

#### State University of New York College of Environmental Science and Forestry

#### Office of the President

Submitted electronically to: evaluationservices@msche.org

December 19, 2011

Dr. Elizabeth Sibolski President of the Commission Middle States Commission on Higher Education 3624 Market Street, 2<sup>nd</sup> Floor West Philadelphia, PA 19102

Dear Dr. Sibolski:

First, I would like to thank the evaluation team for their thoughtful and thorough review of the State University of New York College of Environmental Science and Forestry (SUNY ESF) affirming that the College continues to meet the standards of affiliation enumerated in *Characteristics of Excellence*. The valuable insights shared by the evaluation team during their visit and in their report are helpful and greatly appreciated. We receive the report with regard for the team's experience and acumen, and generally accept the suggestions and recommendations.

We appreciate the comment from co-chairs Buchanan and Hamberger, "Your institution has much of which to be proud and that pride was evident in all of our conversations with SUNY ESF's faculty, staff, and students." We also value the team's identification of the following areas of significant accomplishment at SUNY ESF including:

- The level of campus-wide knowledge about the *Vision 2020* strategic plan and the frequency with which community members reference its importance.
- Providing a more rich and varied experience for its students, both undergraduate and graduate, than one might think for an institution of this size.
- The effective presentation in materials such as the *Student Handbook* and the Academic Support Services' FAQ website and for the openness and responsiveness to student concerns and initiatives.
- The open discussion of critical issues facing SUNY ESF and the collegial exploration of strategies for responding to those issues.

The team provided a number of suggestions to enhance the institution. We appreciate these suggestions and will consider each carefully. There are two suggestions that we feel require additional information relating to the report to provide context and better understanding of the institution.

1. Standard 3, Suggestion 3 (p. 9) – "While considering different opportunities to work with Syracuse, changes to the SUNY ESF organizational structure might become possible..." The relationship between SUNY ESF and Syracuse University has continuously evolved since the

separation of the two entities in 1948. Both institutions are committed to a partnership that respects and utilizes the strengths of each and minimizes duplication of effort. Shared services are spelled out in a contract between the institutions that is revised and renewed every five years. However, structural differences between Syracuse University and SUNY ESF limit compatibility in some areas of potential cooperation. Therefore, SUNY ESF has identified and is continuing to explore additional organizational efficiencies with neighboring Upstate Medical University and other SUNY institutions in the region. In this respect, SUNY ESF is seen as a leader in the recently articulated SUNY Shared Services Initiative.

2. Standard 6 Suggestion (p. 10) - While we indicate in our self-study report that we are striving for improvement in the area of communication (Self-Study Chapter 5, Challenge 9) survey data do not support the generalization that communication is weak. Surveys completed by faculty and staff through the Middle States self-study process indicate that when rating levels of confidence in how well they are kept informed of institutional policies, 83% of faculty were very or somewhat confident and 85% of staff felt very confident or somewhat confident. When asked how well informed they felt about college issues, 31% felt very well informed and another 62% felt somewhat informed. Staff responding to this question indicated that almost 31% felt very well informed and an additional 57% felt somewhat informed. These results confirm our perception that there is potential for improvement, however conflicts with the team's perception that communication is "weak."

The team also provided recommendations in the area of assessment. Here too we generally agree with the team; however we feel two recommendations require additional information relating to the report to provide context and better understanding of the institution.

- 1. Standard 7 Recommendation (p.16) The College President provides direct leadership for institutional effectiveness and is supported in this effort by the Cabinet. The Assistant Provost for Assessment works with the President to support unit level assessment data collection and analysis activities. Analysis of these data involves faculty and staff at the unit or departmental level and specific metrics are assigned in individual performance programs to ensure engagement and follow through. Unit level data are used to assess progress relative to accomplishing the goals outlined in the Vision 2020 strategic plan at the annual Cabinet Retreat. Strategic analysis, based on these data, is conducted through a deliberative process during the retreat and at follow-up sessions. The unit directors, chairs, deans and Vice Presidents review assessment results, institutional metrics, and determine new goals tied to the strategic goals for the coming year to be used in unit level assessment activities. Responsibility for the assessment of Vision 2020 involves 15 deans, VPs, and department heads. The results are communicated by the President annually to students through open sessions, faculty via faculty meetings, the Board of Trustees, and the Chancellor of the State University of New York during annual reviews. We continue to improve the communication between units and the Cabinet to provide clarity of the College's process that strategically analyzes assessment data with the goal to improve the effectiveness of the institution.
- 2. Standard 14 Recommendations (p. 18) Assessment of student learning outcomes is accomplished as outlined in the 2009 Assessment Monitoring Report to MSCHE. Each program has an assessment plan that includes explicit learning outcomes, metrics and standards to measure success in achieving learning outcomes, a schedule for collecting assessment data, and a process for analyzing the data and responding to identified deficiencies. Academic departments are required to report annually on their assessment

activities with specific reference to the schedule in their learning outcomes assessment plans. For programs not having discipline-specific accreditation, this formal process has been in place only since 2009. For these programs the complete cycle of data collection and analysis is scheduled for completion in the next two years. The results of learning outcomes assessments are used to modify curricula to meet the learning objectives defined in the assessment plans.

The appropriateness of the learning objectives of each program is assessed in a process tied to SUNY-mandated external program review. On a six year cycle, the faculty responsible for each academic program (curriculum) produce a self-study that examines the program objectives, execution, and outcomes (including learning outcomes, enrollment, graduation rates and more). An external review team reads the self-study and visits the campus before filing an evaluative report on program health. Faculty responses to external reviews may include changes in program objectives that result in curricular change or in the creation or deletion of programs.

Assessment through the mechanisms described above, and additional factors such as enrollment, provide the foundation for ongoing meaningful curricular change at ESF. In just the last academic year 100 curriculum adjustments moved through the Faculty Governance Curriculum Committee. Nevertheless, the College recognizes the need and is committed to the training of new and existing faculty as to their role and responsibility in the assessment process.

The College is committed to continuous improvement in each of the Characteristics of Excellence in Higher Education. In particular, we commit to the following specific efforts and will address them in the Periodic Review Report:

- Strengthening internal communication
- Providing focused leadership to continue robust assessment that clearly informs decisionmaking, including decisions regarding resources allocation, development of new academic programs and retiring of others
- Providing continued leadership for sustained assessment activity, dedicating faculty effort
  to learning outcomes assessment leading to meaningful curricular change, as well as
  strengthening communication of assessment efforts and including learning outcomes
  assessment in new faculty orientation

In closing, the institutional review process has been very positive for SUNY ESF. Several suggestions and recommendations from the selected topics self-study report are already being implemented and the document will continue to be used long after the Commission's action. We look forward to updating the Commission in our Periodic Review Report.

Sincerely,

Cornelius B. Murphy, Jr., Ph.D.

