-Environmental-Sciences (MEES) Program[1] administered through the Graduate School and College of Computer, Mathematical & Natural Sciences (CMNS) at UMCP[2] presently includes 77 students from UMCES (45% of the total number of MEES students); 2) the Behavior, Ecology, Evolution and Systematics Concentration (BEES)[3] in the Biological Sciences Graduate Program at UMCP presently has 1 UMCES student; 3) the Graduate Program in Life Sciences (GPILS),[4] administered by the University of Maryland Baltimore, presently has 1 UMCES student; 4) the Applied Ecology and Conservation Biology, and Wildlife and Fisheries Management tracks leading to the MS degree in the Biology Department at Frostburg State University[5], presently includes 4 UMCES students.

The vast majority of graduate students supervised by the UMCES faculty have been enrolled in the MEES Program through which 86 PhD and 125 M.S. degrees under UMCES supervision have been conferred since 2002. In earlier years (1976-2001), 274 degrees (110 PhD and 159 M.S.) were awarded to MEES students supervised by UMCES faculty. MEES degrees awarded to UMCES students are conferred through the Graduate School of UMCP (UMCP Graduate School).

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[1] MEES Graduate Program
[2] College of CMNS
[3] BEES Program
[4] GPILS Program
[5] Frostburg State Program

Seeking Accreditation

Through its recent authorization to grant degrees and the accreditation process now underway, UMCES has an opportunity to strengthen, expand, and improve its commitment to education. Over time, UMCES and its faculty have come to play an increasingly important role in graduate education within the USM. The Director of the system-wide Marine-Estuarine-Environmental Sciences (MEES) Program is a tenured UMCES faculty member. UMCES faculty members chair or co-chair all but one of the six Areas of Specialization in MEES (MEES Graduate Program) and teach the majority of courses in MEES. In 2013, UMCES initiated the application process to seek accreditation by MSCHE. Preparation of the Accreditation Readiness Report provided an opportunity for UMCES to critically evaluate levels of compliance with the 14 MSCHE Standards of Institutional Excellence. UMCES was advanced to Candidacy by MSCHE in November 2013. The accreditation process, including the self-study about to be undertaken, will further engage the UMCES community, increasing awareness of the need for constant improvement to meet expectations of excellence in an accredited institution

Section 2: Nature and Scope of the Self-Study

As a candidate institution seeking accreditation by the MSCHE, UMCES must adopt the Comprehensive Model in conducting its self-study. Each of the 14 Standards of Excellence, excepting Standard 12, which applies only to undergraduate institutions, will be addressed in the Self-Study Report to demonstrate the degree to which UMCES possesses the characteristics of excellence described in the standards and to propose recommendations for enhancing or improving compliance with the standards.

The self-study will be conducted by six working groups (WGs) under direction and oversight of a steering committee (SC). The six WGs are organized in thematic areas, each of which is guided by selected MSCHE Standards of Excellence. The six working groups and thematic areas are:

Working Group 1. Institutional Planning to Achieve Mission and Goals (MSCHE Standards 1, 2, and 3)

Working Group 2. Building Upon an Administration that is Efficient, Transparent, and Founded on Integrity (MSCHE Standards 4, 5, and 6)

Working Group 3. Recruiting, Retaining, and Training Outstanding Students (MSCHE Standards 8 and 9)

Working Group 4. A Faculty Committed to Excellence (MSCHE Standard 10)

Working Group 5. Delivering High-Quality Graduate Education (MSCHE Standards 11 and 13)

Working Group 6. Improvement through Assessment (MSCHE Standards 7 and 14)

While investigating degree of compliance with the MSCHE standards, working groups will consider how UMCES is progressing towards meeting the goals expressed in its mission and strategic plan, and how the institution can improve its overall mission effectiveness.

Section 3: Intended Outcomes of the Self-Study

UMCES continuously seeks to maintain and strengthen its leadership role in 1) conducting environmental research, 2) applying science to solve environmental problems, and 3) delivering high-quality graduate education. Self-study presents an opportunity for UMCES to conduct in-depth self-evaluation and assessment of its policies, procedures, and commitment to achieving excellence. UMCES will undertake a comprehensive assessment that examines institutional compliance with MSCHE Standards. Additionally and importantly, outcomes of the Self-Study will lead to improvements in UMCES and the learning environment of its graduate students.

Intended outcomes of the self-study include:

1. Demonstrating compliance with MSCHE's 14 Standards of Excellence.

2. Engaging the UMCES community and its stakeholders in the review and assessment of procedures that are employed to achieve excellence in research, research applications, and graduate education.

3. Evaluating institutional effectiveness and demonstrating that UMCES is achieving its mission through successful implementation of its strategic plan.

4. Identifying actions to sustain and improve performance of the institution, including recommendations for additional or new assessment procedures.

UMCES will achieve these outcomes through broad and diverse representation on its self-study SC and WGs and through in-depth examination by the working groups of institutional policies, procedures, and evidence of success. The Self-Study represents an opportunity for UMCES to set aspirational goals as it seeks first-time accreditation with MSCHE.

Section 4: Organizational Structure and Membership of the Steering Committee and Working Groups

The Self-Study will be conducted under the guidance and oversight of a 16-member SC that broadly represents the UMCES community, its governing board, and its constituencies. Six WGs, each consisting of 9-13 members who broadly represent UMCES faculty, administration, and students, report to the SC. Each of the WGs will address research questions organized thematically and based on the MSCHE Standards of Excellence. Appointments of members to The SC and WGs will remain in effect throughout the Self-Study.

Steering Committee

The SC provides oversight to the Self-Study planning process. Additionally, the SC will review, critique and edit reports of WGs and the final Self-Study Report. The co-chairs and members of the SC are strong supporters of the UMCES effort to become accredited. They are leaders, strong contributors, and facilitators, and are committed to advancing the education mission of UMCES.