Cornelius B. Hurphy &

President





DEC. 1 5 2011

SUNY-ESF

December 14, 2011

TO:

Cornelius Murphy

President

SUNY College of Environmental Science and Forestry

FROM:

Thomas Buchanan

President, University of Wyoming

Co-Chair, Evaluation Team

Barnett Hamberger

Assistant Provost of Academic Program Review, New York University

Co-Chair, Evaluation Team

RE:

Final Report of the Evaluation Team Representing the Middle States

Commission on Higher Education

We are pleased to present to you, the Board of Trustees, and members of the administration, faculty, staff, and student body of the SUNY College of Environmental Science and Forestry the final report of the evaluation team that traveled to SUNY ESF on November 7-9 for a site visit related to the institution's self-study report to the Middle States Commission on Higher Education.

On behalf of the entire evaluation team, it was an honor to have been invited to serve on this team and a pleasure to have the opportunity to visit SUNY ESF. Your institution has much of which to be proud and that pride was evident in all of our conversations with SUNY ESF's faculty, staff, and students.

We'd like to extend a special thank you to Valerie Luzadis for all of her work and that of her staff to make our visit efficient and productive.

Best wishes to all of SUNY ESF for success in your future endeavors.

attachment

cc: Middle States Commission on Higher Education

### Report to the Faculty, Administration, Trustees, Students

Of

# STATE UNIVERSITY OF NEW YORK COLLEGE OF ENVIRONMENTAL SCIENCE AND FORESTRY Syracuse, NY 13210

Ву

An Evaluation Team representing the Middle States Commission on Higher Education

Prepared after study of the institution's self-study report and a visit to the campus on November 7-9, 2011

#### The Members of the Team:

Tom Buchanan, Co-Chair President University of Wyoming Dept. 3434 1000 E. University Avenue Laramie, WY 82071

Barnett Hamberger, Co-Chair
Assistant Provost for Academic Program Review
New York University
194 Mercer Street, 4th Floor
New York NY 10012

Michelle Appel
Director, Enrollment Policy and Planning
University of Maryland, College Park
1101 Mitchell Building
College Park, MD 20742-5015

Tom Apple
Provost
University of Delaware
Office of the Provost
116 Hullihen Hall
Newark, DE 19716

Art Johnson
Professor, Political Science and UMBC Provost Emeritus
University of Maryland, Baltimore County
1000 Hilltop Circle
Baltimore, MD 21250

Margaret Plympton
Vice President for Finance and Administration
Lehigh University
27 Memorial Drive West
Bethlehem, PA 18015

#### Working with the Team:

Fred Hildebrand
Assistant Provost for Academic Programs and Planning
SUNY System Administration
SUNY Plaza – S508
Albany, NY 12246

#### AT THE TIME OF THE VISIT

#### President/CEO:

Cornelius B. Murphy, Jr. President

#### **Chief Academic Officer:**

Bruce C. Bongarten
Provost and Vice President for Academic Affairs

#### Chair of the Board of Trustees:

William L. McGarry, Jr.
Chair, Board of Trustees
c/o Vice President for Administration
SUNY-ESF
1 Forestry Drive
208 Bray Hall
Syracuse, NY 13210

#### I. Context and Nature of the Visit

The State University of New York College of Environmental Science and Forestry (SUNY ESF) was founded by the State of New York in 1911 for the purpose of providing the education and research needed to stabilize and increase the forestry resources of the state. Over time, the goals of the college have evolved to include research and education about a wide range of environmental issues and their sociopolitical implications. "Sustainability" has been a core principle from the beginning and has grown to include sustainable practices in water resources, community planning and design, ecosystem management, and construction.

Today, SUNY ESF is a doctoral granting campus within the 64 campus system of the State University of New York. Governance of SUNY ESF is guided by both an appointed college Board of Trustees and the chancellor of the SUNY System who reports to the Board of Trustees of the State University of New York. The college enrolls approximately 2,750 undergraduate and graduate students. A significant percent of the 135 full-time faculty are actively engaged in funded research.

SUNY ESF is designated a Doctoral/Research University within the Carnegie Classification framework with 22 undergraduate and 30 graduate degree programs. The campus culture is influenced by a positive and strong commitment to the environment and by a long-standing partnership with adjoining Syracuse University (Syracuse). The Syracuse partnership provides SUNY ESF students with expanded academic and extracurricular opportunities. While SUNY ESF has no branch campuses, it uses a number of forests and field stations for experiential learning opportunities.

SUNY ESF was first accredited in 1952 and has enjoyed that status ever since. Given the centrality of sustainability to the college's mission, SUNY ESF elected to pursue a selected topics self-study for the 2010-2011 accreditation cycle. Through its self-study document, SUNY ESF has demonstrated its compliance with the 14 standards of excellence in higher education as established by the Middle States Commission on Higher Education (Middle States) and its commitments to sustainability. In November 2011, a six-person team visited SUNY ESF for three days to confirm the contents of the self-study.

#### II. Affirmation of Continued Compliance with Requirements of Affiliation

Based on the self-study, interviews, the certification statement supplied by the institution, and other institutional documents, the team affirms that the institution continues to meet the requirements of affiliation as described in Middle States' Characteristics of Excellence in Higher Education.

### III. Compliance with Federal Requirements; Issues Relative to State Regulatory or Other Accrediting Agency Requirements

Based on a review of the self-study, certification by the institution and other institutional documents, and interviews, the team affirms that the institution's Title IV cohort default rate is within federal limits. In addition, the team affirms the institution's compliance with relevant requirements under the Higher Education Opportunity Act of 2008.

#### IV. Evaluation Overview

The site review team was impressed by SUNY ESF's administrative openness to students. The team commends the faculty and administration for their recognition of the treasure they have in their students and for their responsiveness to their ideas and needs.

While it is the academic purview of the institution to set its own curricular agenda, the team notes the opportunity for a more global perspective on sustainability.

The commitment of SUNY ESF to "sustainability" is substantial and pervasive. As a cornerstone principle, however, the lack of consensus on an articulated working definition will continue to obfuscate the extent to which SUNY ESF achieves the goals articulated in the self-study. This obfuscation is not an issue unique to SUNY ESF as "sustainability" enjoys an excessive level of use in popular literature and is often used as jargon to encompass anything from personal recycling to global continuity. If, however, SUNY ESF wishes to establish its primacy in this educational arena, the site review team suggests that ascertaining a working definition is an elemental task. Further, the apparent reliance on a wide array of ranking and rating schemes as indicators of accomplishment in this regard belie the true leadership position that SUNY ESF should occupy. Rather than using the institutional rating schemes of others, the team urges the institution to step forward as the leader in developing substantive intellectual metrics for the many institutions claiming position in this academic space. SUNY ESF is poised to accept this leadership role.

The self-study document includes references that imply a desire to link sustainability to all college coursework and programs. Not every course taught by SUNY ESF faculty, or all general education requirements, needs to directly incorporate sustainability. Forcing the inclusion of sustainability in places where it does not logically exist may diminish those many areas where the SUNY ESF community's sustainability efforts excel. Of note are several statements suggesting that sustainability modules be developed and imported into SUNY ESF classes that currently lack a sustainability component. As a practical matter, the team believes that the broad umbrella of sustainability already permeates much of the college's coursework, although its operationalization takes different forms in different curricular and co-curricular environments.

Further, in an era of significant fiscal uncertainty, the focus of sustainability might target not only academic content but also the form and structure in which it occurs. In this regard, the review team urges SUNY ESF to consider the extent to which the breadth of undergraduate and graduate degree offerings and the preponderance of councils, institutes, consortia, and the like spread too thin the significant intellectual substance that the faculty have to offer. Faculty flexibility and course availability are among the prices paid for optimistic programmatic scope. In today's competitive research environment, greater interdisciplinary bench depth in a more circumscribed array of programs and research foci might help to provide enhanced competitiveness in securing national awards (e.g., NSF), as well as the intellectual recognition that SUNY ESF warrants and deserves. The site review team urges the faculty to continue these discussions.

By any measure, there appears to be broad awareness and commitment to the fundamental concepts and notions that have stimulated the "sustainability" initiatives impacting higher education. The team was impressed by the ability of students, both undergraduate and graduate, to articulate these principles. It is clear that the students have integrated what they have learned into their lifestyles and future professions.

SUNY ESF's mission, vision, and values statement indicates "environmental discovery," "promoting leadership necessary for stewardship," and being "committed to sustainable practices and policy alternatives that will both protect the environment and meet the needs of a global society" are at the heart of the institution. The team encourages SUNY ESF to continue to embrace a dialogue representing a diversity of views in the area of sustainability.

The site review team praises the wide-spread participation of the campus community in the self-study process. The resulting document puts forth a strategy for the benefit of the institution and should remain a working document as SUNY ESF plans and progresses over the next several years. The document contains institutional recommendations too numerous for the team to comment on individually. It is incumbent on SUNY ESF to prioritize these recommendations and to consider what might be immediately and easily implemented and those which are mid- and long-term goals. As the self-study itself recognizes, SUNY ESF needs to conduct a comprehensive college-wide examination of priorities and work demands to determine if resources are optimally allocated.

Finally, the site review team strongly suggests that the *Power of SUNY* master plan provides rich opportunity for SUNY ESF to establish an enviable system-level leadership position. We encourage them to do just that.

#### V. Compliance with Accreditation Standards

#### A. Standards Addressed Substantively within the Selected Topics

Not applicable

#### B. Standards Addressed Partially within the Selected Topics

#### Standard 1: Mission and Goals

Based upon a review of the self-study, other institutional documents, and interviews with faculty, staff, and students, the team concludes that SUNY ESF meets this standard.

#### Summary of evidence and findings:

Much as it did in 1911, SUNY ESF has a well-articulated and clearly understood mission. The institution maintains an important "niche" within the SUNY system, and the goals described in the most recent self-study (further described below) continue to move SUNY ESF forward.

In 2003, the SUNY ESF Board of Trustees endorsed *Vision 2020*, a strategic plan for the college. Seven goals were articulated in the plan that touch on major components of the institution including academic experience, student life, institutional reputation, financial stability, partnership enhancement, institutional responsiveness, and human and physical resources. Resource allocation and curriculum development proposals and decisions are derived directly from these goals. This document continues to be relevant and provides important guidance for the campus, but warrants updating.

The more recently completed *Sustainability Plan* includes specific institutional goals for the reduction of emissions, student sustainability programs, and the like. The seven goals of this plan replicate those of the *Vision 2020* document and establish the connection between the two documents. When complete, *The Campus Master Plan* will add to both *Vision 2020* and *The Sustainability Plan* in addressing the physical needs and opportunities of the college, both in Syracuse and at remote sites, with a 20-year horizon.

The production of these planning documents was broadly collaborative. They are available on the web and were routinely referenced in meetings across campus during the site team visit. In addition, these plans contributed significantly to the creation of the *Middle States Self-Study*, which was also a broadly participative process.

Progress toward plan implementation is measured quarterly, is reviewed by the President's Cabinet at least annually, and the Board of Trustees is updated periodically. Unit-specific goals are reviewed at a more granular level on a

quarterly basis. Combining these initiatives into one comprehensive planning document might create a more transparent planning environment for the campus community. This consolidation might also help clarify terms such as "goals," "objectives," and "vision" that are sometimes inconsistently used across departments.

#### Significant Accomplishments:

The team commends SUNY ESF for the level of campus-wide knowledge about *Vision 2020* and the frequency with which community members reference the importance of the strategic plan. Such institution-wide engagement in a strategic plan is a rare and valuable accomplishment.

#### Standard 2: Planning, Resource Allocation, and Institutional Renewal

Based upon a review of the self-study, other institutional documents, and interviews with faculty, staff, and students, the team concludes that SUNY ESF meets this standard.

#### Summary of evidence and findings:

To meet this standard, an institution must develop a mission and goals that are clearly articulated and expressed as observables (Standard 1). Standard 2 addresses the ways in which an institution achieves its mission and goals, which occurs through planning, defining and implementing objectives and strategies (the path to achieving the goals) and allocating resources intentionally to those strategies.

SUNY ESF's Vision 2020 strategic plan was adopted by the Board of Trustees in 2003 and is intended to serve as a living document to guide the direction of the college for the next several years.

SUNY ESF planning occurs during "mission review" processes that are coordinated with the SUNY system; the most recent occurred in 2006. The college president initiates the process that updates the strategic plan and then reports annually to the SUNY ESF Board of Trustees. An annual planning retreat document was provided, and it is clear that metrics and benchmarks are being reviewed. The extent to which the review is pervasive and to what extent actions are changed when benchmarks are not met is addressed in Standard 7.

Each unit lists an assessment plan which contains unit goals linked to strategic plan goals. Most, but not all units, have listed measures of assessment, metrics, and actions based on assessment of outcomes. In the assessment plans, little attention is given to the actions needed to accomplish goals. To improve this lack of action, each unit should set its goals and provide specific actions to meet

these goals. This should be followed by metrics needed to test achievement, as well as action taken if expectations were not met.

The State University of New York System has recently completed its own strategic plan. This plan, *The Power of SUNY*, seeks to revitalize New York State through six major initiatives: entrepreneurship, seamless education, health, energy, community, and global perspective. SUNY ESF understands the need to integrate its work into the larger SUNY plan to secure system-level funding. Budget allocation to the campuses of SUNY from the System is based on a number of metrics including number of students, type of students, and associated performance-based metrics. Matching funds are provided to support research and service as they align with the plan.