The SC has met twice during the self-study design process. It has contributed actively to the Self-Study Design and will oversee and guide the Self-Study. The chair of each WG sits on the SC to ensure accountability and provide effective communication among WGs and the broader UMCES community. The SC provided input and has reviewed the charges to the WGs. The SC

also has reviewed the research questions posed by each WG in the Self-Study Design Report. The SC will review and edit all documents prepared for self-study by the WGs. Members of the SC include:

- Edward Houde, Vice President for Education and Professor (Co-Chair of SC and Chair of WG6)
- Erica Kropp, Vice President for Administration (Co-Chair of SC and Chair of WG1)
- JoAnn Boughman, Senior Vice Chancellor for Academic Affairs, University System of Maryland
- Andrew Elmore, Associate Professor, Appalachian Laboratory (Chair of WG5)
- Emily Flowers, Graduate Student, Institute of Marine and Environmental Technology, Chair of UMCES Graduate Student Council
- Russell Hill, Director and Professor, Institute of Marine and Environmental Technology
- Raleigh Hood, Professor and Chair of UMCES Faculty Senate, Horn Point Laboratory
- Thomas Lingan, Member UMCES Board of Visitors, Partner, Venable LLP
- Thomas Miller, Director and Professor, Chesapeake Biological Laboratory
- Raymond Morgan, Director and Professor, Appalachian Laboratory
- Fredrika Moser, Director, Maryland Sea Grant
- Catherine Motz, Member, Board of Regents, University System of Maryland
- David Nemazie, Associate Vice President for External Affairs (Chair of WG2)
- Michael Roman, Director and Professor, Horn Point Laboratory
- David Secor, Professor, Chesapeake Biological Laboratory (Chair of WG4)
- Michael Wilberg, Associate Professor, Chesapeake Biological Laboratory (Chair of WG3)

Working Groups

Each of the six WGs is chaired by a member of the SC to assure support and to encourage communication among the WGs. Some WG members are assigned to more than one WG to promote connectivity. In particular, membership of WG6 consists primarily of members who also serve on other WGs. These assignments will assure that the integrative work of WG6 (Institutional Assessment and Assessment of Learning Outcomes) will directly benefit from the work and findings of other WGs.

Working Group 1

Theme: *Institutional Planning to Achieve Mission and Goals*

Chair: Erica Kropp, Vice President for Administration

Members:
- David Balcom, Vice President for Institutional Advancement
- Walter Boynton, Professor, Chesapeake Biological Laboratory
- Jeffrey Cornwell, Research Professor, Horn Point Laboratory
- Ming Li, Professor, Horn Point Laboratory
- Matthew Fitzpatrick, Assistant Professor, Appalachian Laboratory
- Jacqueline Grebmeier, Research Professor, Chesapeake Biological Laboratory
- Michael Roman, Director and Professor, Horn Point Laboratory
- Beth Pinder, Comptroller
- Allen Place, Professor, Institute of Marine and Environmental Technology

Working Group 2

Theme: *Building Upon an Administration that is Efficient, Transparent, and Founded on Integrity*

Chair: David Nemazie, Associate Vice President for External Affairs

Members:
- Hongsheng Bi, Assistant Professor, Chesapeake Biological Laboratory
- William Boicourt, Professor, Horn Point Laboratory
- Dana Bunnell-Young, Graduate Student, Horn Point Laboratory
- Feng Chen, Associate Professor, Institute of Marine and Environmental Technology
- Lee Cooper, Research Professor, Chesapeake Biological Laboratory
- William Dennison, Vice President for Science Applications and Professor
- Edward Gates, Professor, Appalachian Laboratory
- Raymond Morgan, Director and Professor, Appalachian Laboratory
- Cindy Palinkas, Associate Professor, Horn Point Laboratory
- Lisa Ross, Director of Human Resources
- Larry Sanford, Professor, Horn Point Laboratory
- Lisa Wainger, Research Professor, Chesapeake Biological Laboratory

Working Group 3

Theme: *Recruiting, Retaining, and Training Outstanding Students*

Chair: Michael Wilberg, Associate Professor, Chesapeake Biological Laboratory

Members:

- Thomas Fisher, Professor, Horn Point Laboratory
- Patricia Glibert, Professor, Horn Point Laboratory
- Lora Harris, Assistant Professor, Chesapeake Biological Laboratory
- Russell Hill, Director and Professor, Institute of Marine and Environmental Technology
- Rose Jagus, Associate Professor, Institute of Marine and Environmental Technology
- Hillary Lane, Graduate Student, Chesapeake Biological Laboratory
- Kennedy Paynter, Associate Professor and Director of the Marine-Estuarine-Environmental Sciences Graduate Program
- Alyson Santoro, Assistant Professor, Horn Point Laboratory
- Johan Schijf, Associate Professor, Chesapeake Biological Laboratory

Working Group 4

Theme: *A Faculty Committed to Excellence*

Chair: David Secor, Professor, Chesapeake Biological Laboratory

Members:
- J. Sook Chung, Associate Professor, Institute of Marine and Environmental Technology
- Victoria Coles, Research Associate Professor, Horn Point Laboratory
- Michael Gonsior, Assistant Professor, Chesapeake Biological Laboratory
- Mark Castro, Associate Professor, Appalachian Laboratory
- Kathleen Heil, Librarian IV, UMCES and Chesapeake Biological Laboratory
- W. Michael Kemp, Professor, Horn Point Laboratory
- Yantao Li, Assistant Professor, Institute of Marine and Environmental Technology
- David Nelson, Assistant Professor, Appalachian Laboratory
- Elizabeth North, Associate Professor, Horn Point Laboratory
- Jeremy Testa, Assistant Professor, Chesapeake Biological Laboratory

Working Group 5

Theme: *Delivering High-Quality Graduate Education*

Chair: Andrew Elmore, Associate Professor, Appalachian Laboratory

Members:
- Raleigh Hood, Professor and Chair of Faculty Senate, Horn Point Laboratory
- David Kazyak, Graduate Student, Appalachian Laboratory
- Laura Lapham, Assistant Professor, Chesapeake Biological Laboratory

- Thomas Miller, Director and Professor, Chesapeake Biological Laboratory
- Laura Murray, Research Professor, Horn Point Laboratory
- Nicholas Nidzieko, Assistant Professor, Horn Point Laboratory
- Louis Plough, Assistant Professor, Horn Point Laboratory
- Cathlyn Stylinski, Senior Agent, Appalachian Laboratory
- Eric Schott, Research Assistant Professor, Institute of Marine and Environmental Technology

Working Group 6

Theme: *Improvement through Assessment*

Chair: Edward Houde, Vice President for Education and Professor

Members:
- William Dennison, Vice President for Science Applications and Professor
- Andrew Elmore, Associate Professor, Appalachian Laboratory (and chair of WG5)
- Emily Flowers, Graduate Student, Institute of Marine and Environmental Technology, Chair of UMCES Graduate Student Council
- Russell Hill, Director and Professor, Institute of Marine and Environmental Technology
- Raleigh Hood, Professor and Chair of Faculty Senate, Horn Point Laboratory
- Erica Kropp, Vice President for Administration (also SC co-chair and chair of WG1)
- Thomas Miller, Director and Professor, Chesapeake Biological Laboratory
- David Nemazie, Associate Vice President for External Affairs (and chair of WG2)
- Larry Sanford, Professor, Horn Point Laboratory
- David Secor, Professor, Chesapeake Biological Laboratory (and chair of WG4)
- Michael Wilberg, Associate Professor, Chesapeake Biological Laboratory (and chair of WG3)

Section 5. Charges to the Working Groups, Standards to be Addressed, and Self-Study Research Questions

Each WG has a specific charge and MSCHE Standards to address. Each of the WGs has developed a set of research questions to guide its work. All WGs will:

- Report progress to the SC on regular, agreed upon intervals
- Examine and evaluate operations of UMCES related to their charges
- Identify, collect, organize, and analyze data

- Provide draft WG reports on analysis, findings, and recommendations to the SC on a mutually agreed upon schedule.