Decisions regarding the allocation of resources are made by the central administration. The Vice President for Administration conducts resource planning on a multi-year (two- to five-year) cycle, having units utilize internal "Budget Preparation Sheets" for requests. Within academic units, the budgeting is done annually and employs the Provost's "Resource Allocation Model." SUNY ESF may find some use in considering longer-range academic budget plans for all departments, particularly with regard to faculty composition.

From the site review team's meeting with the chairs, it appears that academic directions, programs, and hires are well-coordinated between departments. Relationships between the departments are collegial. Faculty governance has made great strides of late, and the site team encourages its further development. The site team encourages the Curriculum Committee's consideration of resource issues when contemplating the adoption of new programs, which should also take into account the sun-setting of current programs when appropriate.

External program review occurs on a six-year cycle for all units as prescribed by SUNY. For most units such review is accomplished via external accrediting bodies. These reviews begin with a self-study and are followed by a site visit by external experts. Evidence of these reviews is presented in the documentation.

#### Suggestions:

- An area for improvement would be to ensure that each unit sets its unit goals and then provides specific actions that it intends to undertake to meet these goals.
- SUNY ESF should consider longer-range academic budget plans, consistently applied across the college and particularly with regard to the make-up of the faculty, which would then align with the budgets prepared by the Vice President of Administration.

#### Standard 3: Institutional Resources

Based upon a review of the self-study, other institutional documents, and interviews with faculty, staff, and students, the team concludes that SUNY ESF meets this standard.

#### Summary of evidence and findings:

SUNY ESF has many of the resources necessary to accomplish its institutional mission, although consistent with the experience of most state-supported campuses, the funding has been severely constrained in recent years. Because so many of the institution's revenue sources are not entirely within their control, the multi-year planning environment that is used at the institutional level is an important tool for modeling "what-if" scenarios and planning ahead for negative consequences should they arise. There are individual units that plan for multiple years, although this is not an institution-wide practice.

#### Revenue Sources

In relation to the availability of state support, it seems likely that reconciling and enhancing SUNY ESF's strategic direction with the System's *Power of SUNY* plan will be an important approach going forward.

Specific to the support from the SUNY ESF College Foundation endowment, the relationship between the college and the Foundation seems effective, with the fundraising goals and priorities and the endowment spending discussed and set jointly between the campus and Foundation. The endowment investment policy is appropriately conservative with a focus on gaining some additional income while minimizing the downside risk in order to maintain the corpus of investments.

The capital campaign's goal of increasing flexible funding is key, and should be supported as the campaign unfolds. SUNY ESF has a five-year contract with the Foundation that delineates how Foundation funds are to be used in support of the college. As the Foundation grows, it would be wise to review and revise the agreement regarding expenses that the endowment return will cover.

#### Resource Planning

SUNY ESF devotes significant time and effort to the allocation of resources, both by identifying institutional needs and by revising them as funding becomes known. Whether the resulting allocations are "adequate" is of course a complicated question; for example, recent guidance from the state mandating that institutions spend down their institutional reserves before requesting additional operating support is in conflict with SUNY's guidance that campuses should have reserves of at least 10 to 25 percent of each operating budget.

The documents provided give consistent guidance about how the campus community should engage the resource allocation process. However, additional information concerning priority-setting processes in resource allocation could be made more broadly available.

Currently, faculty position allocations are managed within Academic Affairs, with input from department chairs and the Academic Council. This process results in a prioritized list of existing and new programs that require funding in future years.

The President, after receiving input from the Cabinet, makes final resource allocation decisions.

#### Appropriate Use of Resources

As noted in the SUNY ESF Annual Internal Control certification, all areas of internal controls were fully compliant with SUNY Internal Control requirements, except for the internal controls systems and review topic (question B).

Although the SUNY ESF campus is not expected to have a separate external audit, some unit-level audits occasionally occur. The reports on these audits, included with the self-study materials, show challenges for smaller organizations. The SUNY ESF vehicle audit findings suggest the need for better documentation. Management responses to each of these audits are appropriate.

SUNY ESF performs regular assessment of the accomplishment of institutional goals with metrics articulated for different units. These assessments are regularly reviewed by institutional leadership. However, the feedback loop that would change resource allocations if specific outcome measures are not met is not yet part of the process. A limited number of processes, such as enrollment and financial aid, do receive this level of attention. (See Standard 7 for further discussion of this institutional assessment topic.)

#### Significant Accomplishments:

SUNY ESF provides a more rich and varied experience for its students, both undergraduate and graduate, than one might think for an institution of its size, in part because of the relationship with Syracuse. Although this coordination presents some challenges, particularly during these financially difficult times, the value of the Syracuse class experience and co-curricular activities for the students is enormous and significantly enriches SUNY ESF student opportunities.

#### Suggestions:

 All of the additional revenue sources identified in the self-study report should be explored (master's level programs for cash-paying students, summer/distance education expansion, and recovering more program costs on non-federally funded research projects). In planning for tuition enhancement, it will be important to ensure that the full costs of presenting new programs, as well as the full revenue, be included in specific program business plans.

- In addition to seeking additional resources, it is also important to ensure that institutional practices support the reallocation of resources from lower priority to higher priority investments.
- The renegotiation of the Syracuse Accessory Instruction and Related Services Agreement, the credit hour management process, and the utilities purchasing volume all present opportunities for longer range planning and adjustments to shared activities. The challenges of partnering with a private institution while also being part of the SUNY system are not to be taken lightly, but the long tradition of cooperation between these two institutions provides a rich legacy upon which to build and, as noted above, significantly enhances the student experiences. While considering different opportunities to work with Syracuse, changes to the SUNY ESF organizational structure might become possible, given the scale of the current administrative infrastructure compared to the size of the institutional enrollments.
- Beyond the Syracuse and SUNY relationship, continuing to explore other consortia activities and partners is also important. Whether with SUNY Upstate, local community colleges, or institutions further away, such opportunities can be helpful in managing during constrained financial times.
- Given the focus on increasing externally funded research, it is important to keep in mind that these projects will end up costing the institution money, regardless of the level of indirect cost recovery. For example, federally negotiated full recovery does not reimburse for administrative expenses over 26 percent. This is not intended to imply that enhancing the research program should not proceed. Rather, resource ramifications need to be considered, planned, and accounted for.
- The aging, home-grown, and perhaps not fully supported administrative software presents a serious resource challenge for the future. The costs of a replacement project will be large and complicated, given the institutional partners and their incompatible systems. The costs of not doing the replacement, however, will also be large, as the existing self-supported and non-compatible system ages.

#### Standard 6: Integrity

Based upon a review of the self-study, other institutional documents, and interviews with faculty, staff, and students, the team concludes that SUNY ESF meets this standard.

#### Summary of evidence and findings:

As an institution, SUNY ESF shows a clear commitment to live out its mission and values and to promote a common understanding of expectations. Its external communication venues (website, catalog, student handbook) provide clear explanations of policies and procedures in ways that speak appropriately to their audiences. However, a review of the self-study and other institutional documents indicates two areas in which communication could be improved.