The research questions will focus the self-study, will document past practices and procedures, and will recommend pathways for improvement. They are intended to explore how UMCES has learned from experience and how it can strengthen its mission effectiveness to ensure ongoing compliance with MSCHE Standards. MSCHE emphasizes that self-study must be based on evidence and data collected by the WGs and then measured against the UMCES mission, goals, and aspiration. It will be important to explain why UMCES deploys its resources in particular ways to advance its mission, and how this serves to improve its capacity to provide excellent educational opportunities. In summary, answers to each research question will be comprised of three components: (1) Assessment that will include a declarative statement describing the success of UMCES in the indicated area; (2) Presentation and explanation of evidence, including a discussion of how the WG came to its conclusion; and (3) Recommendations for improvement, if deemed necessary.

The chairs of the six WGs will direct their members in the data-collecting and information-gathering tasks, and also in data analysis and drafting of chapters for the self-study. Each WG will submit a report of its analysis, findings, and recommendations to the SC, following the template and style guidelines for WG reports (see Sections 7 and 8). The SC will review and edit reports of the WGs and will draft the comprehensive Self-Study Report.

Working Group 1 will address MSCHE Standards 1, 2, and 3

Theme: *Institutional Planning to Achieve Mission and Goals*

WG1 Charge:

Working Group 1 will evaluate the extent to which the UMCES community embraces its mission. This group will examine the mission with respect to its institutional relevance and will provide evidence that demonstrates how the mission of UMCES and its goals guide planning and resource allocation. WG1 will review documentation of the processes by which UMCES allocates its human, fiscal, facility, and technological resources. This group will evaluate the extent to which planning and allocation processes are inclusive, transparent and sufficiently flexible to address shifting needs and priorities. WG1 will consider whether resources are allocated in a manner consistent with, and in support of, aspirations in the mission statement and strategic plan of UMCES. Lastly, WG1 will consider if processes are in place to satisfy current and future resource needs and how these resources might be generated.

MSCHE Standards Addressed:

Standard 1: Mission and Goals. *The institution's mission clearly defines its purpose within the context of higher education and indicates who the institution serves and what it intends to accomplish. The institution's stated goals, consistent with the aspirations and expectations of higher education clearly specify how the institution will fulfill its mission. The mission goals are developed and recognized by the institution with the participation of its members and its governing body and are used to develop and shape its programs and practices and to evaluate its effectiveness.*

Self-Study Research Questions:

1. How does the Strategic Plan support the mission of UMCES?

2. Does the UMCES community have knowledge and understanding of the mission of UMCES, particularly given the recent expanded articulation of graduate education?

3. Do we effectively communicate the mission and promote UMCES as a leader in environmental science and education within UMCES, within the University System of Maryland, and more broadly to the constituencies served by UMCES?

4. How is the mission of UMCES evolving to promote a comprehensive understanding of the environment, to apply that knowledge to solve problems, and to enhance graduate education?

Standard 2: Planning, Resource Allocation, an Institutional Renewal. *An institution conducts ongoing planning and resource allocation based on its mission and goals, develops objectives to achieve them, and utilizes the results of its assessment activities for institutional renewal. Implementation and subsequent evaluation of the success of the strategic plan and resource allocation support the development and change necessary to improve and to maintain institutional quality.*

Self-Study Research Questions:

1. Are planning and resource allocations appropriately based on the declared mission and goals of UMCES?

2. How are the mission and goals of UMCES incorporated and supported within its organizational units?

3. Are plans in place to review and revise the mission, goals and objectives of UMCES to ensure that they are fitting and relevant? If so, what methodologies are used and how is progress measured?

4. Has UMCES planned for changes that seeking and achieving accreditation may bring?

5. How has UMCES partnered with other University System of Maryland institutions to ensure the needs of its constituents are met?

6. Are the roles of administrators, faculty, and staff within UMCES clearly defined with respect to institutional planning and resource allocation, yet flexible enough to adapt to changing needs?

Standard 3: Institutional Resources. *The human, financial, technical, facilities and other resources necessary to achieve an institution's mission and goals are available and accessible. In the context of the institution's mission, the effective and efficient uses of the institution's resources are analyzed as part of the ongoing outcomes assessment.*

Self-Study Research Questions:

1. Is the Facilities Master Plan up to date in terms of articulating and prioritizing requirements and needs of renewed physical assets, including modernization of instructional technology, in support of the UMCES mission?

2. How are the mission and goals of UMCES factored into the budget process? Are methods in place for reviewing allocation of financial resources in the context of relevance to mission and goals?

3. Is the UMCES budgeting process transparent? Are there practices that could improve transparency?

4. What challenges face the Institution in obtaining the resources necessary to achieve its goals and objectives, and how are they being addressed to minimize impacts of budgetary uncertainty on the ability of UMCES to support its mission?

Working Group 2 will address MSCHE Standards 4, 5, and 6

Theme: *Building Upon an Administration that is Efficient, Transparent, and Founded on Integrity*

WG2 Charge:

Working Group 2 will evaluate the merits and effectiveness of the leadership, administration, and governance structure, and institutional commitments of UMCES that embody the highest standards of academic integrity. WG2 will document how the UMCES governance structure, administration, and commitment to shared governance enable it to fulfill its mission and exemplify its core values. This group will assess whether the governance and administrative structures and processes assign clearly defined roles and responsibilities to key administrators and faculty for planning and decision-making, and fulfilling expectations for policy and resource

development. WG2 will evaluate the adherence of UMCES to the high ethical standards embodied in its stated policies and practices involving both internal and external constituencies.

MSCHE Standards Addressed:

Standard 4: Leadership and Governance. *The institution's system of governance clearly defines the roles of institutional constituencies in policy development and decision-making. The governance structure includes an active governing body with sufficient autonomy to assure institutional integrity and to fulfill its responsibilities of policy and resource development, consistent with the mission of the institution.*

Self-Study Research Questions:

1. Does the governance structure of UMCES support its policy responsibilities and resource allocation?

2. Are the distinct roles and responsibilities of each constituent group participating in shared governance understood and accepted by the UMCES community?

3. What formal and informal mechanisms are in place at UMCES for information sharing between senior leadership, faculty, students, and staff?

4. Is leadership perceived as being transparent in its decision-making processes?

5. Are UMCES-wide committees and governance bodies appropriately representative and inclusive?

6. Has UMCES been reviewed externally? Was the process useful and did it effect change?

7. How does UMCES interact with the University System of Maryland and its 11 other constituent institutions?

Standard 5: Administration. *The institution's administrative structure and services facilitate learning and research/scholarship, foster quality improvement, and support the institution's organization and governance.*

Self-Study Research Questions:

1. How effective are administrative procedures and actions in advancing the UMCES mission and strategic plan?

2. Are reporting mechanisms and procedures effective to meet best-practice standards of the State of Maryland and extramural requirements of funding agencies, including public, non-governmental, and private sources?

3. What procedures are followed in reviewing the President, Vice Presidents, and Laboratory Directors to evaluate their effectiveness in supporting the mission and strategic plan of UMCES?

4. Are job descriptions of Vice Presidents and support staff clearly defined and communicated to faculty, students and staff? In particular, does the recently established Office of Education, including the role and commitment of the Vice President, meet these expectations?

5. Are UMCES administrative policies and structures supportive of graduate education and do they facilitate student learning?

Standard 6: Integrity. *In the conduct of its programs and activities involving the public and the constituencies it serves, the institution demonstrates adherence to ethical standards and its own stated policies, providing support for academic and intellectual freedom.*

Self-Study Research Questions:

1. Does the UMCES administration communicate sufficiently and consistently with faculty, students, and staff when new policies are established and does UMCES provide necessary training and professional development, if required?

2. How does UMCES ensure integrity in its hiring, merit, retention, and dismissal procedures of faculty, students, and staff?

3. How does UMCES promote and protect academic and intellectual freedom?

4. Are students protected to ensure their academic work is recognized and not subordinated by faculty, administration, or funding entities?

5. Are reasonable and adequate procedures in place to address grievance within UMCES? Is UMCES responsive to grievance and does it seek solutions?

6. How are the needs of UMCES internal and external constituencies considered in curriculum development and improvement?

7. In what ways does UMCES demonstrate transparency, honesty, and integrity in dealing with internal and external constituencies? Has UMCES created a climate of trust that is appreciated by its supporters, both within the institution and external to it?

Working Group 3 will address MSCHE Standards 8 and 9

Theme: *Recruiting, Retaining, and Training Outstanding Students*

Working Group 3 will assess the procedures used by UMCES to recruit and admit highly qualified graduate students whose interests, goals, and abilities align with the mission of UMCES in the environmental sciences. WG3 will identify the support services that UMCES employs to ensure that students are retained and to assist students as they pursue their educational goals. Additionally, this group will describe and evaluate student support services, including financial support, logistical support, and mentorship that enable the institution to ensure that each student meets the standards of graduate education in UMCES.

MSCHE Standards Addressed:

Standard 8: Student Admissions and Retention. *The institution seeks to admit students whose interests, goals, and abilities are congruent with its mission and seeks to retain them through the pursuit of the students' educational goals.*

Self-Study Research Questions:

1. In what ways and how effectively does UMCES recruit graduate students whose interests and abilities fit the mission and goals of UMCES?

2. Are admissions standards and expected learning outcomes communicated effectively across all elements of the UMCES graduate programs? Are expectations similar for all students entering UMCES?

3. Is information on fellowships and financial assistance made available in an effective manner?

4. Do UMCES policies for extra-institutional training allow our students to benefit from strengths of other programs?

5. What are the factors that contribute to the high retention rate of students, and how can we ensure that this success continues?

Standard 9: Student Support Services

The institution provides student support services reasonably necessary to enable each student to achieve the institution's goals for students.

Self-Study Research Questions:

1. Are support procedures to inform and guide students with respect to courses and mentoring experiences available and effective?

2. Are the student support services available within the University System of Maryland adequate for UMCES students? What student support services should be developed by UMCES?

3. What resources are available for students to enhance their educational goals outside of the internal offerings of UMCES? Do students have teaching or mentoring opportunities, and how can UMCES improve these opportunities?

4. Is student advising (academic, career, personal) available in UMCES that is effective in assisting students to achieve expected learning outcomes and meet their educational goals?

5. Does UMCES provide for the needs of special populations including students with disabilities, international students, and underrepresented and underserved students?

6. Are processes in UMCES and in the MEES Graduate Program sufficient to provide the safe and secure maintenance and dissemination of student records and other information?

7. How and to what extent does outcome assessment inform development and improvement of student support services in UMCES?

Working Group 4 will address MSCHE Standard 10

Theme: *A Faculty Committed to Excellence*

WG4 Charge:

Working Group 4 will evaluate how the UMCES academic and research faculty and professional support staff advance comprehensive understanding of our environment and natural resources, as emphasized in the mission statement. Excellence in scientific discovery, integration, application, and teaching by UMCES faculty members is fundamental to the success of its graduate education program and also its involvement in K-12 and undergraduate education. WG4 will assess the extent to which UMCES faculty members and qualified professionals adopt best practices in teaching, research, and service. This group will analyze how UMCES sustains and advances its mission through faculty recruitment, retention, promotion, provisioning of resources, development, evaluation, and rewards. WG4 will assess current practices and recommend pathways to further improvement in faculty performance that will assure institutional sustainability and excellence.

MSCHE Standard Addressed:

Standard 10: A Faculty Committed to Excellence. *The institution's instructional, research, and service programs are devised, developed, monitored, and supported by qualified professionals.*

Self-Study Research Questions:

1. Are UMCES faculty members conducting high quality research, synthesis and application in support of the UMCES mission?

2. Is the teaching performance of UMCES faculty members evaluated in MEES courses? What mechanisms and resources are available to help faculty improve teaching?

3. Does UMCES support and evaluate faculty mentorship of graduate student research, ensuring high-quality mentorship of students across UMCES?

4. What procedures are in place for faculty evaluation and promotion? Has UMCES developed coherent practices for regular faculty assessments?