While sustainability is at the heart of SUNY ESF's mission, values, and curriculum, campus constituents continue to debate how best to define sustainability. The college might benefit from a more intentional messaging strategy around what sustainability means that includes academic, student affairs, and administrative units, while understanding that sustainability may not apply everywhere.

The college has recognized a challenge in "communicating administrative policies, procedures and protocols to those who would use them." The self-study indicates a need for broader content coverage by the campus web presence. While the campus website does an admirable job of communicating information, particularly to students, it does not cover the breadth of information the campus requires.

#### Suggestions:

The team affirms the self-study finding that campus communication is an area for improvement. While students are engaged in and informed about campus initiatives, campus-wide internal communication is weak. The team suggests that the college explore ways to promote communication through a variety of venues. The small institutional size and collegiality at SUNY ESF should be a valuable asset in promoting transparent communication about strategic priorities and procedural information.

#### Standard 8: Student Admission and Retention

Based upon a review of the self-study, other institutional documents, and interviews with faculty, staff, and students, the team concludes that SUNY ESF meets this standard.

#### Summary of evidence and findings:

As is the case with many of SUNY ESF's student-targeted materials, admission information is clearly communicated to its audience. The admissions site includes a Video FAQ, integrating the kinds of questions prospective students may have with video clips of answers from current students. The Retention Report provides ample evidence of SUNY ESF's assessment of student success and its enrollment management and retention initiatives.

SUNY ESF's website and admissions information clearly demonstrate a path for students with an interest in the environment, science, and forestry; less clear are the options available for students who begin at SUNY ESF and determine that they no longer want to study in one of these areas. This may be the result of the clear focus on mission and the commitment of the students, faculty, and staff to that mission. However, SUNY ESF may benefit from exploring ways to communicate the options available for students whose goals change. For instance, context could be added to graduation and retention rate information to make clear that SUNY ESF first-year students who choose to leave ESF and go to other SUNY institutions graduate from them at high rates.

A retention team exists, and there is evidence of effective programs and services for low-achieving students that target persistence, time to degree, and appropriate learning goals. The team commends SUNY ESF's freshman retention rates.

An enrollment plan exists for a ten-year time frame and outlines targets for both resident and non-resident undergraduate and graduate students. These plans are formulated in conjunction with the SUNY system.

In order to attract graduate students of the number and caliber necessary to be a high-impact institution in sustainability research, SUNY ESF must improve the financial support of its graduate students. Much of this support will have to be derived from federally-funded research proposals. Increased mentoring support for students' efforts to garner competitive federal and foundation fellowships should also be considered.

#### Standard 9: Student Support Services

Based upon a review of the self-study, other institutional documents, and interviews with faculty, staff, and students, the team concludes that SUNY ESF meets this standard.

#### Summary of evidence and findings:

Given the specialized nature of the institution, it is not surprising that SUNY ESF students are aware of and committed to the principle of sustainability and often take the lead in the initiation of sustainable activities. The self-study contains an extensive list of student-initiated sustainability practices, ranging from accelerated composting to a zero-waste campaign. Co-curricular sustainability activities are clearly student-driven. The administration has been open to and supportive of student initiatives in sustainability. It is evident that student leaders pass down the commitment to sustainability to the next generation of students. New student orientation discusses the mission of the college. Transfer students are integrated into the ethos of SUNY ESF through a "Transfer Student-to-Student Mentors" program, linking transfer students to a returning SUNY ESF student. All

first-year students are required to participate in at least one service project in their first semester that is directly related to sustaining the environment.

A 2002 retention report indicated that there was need to place greater emphasis on academic advising and enhanced student support services. Pre-2008, Student Life consisted of three staff. The office has been expanded since then with the addition of a career development officer and a community service and service learning coordinator to complement the existing staff in multicultural affairs, academic support services, student activities, counseling, and judicial affairs. The students with whom the team met praised the efforts of the office. In addition to the resources provided directly by SUNY ESF, Syracuse provides some student services, including counseling and health services, recreation facilities, club and intramural sports, other clubs and organizations, and meal plans.

On the issue of academic advising, the self-study indicates that an earlier survey reported that students were not happy with faculty academic advising. The self-study further stated that the Provost's Office had emphasized faculty advising "by conducting a faculty symposium on best practices." A more recent survey indicated an improvement in this area. Anecdotal information collected from undergraduates during the team visit was unclear as to whether this area still needs attention. The site review team heard comments that faculty lack familiarity with the advising system and that they are difficult to reach due to research commitments (perhaps being out of the country). In general, however, students reported that faculty members were readily available and supportive advisors.

#### Significant Accomplishments:

The team commends SUNY ESF for materials such as the *Student Handbook* and the Academic Support Services' FAQ website for the effective way in which they are presented. In addition, the team commends SUNY ESF for its openness and responsiveness to students' concerns and initiatives.

#### Standard 10: Faculty

Based upon a review of the self-study, other institutional documents, and interviews with faculty, staff, and students, the team concludes that SUNY ESF meets this standard.

#### Summary of evidence and findings:

SUNY ESF faculty members possess appropriate academic credentials, especially in the field of sustainability, to teach and perform research at the university level. Nearly half the faculty has work experience outside of higher education related to sustainability. Faculty members also make significant outreach and service contributions to the campus, region, state, and beyond.

The quality of faculty members and their dedication to SUNY ESF, its students, and its mission are evidenced by faculty accomplishments. These accomplishments include a strong publication record, growing grant support, positive indications of student performance and satisfaction, and an impressive record of activity within local and state communities. A significant percentage of this activity is directly related to sustainability issues. Perhaps most noteworthy is that SUNY ESF faculty members are engaged in research on every continent.

SUNY ESF's policies are easily accessible to all stakeholders and include procedures for faculty review, teaching loads, promotion and tenure, and curriculum development and control.

The team found that SUNY ESF is in the process of clarifying key policies and that there has been collegial discussion of these policies among faculty members and between the faculty and the administration. SUNY ESF is an open campus where academic freedom is respected.

Based on the self-study and campus interviews, the campus and its faculty appear to be experiencing a cultural change driven by a restrictive fiscal environment, increased research and federal funding expectations, increased emphasis on managerial efficiency and transparency, faculty turnover related to retirements, changes in faculty review and workload policies, and re-energized faculty governance.

Discussion of these and other critical issues has been open and on-going. Such open discussion will be necessary in the future if faculty, staff, and students are to understand the goals of such change.

The renewed faculty governance structure remains a work in progress and will require nurturing and support from the administration and the faculty. Its committee structure appears to be functional, but it cannot depend on any one person or group and should involve senior as well as junior faculty members. A new policy related to promotion and tenure is under discussion and near finalization. The team believes that clarification and greater specificity in defining expectations with regard to faculty positions will be beneficial to candidates and reviewers in the promotion and tenure process. Given the fact that the promotion and tenure process, like many of SUNY ESF's processes, is department-driven, faculty members must understand the criteria for success and there must be consistency in applying these criteria. The use of a college-wide committee to review department recommendations before they go to the Provost will help achieve this consistency.

In defining expectations related to teaching, research, and service, faculty members must understand that there will be differential workload expectations among faculty members of different departments and even within the same department. Department chairs and the administration must be able to articulate the reasons for differential expectations and monitor actual faculty workloads to

ensure equity and credibility of department and institutional policies. This monitoring includes making certain that workload expectations are defined early in a faculty member's first year and that on-going mentoring is provided to junior faculty members. The team also believes there will be value in closely monitoring workload assignments to guard against inequitable distributions of workload. The annual faculty plans and reviews are excellent vehicles for achieving this.

The team is concerned that SUNY ESF is in danger of over-extending its faculty due to the number of programs, number of centers, new research goals, a growing student population, and a restricted fiscal environment. One means of avoiding such a situation is to regularly review programs and to consider a program's termination if there is a failure to meet reasonable productivity metrics or if a program is inconsistent with SUNY ESF's mission and its sustainability focus.

It is likely that there will be a continuing number of faculty retirements over the next several years. SUNY ESF has attempted to be strategic in its hiring. An increasing number of females are joining, and will likely continue to join, the faculty ranks as positions become available. SUNY ESF may wish to consider leadership development programming for faculty and professional staff to strengthen succession planning and to broaden the number of individuals who can positively contribute to campus strategic discussions and initiatives. As at other institutions, it is important to have mechanisms and initiatives to ensure that all faculty members, particularly female faculty, receive equitable treatment, especially with regard to workload expectations.

Even in the context of constrained resources, the institution has continued adding faculty members. There is appropriate institutional support for the advancement of faculty in teaching, research, and service. The college is developing new research space to support faculty scholarly activity. Given the interdisciplinary nature of the subject matter taught at SUNY ESF, its focus on sustainability, and the research conducted by its faculty, the team suggests that SUNY ESF consider creative ways to design new research and teaching space to facilitate and encourage even greater interdisciplinary relationships.

Some percentage of SUNY ESF's academic program is delivered by part-time faculty and teaching assistants. Departments are expected to conduct reviews of part-time faculty on a regular basis. Additionally, SUNY ESF provides a two-day orientation for teaching assistants. The college annually evaluates these orientation sessions based on the response of the participants. The team suggests that SUNY ESF review these evaluations to ensure that part-time faculty and teaching assistants are fully equipped to carry out their functions and to achieve greater consistency across departments in policies related to teaching assistants.

#### Significant accomplishments:

SUNY ESF is commended for the open discussion of the critical issues facing it and the collegial exploration of potential strategies for responding to those issues.

#### Suggestions:

- Consider leadership development programming for professional staff and faculty.
- Consider creative ways to design new research and teaching space to facilitate and accommodate new and existing interdisciplinary activity.
- Review current training for graduate teaching assistants and consider enhancing the current program to ensure teaching assistants are fully prepared to meet their responsibilities and to achieve greater consistency in policies related to teaching assistants.

#### C. Standards Reviewed via Documentation

#### Standard 4: Leadership and Governance

The documentation demonstrates compliance with this standard.

#### Brief Summary Analysis, Comments, Details, or Explanation:

There is a well-defined system of collegial governance, delineating decision-making responsibilities for institutional constituencies. Appropriate written policies exist for SUNY ESF and the SUNY-system. Presumably because they are political appointees, there does not appear to be an assessment process for the SUNY ESF trustees.

#### Standard 5: Administration

The documentation demonstrates compliance with this standard.

#### Brief Summary Analysis, Comments, Details, or Explanation:

The administrative structure appears appropriate to support the institution's activities and organization. With regard to assessment and service, the documentation was uneven. Up-to-date unit assessment plans were available at the time of the team visit; this was an improvement from the initial visit, when some administrative unit assessment plans ended in 2008-2009 and they often

did not include assessment results. Among the most current documents, only some administrative units had assessment results, information on implementation, and evidence of the use of these assessment results.

#### Standard 7: Institutional Assessment

The documentation demonstrates compliance with this standard.

#### Brief Summary Analysis, Comments, Details, or Explanation:

The self-study provides examples of assessment activities and the subsequent decisions. Some, but not all campus units are actively engaged in assessment activities and the subsequent institutional improvement.

Data are collected on a variety of metrics, and a standard format for collection and reporting exists. It is less clear how the community uses this information as it makes decisions. The Retention Committee provided a thorough assessment of student success activities along with recommendations for action. The campus is poised to complete a full cycle of assessment-based action.

Though the campus has a common administrative assessment reporting format, strategic analysis of the reports is absent. Metrics for assessing the Vision 2020 plan are created within academic departments and administrative units and discussed by the President and his cabinet. It is not clear that assessment activities and results are coherently defined and communicated and that campus constituents understand that data for assessment of institutional goals are available. The campus should continue its assessment activities with an emphasis on strategic analysis of the results that leads to decisions.

#### Recommendations:

The campus could benefit from focused leadership that is given both the responsibility and the resources necessary to carry out a robust assessment program that informs decision-making, including decisions regarding resource allocations.

#### Standard 11: Educational Offerings

The documentation demonstrates compliance with this standard.

#### Brief Summary Analysis, Comments, Details, or Explanation:

Educational offerings are consistent with SUNY ESF's mission. There are program goals expressed as student learning outcomes and effectiveness of offerings is periodically evaluated. Institutional faculty and resources appear appropriate. The

assessment of student learning outcomes is addressed in Standard 14.

#### Standard 12: General Education

The documentation demonstrates compliance with this standard.

#### Brief Summary Analysis, Comments, Details, or Explanation:

SUNY ESF's general education requirements are clearly described. SUNY ESF received an exception from SUNY System requirements for foreign languages, and its general education requirement now totals 27 credits. However, as noted in the Document Roadmap, each SUNY ESF undergraduate curriculum is "in the process of individually tailoring the general education curriculum to both meet the minimum standard" and to support the major curriculum. In 2003, SUNY ESF adopted a seven-year plan to assess its general education program. In 2007, this plan was replaced by a SUNY system-wide general education assessment plan. Both approaches were heavily subsidized by the SUNY System but funding was eliminated in 2010. SUNY ESF is now planning a process to redesign its general education program and its assessment methods.

#### Standard 13: Related Educational Activities

The documentation demonstrates compliance with this standard.

#### Brief Summary Analysis, Comments, Details, or Explanation:

SUNY ESF capitalizes on its unique relationship with Syracuse to offer academic support services to its students, including disability services, tutoring, and remediation. Its contractual relationships with Syracuse for both services and curricular offerings are well documented and transparent. Transfer courses are articulated consistent with SUNY practice and policies which are readily available for students. SUNY ESF maintains off-campus facilities for experiential learning that are consistent with its mission and student needs. It has a second location used for students in the Ranger School.