5. Are programs and resources for faculty development in place at UMCES? Have the programs demonstrated increases in faculty performance, recruitment, retention and diversity?

6. Are K-12, undergraduate education, and public outreach incorporated into faculty activities and performance evaluations?

7. How are faculty members involved in curriculum development, academic administration and policies, and course evaluation and improvement?

8. How is participation in the academic program distributed across UMCES faculty?

Working Group 5 will address MSCHE Standards 11 and 13

Theme: *Delivering High-Quality Graduate Education*

WG5 Charge:

Working Group 5 will assess how educational offerings by UMCES are designed, implemented, evaluated, and revised to attain explicit, rigorous, and mission-relevant student learning outcomes across all educational programs in UMCES. WG5 will also review the structure, policies, and practices to evaluate the lines of institutional authority within UMCES and the University System of Maryland that are used to define and communicate student learning outcomes, including how professional development and science application are integrated into the curriculum. This group will also determine if there are sufficient academic and technological resources for faculty and students to succeed, and to support the development of new teaching practices that emphasize the effective use of technology for teaching and learning.

MSCHE Standards Addressed:

Standard 11: Delivering High-Quality Graduate Education. *The institution's educational offerings display academic content, rigor, and coherence appropriate to its higher education mission. The institution identifies student learning goals and objectives, including knowledge and skills, for its educational offerings.*

Self-Study Research Questions:

1. Are UMCES graduate education offerings congruent with our mission?

2. Do UMCES educational offerings have academic content and rigor appropriate to the degree levels we offer?

3. What institutional mechanisms are in place to evaluate and refine educational offerings, in terms of relevancy to the UMCES mission and to academic content and rigor?

4. Are UMCES educational efforts conducted and offered in a manner that they prepare graduate students to secure professional employment appropriate to their degrees?

5. Are UMCES students at each of its Laboratory Units equally able to access and participate in UMCES educational offerings?

6. Are UMCES educational offerings responsive to the needs of incoming graduate students and a changing job market?

7. How does UMCES monitor the progress of graduate students in research and course work? What procedures are available to enhance student success?

Standard 13: Related Educational Activities. *The institution's programs or activities that are characterized by particular content, focus, location, mode of delivery, or sponsorship meet appropriate standards.*

Self-Study Research Questions:

1. Are there resources and support available to underprepared UMCES students?

2. How do students apply their learning outside of the classroom, including interacting with the broader environmental management community?

3. What learning opportunities are available to UMCES students beyond formal instruction? Are UMCES students able to gain experiences by communicating and working with the environmental management community and the public?

4. What educational activities are conducted by UMCES but not directly linked to its graduate education programs? Are these activities and any planned programs supportive of the UMCES mission?

Working Group 6 will address MSCHE Standards 7 and 14

Theme: *Improvement through Assessment*

WG6 Charge:

Working Group 6 will determine if appropriate and effective assessment procedures are implemented that demonstrate how UMCES and its graduate education programs meet expectations expressed in the institution's mission and strategic plan. WG6 will determine if UMCES has implemented useful assessment procedures for evaluating the planning, allocation, and distribution of resources to meet its institutional goals and to achieve the stated learning and professional outcomes for its graduates. This group will identify procedures that are in place to evaluate the success of UMCES graduates in professional placement and employment. Looking across UMCES and considering the charges to all of the self-study working groups, WG6 will make recommendations to enhance and improve procedures to assess student learning and the overall institutional effectiveness of UMCES.

MSCHE Standards Addressed:

Standard 7: Institutional Assessment. *The institution has developed and implemented an assessment process that evaluates its overall effectiveness in achieving its mission and goals and its compliance with accreditation standards.*

Self-Study Research Questions:

1. Are the assessment activities of UMCES, including assessment of student-learning outcomes, organized, documented, and sustained?

2. What procedures are in place to evaluate the effectiveness of UMCES in meeting its mission and strategic plan goals? Are all aspects of the mission adequately addressed?

3. Are program and service assessments in UMCES transparent? In what ways might transparency be improved?

4. Are there guidelines for allocation of resources and assessment of outcomes in UMCES that influence administrative decision-making on distribution of resources?

5. Are institutional responses to assessment timely and effective? Are the results of assessments seen to shape decision making at various administrative levels within UMCES?

6. Are assessment practices reviewed for effectiveness, completeness, and lack of redundancy? In what ways are assessment practices made available for critical comment and changes in UMCES?

Standard 14: Assessment of Student Learning. *Assessment of student learning demonstrates that, at graduation, or other appropriate points, the institution's students have knowledge, skills, and competencies consistent with institutional and appropriate higher education goals.*

Self-Study Research Questions:

1. What assessment procedures are in place to gauge student learning outcomes at the course, program and institutional level, and are the procedures appropriately implemented by the faculty?

2. Are procedures in place to ensure that information on graduate student learning assessment is shared with and communicated to appropriate constituents, and used effectively to improve teaching, advising, mentoring and learning?

3. Are procedures in place to assess and track graduate student achievement and success at critical points in a student's progress toward a M.S. or PhD degree and are procedures fully compliant with policies of the inter-institutional graduate programs in which UMCES students matriculate?

4. Are assessments of student progress and success in graduate education linked effectively to mission and institutional assessment (Standard 7) procedures in UMCES?

5. Are procedures in place that provide opportunity for development and restructuring of graduate program curricula and course delivery to address needs for improvement identified through assessment processes?

6. To what extent are careers of alumni tracked and assessed to determine if the UMCES graduate learning outcomes effectively provided training to launch careers in a range of employment sectors?

Section 6. Inventory of Supporting Documents

Key documents to support the WGs and the SC will be posted on the UMCES website and accessible via links from the "My UMCES" website pages. Included in the documents are the UMCES mission statement, latest strategic plans, and the Accreditation Readiness Report submitted to MSCHE in August 2013, which included an exhaustive list of documents and sources of evidence to demonstrate compliance with MSCHE standards. These key documents will be updated as appropriate to recognize new and revised policies, a revised UMCES mission statement (2014), and the evolution of graduate education in UMCES.

The following lists of documents were identified as potentially useful to each of the WGs. The lists are not exhaustive and will be supplemented during the self-study by new documents, policies, information, or survey data that are specific to each WG. Importantly, links to key documents for each of the MSCHE Standards were included in the Accreditation Readiness Report submitted by UMCES to MSCHE (August 2013) and are accessible to the WGs.

Working Group 1 (addressing Standards 1, 2, and 3)

Agreement between UMCES and UMCP, 2012
CBL and UMCES Library Resources
House Bill 268 (2012)
HPL Library Resources
Maryland Codified Article of Natural Resources 3-403
Maryland Codified Articles of Education 10-101 and 12-104
MEES External Review 2008
MEES Self Study 2008
UMCES Accreditation Readiness Report 2013
UMCES Administration Organizational Chart
UMCES Administrative Council Agendas
UMCES and USM Consolidated Policies
UMCES Annual Faculty Convocation
UMCES Annual Reports 2011, 2012, 2013
UMCES Board of Visitors
UMCES Clients Consultation Report, 2004
UMCES Executive Council Agendas
UMCES External Review 2004
UMCES Facilities Master Plan Full Report 2012
Facilities Master Plan Summary 2012
UMCES Faculty Senate
UMCES FY 2011 Efficiency Summary
UMCES Governance Model 2003
UMCES Graduate Faculty Council
UMCES Integration and Application Network (IAN)
UMCES Internal Audit 2013 - Financial Reporting

UMCES Internal Audit 2013 - Fraud Monitoring
UMCES Internal Audit 2013 Plan
UMCES Maryland Statutes
UMCES MFR Report 2012
UMCES Mission Statement 2012
UMCES Mission Statement 2014
UMCES Policy and Procedures on Graduate Education (III-7.10)
UMCES Policy on Faculty Senate (II-3.00)
UMCES Policy on Graduate Assistantships (III-7.11)
UMCES Policy on Shared Governance (I-6.00)
UMCES Presentation to Board of Regents 2004
UMCES Self Study 2004
UMCES Single Audit Together with Reports of Independent Public Accountants
UMCES Strategic Plans 2000, 2004, 2012
UMCES Sustainability Report
UMCES Website
UMCP Electronic Library
USM Implementation Plan, 2010

Working Group 2 (addressing Standards 4, 5, and 6)

Chancellor's Accreditation Support
Environmental Insights Newsletter
Maryland House Bill 268 (2012)
MEES Graduate Program
MOU Between UMD College Park and UMCES
State of Maryland Ethic Disclosure Laws and Policies
UMCES Accreditation Readiness Report 2013\
UMCES Administration
UMCES Faculty Senate
UMCES Graduate and Faculty Handbook
UMCES Integration and Application Network
UMCES Leadership
UMCES Leadership CVs
UMCES Mission Statement 2012
UMCES Mission Statement 2014
UMCES MOU with UMBC
UMCES Policy on Faculty Senate (II-3.00)
UMCES Policy on Faculty, Student And Institutional Rights and Responsibilities
UMCES Policy and Procedures on Graduate Education (III-7.10)
UMCES Policy on Graduate Assistantships (III-7.11)
UMCES Policy on Integrity (III-1.0)

UMCES Policy on Organization of UMCES (I-6.00.1)
UMCES Policy on Sexual Harassment (VI-1.20)
UMCES Policy on Shared Governance (I-6.00)
UMCES President Boesch CV
UMCES President Profile
UMCES Presidential Review Process
UMCES Presidential Review 2012
UMCES Training on the Responsible Conduct of Science
UMCP Graduate Catalog
UMCP Graduate Catalog Academic Policies
UMCP Graduate Catalogs Archives
UMCP Graduate School
USM 2012 Legislative Testimony
USM and UMCES Policies (especially Section VII Personnel)
USM Board of Regents Bylaws
USM Board of Regents Committees
USM Board of Regents Conflict of Interest Policy (I-7.00)
USM Board of Regents Membership
USM Board of Regents Minutes
USM Board of Regents Policy on Five-Year Review of USM Presidents (VII-5.01)
USM Organizational Chart
USM Policy on Classified and Proprietary Work (IV-2.20)

Working Group 3 (addressing Standards 8 and 9)

AL Safety
CBL Safety
HPL Safety
IMET Safety Manual
MEES Colloquium
MEES Faculty Handbook
MEES Faculty Handbook Policy for Review of Alleged Arbitrary and Capricious Grading (III-1.20)
MEES MS Graduate Outcomes Assessment
MEES PhD Graduate Outcomes Assessment
MEES Website on Financial Assistance
MEES Website for Prospective Students
UMCES Accreditation Readiness Report 2013
UMCES Faculty and Graduate Student Handbook
UMCES Faculty Directory
UMCES Mission Statement 2012
UMCES Mission Statement 2014
UMCES Policy on Evaluation of Performance of Faculty (II-1.20)

UMCES Policy on Faculty Workload and Responsibilities (II-1.25)
UMCES Policy on Graduate Assistantships (III-7.11)
UMCES Policy on Misconduct in Scholarly Work (III-1.10)
UMCES Safety: in UMCES Graduate and Faculty Handbook
UMCES Scientific Diving Safety
UMCES Small Boat Safety
UMCES Strategic Plan 2012
UMCES website: Graduate Education at UMCES
UMCP Admissions Webportal
UMCP Graduate Catalog Academic Policies
UMCP Graduate School Web Portal to MEES
UMCP Graduate School Office of the Ombudsperson
UMCP Guide for Prospective Students Job Placement Factsheet
UMCP Policy on Confidentiality and Disclosure of Student Records (III-6.30(A))
USM Affirmative Action Plan for Minorities and Women
USM Affirmative Action Plan for Veterans and Individuals with Disabilities
USM Environmental Health and Safety
USM Policy on Affirmative Action and Equal Opportunity (VI-1.00)
USM Policy of Non-Discrimination on the Basis of Sexual Orientation (VI-1.05)
USM Policy on Records Management (VI-6.10)
USM Policy on Sexual Assault (VI-1.30)
USM Policy on Sexual Harassment (VI-1.2

Working Group 4 (addressing Standard 10)

MEES Course Evaluation Form
MEES Curriculum Committee, 2013-
MEES External Review, 2008
MEES Faculty Handbook
MEES Program Committee Membership and Activities, 2009-2013
MEES Program Committee Policies and Procedures
MEES Self Study, 2008
MEES Student Records, 2009-2013
MEES Thesis Credit Hour Records, 2009-2013
UMCES Accreditation Readiness Report Faculty Data (Appendix10-C)
UMCES Annual Reports, 2011, 2012, 2013
UMCES Convocation Agendas, 2009-2013
UMCES and Laboratory Unit Environmental Literacy and K-12 Education Websites
UMCES External Review, 2004
UMCES Faculty Annual Merit Evaluations Policy
UMCES Faculty Contracts
UMCES Faculty Data (rank, demographics, credentials, promotions, performance portfolios, etc.), 2009-2013