#### Standard 14: Assessment of Student Learning

The documentation demonstrates compliance with this standard.

#### Brief Summary Analysis, Comments, Details, or Explanation:

Documentation demonstrates a consistent framework for learning outcomes assessment across the curriculum. Departments are required to provide annual progress reports. Program assessments are conducted by faculty engaged in

each program. However, it appears that a sizeable number of the faculty are not fully knowledgeable and engaged with the updated assessment processes which were implemented in conjunction with the 2009 Assessment Monitoring Report to Middle States Commission on Higher Education.

Departments with professional programs and related national/regional accrediting bodies use results from the assessment of student learning outcomes to change and improve their programs. Other academic units appear to lack an understanding of assessment data availability and quality; they do not utilize data strategically for planning purposes. All academic programs have assessment plans and conduct annual assessment activities, even those that are not externally accredited. Academic units should be made more aware of how these assessments can be better used to inform and enhance academic programs. The campus could build upon learning outcome activities already underway by utilizing the expertise of those within disciplines requiring professional accreditation. These faculty members could become "ambassadors" for assessment as they are able to clearly articulate the benefits of assessment for their departments and students.

It is unclear that assessment guides decisions related to the creation of new academic programs (majors, graduate programs, or special programs such as international study) or impacts on existing programs. Assessment of general education requirements is undergoing a transformation in light of new SUNY requirements.

The team is concerned about the ability of the campus to sustain its assessment activity. Commitment to the assessment process is uneven across campus. Assessment results are not coherently communicated. SUNY ESF needs to be sure that assessment efforts do not become fractured data collection activities which may drive some departmental change but minimally impact strategic decision making.

#### Recommendations:

- The team recommends that assessment activities should address measurable outcomes and lead to meaningful curricular change. Assessment results should inform proposals for curricular additions and modifications and should, at times, guide plans for retiring courses or majors. The Office of Academic Affairs should ensure that this happens.
- The institution must continue to dedicate faculty effort to learning outcomes assessment. Continued leadership is necessary for sustained assessment activity and may require additional resources. The institution should consider how best to ensure faculty participation in outcomes assessment. An appropriate college-wide curriculum committee might be a logical starting point.

#### VI. Summary Recommendations Requiring Follow-Up Action and Requirements

#### 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.

#### Recommendation:

The campus could benefit from focused leadership that is given both the responsibility and the resources necessary to carry out a robust assessment program that informs decision-making, including decisions regarding budget allocations.

#### 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.

#### Recommendations:

- The team recommends that assessment activities should address measurable outcomes and lead to meaningful curricular change. Assessment results should inform proposals for curricular additions and modifications and should, at times, guide plans for retiring courses or majors. The Office of Academic Affairs should ensure that this happens.
- The institution must continue to dedicate faculty effort to learning outcomes assessment. Continued leadership is necessary for sustained assessment activity and may require additional resources. The institution should consider how best to ensure faculty participation in outcomes assessment. An appropriate college-wide curriculum committee might be a logical starting point.

### **Advancing Sustainability at ESF**

A Selected Topics Self -Study for MSCHE Reaccreditation Executive Summary



Cornelius B. Murphy, Jr., Ph.D. *President* 





#### **ESF's Mission**

The mission of the College of Environmental Science and Forestry is to advance knowledge and skills and to promote the leadership necessary for the stewardship of both the natural and designed environments.

#### ESF's Principles of Sustainability

We begin with a commitment to meet present needs without compromising the ability of future generations to meet their own needs. To do this we must:

- Understand basic functions of natural and social systems;
- Acknowledge and quantify the limitations of nature's capacity; and
- Develop solutions through the integration of social, economic, technological, and environmental systems.

#### **Chapter 1. Executive Summary**

It is most appropriate that, in our Centennial year, the State University of New York College of Environmental Science and Forestry (SUNY-ESF) undertake a thorough review of our remarkable institution and of its compliance with the Accreditation Standards of the Middle States Commission on Higher Education (MSCHE). It is also timely to conduct a Self-Study focused on the College's responsibility to adopt sustainable practices, teach the basic principles underlining the concept of sustainability, and conduct research to provide the foundation for sustainable management. The centrality of sustainability to the College's mission and the evolving understanding of its many dimensions have prompted SUNY-ESF to undertake a full-scale evaluation of its commitment to sustainability. The review took place within the process of preparing this Selected Topic Self-Study for reaccreditation and this document contains the results of the analysis and recommendations for how to move forward. The College has provided a demonstration of compliance with all 14 standards of excellence in higher education in the form of a document roadmap following the MSCHE format. The document roadmap includes citations to the necessary documentation of ESF's compliance.

This report is organized into three sections, the first of which provides a broad introduction to the College. The second section presents a general context for understanding SUNY-ESF's sustainability agenda by describing the institutional challenges and current progress in advancing the 2003 strategic plan, *Vision 2020*. The final section provides an analysis of sustainability at SUNY-ESF and offers a set of recommendations to advance the College's efforts going forward.

#### **History of ESF**

SUNY-ESF was founded in 1911 for the purpose of providing the education and research needed to stabilize and increase the forestry resources of the State. In the late 1800's, the forest resources of New York State had declined to 6.5 million acres. After 100 years of teaching, demonstrating and conducting supportive research, the forests of New York State have expanded to 18.5 million acres, and they are generating three times the forest biomass being consumed.

The objectives of the College have since evolved to include research and education related to solving a wide range of environmental problems, while taking into consideration human and economic implications as well as scientific understanding. Sustainable practices have been embedded within the College from the beginning. Over the last one hundred years, the mission has expanded to address sustainable practices in other areas including water resources, community planning and design, ecosystem management, and construction.

#### **ESF Today**

SUNY-ESF is a doctoral granting campus within the 64 campus system of the State University of New York. Governance of SUNY-ESF is unique in that it is guided by both a Governor-appointed College Board of Trustees and the Chancellor of the System who in turn reports to the Governor-appointed Board of Trustees of the State University of New York. The College is comprised of approximately 2,750 undergraduate and graduate students. Approximately 94 percent of the 135 full-time faculty are actively engaged in funded research. SUNY-ESF is designated a Doctoral/Research University within the Carnegie Classification framework. The College offers 22 undergraduate and 30 graduate degree programs, most of which are in the science, technology, engineering, and math (STEM) fields. *US News & World Report* ranks ESF among the "Top 50 Public National Universities" and is in the top 50 of all national universities in the "Best Values" category. *Forbes* ranks ESF the third best college in the nation for women in science and engineering. The campus culture is influenced by a strong commitment to protecting the environment and a long-standing partnership with adjoining Syracuse University which provides ESF students with expanded academic and extracurricular opportunities.