UMCES Faculty Grant Records, 2009-2013
UMCES Faculty Grievance Records, 2009-2013
UMCES Faculty Regents Awards Winners
UMCES Faculty, Research Gate and Google Scholar Citation impact analyses, 2009-2013
UMCES Faculty, Student, and Unit Director Surveys (planned)
UMCES Faculty Websites, 2012-2013
UMCES Five-year Comprehensive Review of Tenured Faculty
UMCES Graduate and Faculty Handbook
UMCES Graduate Council Policies and Procedures
UMCES Grant Activity, 2009-2013
UMCES Libraries Website
UMCES Office of Research Administration and Advancement Website
UMCES Policy on Appointment, Promotion, and Tenure of Faculty
UMCES Policy on Review of Laboratory Directors
UMCES Policy on Shared Governance
UMCES Press Releases, 2012-2013
UMCES Self Study, 2004
UMCES Unit Director Annual Faculty Review Criteria
UMCES Unit Graduate Education Committee Investments, 2009-2013
UMCES Vice President of Education Investments, 2013-
USM Comprehensive Review of Tenured Faculty
MD Sea Grant Research Experiences for Undergraduates Program Website

Working Group 5 (addressing Standards 11 and 13)

AL Graduate Education (Appalachian Lab graduate education website)
CBL Graduate Education (Chesapeake Biological Laboratory graduate education website)
CBL Library Resources (a list of library resources at CBL)
Frostburg State and UMCES Master of Science Program
HPL Graduate Education (Horn Point Lab graduate education website)
HPL Library Resources (a list of library resources at HPL).
IMET Graduate Education (Institute of Marine and Environmental Technology graduate
education website)
MEES and UMCES records of job placement of our students
MEES Course Evaluation form
MEES Course Offerings (listings of current MEES courses)
MEES External Review 2008
MEES Faculty Handbook
MEES Graduate Program
MEES Mission Statement
MEES MS Requirements

MEES PhD Requirements

MEES Program Areas of Specialization (listings of course requirements for different Areas of Specialization in MEES)

MEES Provosts Report on MEES Restructuring

UMCES Accreditation Readiness Report 2013

UMCES Graduate and Faculty Handbook

UMCES Libraries Background (summary of library resources at UMCES)

UMCES Mission Statement 2012

UMCES Mission Statement 2014

UMCES Moodle: Electronic Distribution of Teaching Material

UMCES Non-credit Offerings

UMCES Policy on Annual Review of Faculty

UMCES Policy on Graduate Faculty

UMCES Policy on Graduate Student Council

UMCES Policy on Presidential Fellowships

UMCES Policy on the Vice President for Education

UMCES Strategic Plans 1993, 2000, 2004, 2012

UMCP Electronic Library (access to electronic libraries at UMCP)

Working Group 6 (addressing Standards 7 and 14)

MEES Administrative Council Framework Document, 2014

MEES Curriculum Committee Restructuring Documents, 2014

MEES External Review 2008

MEES Graduate Program

MEES MS Graduate Outcome Assessment

MEES MS Requirements

MEES PhD Graduate Outcome Assessment

MEES PhD Requirements

MEES Program Areas of Specialization

MEES Program in UMCES

MEES Self Study 2008

UMCES Accreditation Readiness Report 2013

UMCES Administrative Council Agendas

UMCES Clients Consultation Report, 2004

UMCES Executive Council Agendas

UMCES External Review 2004

UMCES Facilities Master Plan Full Report 2012

UMCES Graduate Student and Faculty Handbook

UMCES MFR Report 2012

UMCES Mission Statement 2012

UMCES Mission Statement 2014

UMCES Policy and Procedures on Graduate Education (III-7.10)

UMCES Policy on Faculty Senate (II-3.00)
UMCES Policy on Organization of UMCES (I-6.00.1)
UMCES Policy on Shared Governance (I-6.00)
UMCES Rate Agreement 2012-2016
UMCES Self Study 2004
UMCES Strategic Plans 2004, 2012
UMCP Dean and Provost's Report on the MEES Review, 2008
UMCP Revised Graduate Admissions and Review Procedures 2014
UMCP Graduate Catalog Academic Policies
USM Capital Planning
USM Committee on MEES Report, 2009
USM Effectiveness and Efficiency Initiative
USM Facilities Master Plan Guidelines
USM Implementation Plan, 2010

Section 7. Organization of the Self-Study Report

I. Foreword from the President and Eligibility Certification Statement

II. Executive Summary

III. Introduction and Institutional Profile
       a. History and Background of UMCES
       b. Structure, Organization and Scope of the Self-Study
       c. Intended Outcomes

IV. Institutional Planning to Achieve Mission and Goals
       a. Standard 1; Analyses and Findings
       b. Standard 2; Analyses and Findings
       c. Standard 3; Analyses and Findings
       d. Conclusions and Recommendations

V. Building Upon an Administration that is Efficient, Transparent, and Founded on Integrity
       a. Standard 4; Analyses and Findings
       b. Standard 5. Analyses and Findings
       c. Standard 6. Analyses and Findings
       d. Conclusions and Recommendations

VI. Recruiting, Retaining, and Training Outstanding Students
       a. Standard 8; Analyses and Findings
       b. Standard 9; Analyses and Findings

     c. Conclusions and Recommendations

VII. A Faculty Committed to Excellence
     a. Standard 10: Analyses and Findings
     b. Conclusions and Recommendations

VIII. Delivering High-Quality Graduate Education
     a. Standard 11; Analyses and Findings
     b. Standard 13; Analyses and Findings
     c. Conclusions and Recommendations

IX. Improvement through Assessment
     a. Standard 7; Analyses and Findings
     b. Standard 14; Analyses and Findings
     c. Conclusions and Recommendations

X. Integration and Summation
     a. Overall Summary of Findings
     b. Recommendations

Section 8.   Format, Editorial Style, and Internal Review of All Reports

Each Self-Study WG will develop its report, not to exceed 20 pages in length, using the template provided here. The template is a guideline; individual WGs may include additional information as warranted. Each WG will document evidence supporting its work. Supporting evidence and documents will be listed in Endnotes. All supporting documents and evidence will be archived on the My UMCES web pages that are designated for each WG.

Report Template

Purpose: Clearly state what the WG set out to accomplish.

• How does the WG's theme relate to its assigned MSCHE standards?

Scope: Describe the extent of research conducted, including any defined limitations or boundaries imposed by the WG.

• What data and information sources were accessed?

- What data were collected or what interviews and surveys were conducted?

- Was the effort sufficient? If not, identify data and information to be collected in the future.

Analysis and Problem-Solving Methods: Describe methods used to answer the WG's research questions.

- How were data and information reviewed and analyzed?

- What models, analytical procedures, or benchmarks did the WG use for guidance or comparison?

- What experts and expert groups were consulted by the WG to inform and support its analysis?

Connections: Relate the WG's work to the overall self-study process

- How do the WG's findings relate to the MSCHE standards and the level of compliance exhibited by UMCES?

- How do the WG's findings relate to and indicate support of the UMCES mission?

- How do the WG's findings relate to those of other WGs?

Conclusions and Recommendations: Summarize conclusions and explain the WG recommendations.

- What conclusions did the WG reach with respect to its theme?

- For the WG's theme area, what improvements in performance would make UMCES more effective in carrying out its mission?

Editorial Style and Format

Each WG is requested to follow guidelines below to insure consistency in creating the final Self-Study Report.

Software: Microsoft Word 2007 and 2010

Font: Times New Roman, 12 point

Spacing: Single spaced; double space between paragraphs; do not indent paragraphs

Margins: 1"

Headings: Primary headings will be centered on the page, in 14-point bold type. Secondary headings will be left justified in 12-point bold type. Tertiary headings will be left justified, in 12-point type, with the first letter of each significant word capitalized.

Length: ≤ 20 pages

Editorial Style: Third person, active voice

Acronyms: Written in full for first usage (acronym in parentheses); thereafter use acronym. Provide a list of acronyms at the end of narrative.

Editing: Assembling individual WG reports into the final document will require significant revision and editing by WG chairs and the SC. WG reports will be edited to insure that the final report has one clear, coherent voice. WG members will review drafts to ensure content is intact.

Internal Review

The first draft of the Self-Study Report will be compiled by the SC co-chairs and WG chairs. The draft will be distributed to the WGs for their responses and recommendations for changes. The second draft of the Self-Study Report will then be submitted to the full SC for its review and edits. With SC edits, this draft will be distributed to all WG members for any further edits or recommendations. A third draft of the Self-Study Report, after approval by the SC, will be posted to the UMCES website for review and comment by the UMCES community. Comments received from the UMCES community will be considered by the SC for incorporation into the Self-Study Report. A fourth and final draft of the Self-Study Report will then be prepared. All WG reports, compiled evidence and data, and supporting documents used to develop the Self-Study Report will be available to the UMCES community.

Section 9. Timetable for the Self-Study and Evaluation

Dates with Key Events, Milestones, or Actions

Date	Event, Milestone, or Activity
July 2014	Appoint Working Groups and Steering Committee
August-September 2014	Working Groups meet, confer, and develop research questions. Steering Committee reviews and approves the questions.
October 2014	Steering Committee reviews, edits, and approves the draft Self-Study Design Report
15 October 2014	Draft Self-Study Design Report submitted to Dr. Tito Guerrero, MSCHE
22 October 2014	Self-Study Design visit to UMCES by Dr. Tito Guerrero
October 2014	Revised Self-Study Design Report distributed to President Boesch, the UMCES Faculty Senate, and the UMCES community for comment and approval
24 October 2014	Finalize Self-Study Design Report. Submit the report to Dr. Tito Guerrero.
10-11 November 2014	MSCHE Self-Study Institute; Dr. E. Houde and Ms. E. Kropp to participate
November 2014	Self-Study is initiated; Working Groups meet and begin collection and analysis of data and information
January 2015	MSCHE selects Evaluation Team Chair
1 February 2015	Working Group progress reports (1) to Steering Committee for review
15 April 2015	Working Group progress reports (2) to Steering Committee for review
15 May 2015	Working Group Reports submitted to Steering Committee for review
5 June 2015	Working Groups revise and edit their reports
15 June 2015	Steering Committee and Working Group Chairs compile s draft Self-Study Report
1 July 2015	Draft Self-Study Report completed and distributed to the UMCES community for its review
July 2015	MSCHE selects the Evaluation Team. Team Chair reviews the Draft Self-Study Report
July 2015	Draft Self-Study Report to President Boesch and Board of Regents for review
August 2015	Evaluation Team Chair visits UMCES
15 September 2015	Final Self-Study Report
September 2015	Final Self-Study Report sent to Evaluation Team
October 2015	Evaluation Team Site Visit
November 2015	MSCHE Action

Section 10. Profile of the Visiting Evaluation Team

 UMCES requests that the Chair of the MSCHE evaluation team be a high-level administrator who has substantial experience at a research institution that specializes in graduate education. The Chair and at least two of the evaluation team members ideally will be experienced in the environmental sciences and will appreciate the diverse science disciplines represented in the four UMCES Laboratory Units. The team should include members who are affiliated with and knowledgeable of public university systems. It should include scientists or science administrators who have held appointments at institutes or centers with a primary mission that emphasizes research on marine and/or terrestrial ecosystems, and graduate education with a strong research emphasis. Ideally, the Chair and some team members will have had prior experience serving on evaluation teams. The team will be broadly knowledgeable on current trends and future needs of graduate education in the environmental sciences.

Some specifics strengths and areas of expertise of the evaluation team can include:

- Familiarity with research institutes and centers
- Expertise in marine and/or environmental science
- Familiarity with public universities and state financing/administration
- Instructional technology
- Curriculum development and review
- Graduate education
- Budgeting and finance

Lists of peer institutions within the MSCHE region and outside of it are provided below. We suggest that highly qualified team evaluators could be drawn from these institutions.

Peer Institutions Within the MSCHE Region	Peer Institutions Outside the MSCHE Region
University of Delaware, College of Earth, Ocean and Environment	College of William and Mary, Virginia Institute of Marine Science
Rutgers University, Institute of Marine and Coastal Sciences	Woods Hole Oceanographic Institution
Paul Smith's College	Utah State University, Quinney College of Natural Resources
Stony Brook University, School of Marine and Atmospheric Science	University of Michigan, School of Natural Resources and Environment
Delaware Biotechnology Institute	Louisiana State U., School of the Coast and Environment
SUNY College of Environmental Science and Forestry	University of Rhode Island, Graduate School of Oceanography and Department of Natural Resources Science

Pennsylvania State University, Department of Geography	West Virginia University, Department of Geology and Geography and Department of Biology
Cornell University, College of Agriculture and Life Sciences	University of North Carolina, Department of Geography
	Duke University, Nicholas School of the Environment