#### **Strategic Planning**

As part of the Self-Study process, the College fully reviewed its progress in complying with *Vision 2020*, our strategic planning document. This guiding document declares SUNY-ESF's commitment to stand as a model of environmental sustainability. Approximately 80% of the activities outlined in the far-reaching plan have

been initiated or completed. Since *Vision 2020*'s 2003 inception, the College has successfully followed its seven strategic planning goals and enhanced its undergraduate and graduate academic excellence, student experience, visible reputation, financial stability, partnerships, responds to the needs of society and the human resource and physical infrastructure of the College.

The review of our strategic plan finds that SUNY-ESF offers two top five undergraduate programs, a top ten undergraduate program, and one top five graduate program. In addition, the College has introduced two new associate and two bachelor programs. Financial aid for students has increased by more than 47% since FY 2003-04, due in part to an increase of approximately 30% in undergraduate student costs, a 29% increase in ESF's number of full-time undergraduate students enrolled (1,209 to 1,558), and a 100% increase in undergraduates enrolling from outside New York State (128 to 256) with higher tuition costs.

We have enhanced campus safety through security measures, policies and communication systems. To broaden experiences in the global ecosystem we have worked to develop student international opportunities. Here at home, community service has been substantially enhanced with approximately 65,000 hours provided on an annual basis. ESF was recognized by The Presidents Higher Education Community Service 2010 Honor Roll.

Through the strategic plan, the campus embarked on initiatives including successfully enhancing the College's visibility and developing partnerships to support financial stability and increasing community services. SUNY-ESF has worked to improve its public profile through cable television and direct mail campaigns, a social network presence, the establishment of an intercollegiate athletics program and our first official campus mascot (Oakie the Acorn), and the creation of a "Going Green" series of weekly television spots reaching 1.72 million people.

Over the past ten years, SUNY-ESF established private funding sources and diversified its endowment. Furthermore, academic, international, regional, topical and federal partnerships have been nurtured or developed with other SUNY and private institutions and organizations. Specific examples include a partnership with the U.S. Small Business Administration to stimulate the growth of urban businesses and a project with the Kauffman Foundation and Syracuse University, to infuse entrepreneurship into existing courses.

The College will be updating the strategic plan to conform with the newly developed State University of New York Strategic Plan ("The Power of SUNY") beginning the first quarter of 2012.

#### Sustainability at ESF

The *Vision 2020* strategic planning process developed a framework to provide a context for integrating sustainability into its academic, research and service programs. This process was later supported by the 2007 Periodic Review Report (PRR) for MSCHE which identifies specific opportunities for progress towards sustainability. Within this framework, the College has set three sustainability goals:

- 1. Enhance the student experience to produce graduates who use their knowledge to foster actions that lead to increasingly sustainable societies;
- 2. Grow the College research enterprise to foster sustainable societies; and
- 3. Champion sustainability through on-campus demonstration.

Since these goals were formally set, ESF has made commendable progress in the areas of education, research and demonstration.

Review of the sustainability initiatives on campus reveal an array of opportunities for students to learn about this topic. Faculty are heavily involved in sustainability research and have extensive academic backgrounds in sustainability. They have embraced the College's sustainability principles and have embedded them into existing coursework. For example, every undergraduate and graduate degree program contains at least one (and, in most cases, many) required courses that address ESF's Principles of Sustainability. The College also reorganized its undergraduate and graduate Environmental Science programs to encourage interdisciplinary learning. Furthermore, ESF now offers a new minor in Renewable Energy and a graduate program in Sustainable Energy Management. Student exposure to sustainable practices also takes place outside of the classroom

on admissions tours, new student orientation, student clubs, a campus garden, internships and campus activities. The campus culture of sustainability is augmented with news, publications and online resources specifically relating to sustainability. SUNY-ESF's outreach programs now focus on sustainability that engage community members ranging from the middle school students to practitioners, covering topics in sustainability in institutional planning, green entrepreneurship, and renewable energy.

The second goal seeks to expand the College's research efforts to include those that foster sustainable societies. An assessment of this goal revealed 74 of the 135 research-active faculty members specifically engaged in research related to sustainability. A review of 2009-10 departmental annual reports indicated all academic departments had at least one faculty member involved in sustainability research leading to 74 journal articles, 11 books and 17 other reports as well as 120 conference presentations. Additionally, in 2010-11, 30 sustainability-related projects (funded at \$4,035,029) were in progress and an additional 47 project proposals (requesting a total of \$23,704,101) were submitted. Commitment to faculty members and facilities has also grown. The College has invested in sustainability research facilities such as an aquatic research laboratory and a biofuels pilot plant, and eight new faculty members have been hired since 2005 to augment sustainability research.

The final sustainability goal seeks to advance the campus's visible sustainability initiatives through demonstration. SUNY-ESF aims to practice what it teaches. Initiated through *Vision 2020's* goal, "Investing in ESF's human resources and physical infrastructure," and expanded within the College's Climate Action Plan, *ESF Carbon Neutral by 2015*, we see a campus whose infrastructure has been transformed. Progress in this area includes new renewable energy technology installations, participation in national commitments to sustainability and top-down and ground-up initiatives. This Fall SUNY-ESF students moved into our new residence building, Centennial Hall, for which we will seek LEED Gold Certification in the coming months. Designed with a number of key energy efficiencies and technologies, the Gateway Building will create more energy than it consumes. The College will seek LEED Platinum Certification for this building scheduled to open in 2012. In 2007, SUNY signed the American College & University Presidents' Climate Commitment.

As part of the commitment the College completed two greenhouse gas inventories, a plan to reach net zero carbon emissions by 2015, and created the Campus Climate Change Committee. The Commitment has also inspired several new visible campus installations that seek to reduce energy. They include one of the country's first 250 kW molten carbonate fuel cells; a wind turbine; a biomass boiler; a green roof on Walters Hall; solar arrays on Baker Laboratory, Waters Hall, Moon Library and the Adirondack Ecological Center; alternative fuel fueling stations for campus and community vehicles; and a self-serve bicycle maintenance station. Other sustainability-related initiatives include the installation of below-ground storage to collect storm water from parking areas; a rain garden; porous pavement in three different areas of campus; and water-saving faucets.

The administration at SUNY-ESF established an Office of Renewable Energy Systems, with two full-time staff members to help focus our sustainability efforts. This office helped to develop a sustainability website; introduce car-sharing and ride-sharing programs; implement sustainability action plans within administrative offices; and adopt several sustainability policies that aim to reduce waste, reduce energy use, purchase more environmentally friendly products and enhance carpooling on campus. Students have also fueled a number of changes on campus. They established the biodiesel production system used to fuel maintenance equipment on campus; the de-lamping of two campus buildings; and an organic campus garden. SUNY-ESF has also received a grant from the Kauffman Foundation to study the feasibility of developing a green energy cooperative based on biodiesel production and established an integrated pest management plan, limiting the amount of pesticide use on campus and increasing the number and diversity of native plants.

In April of 2011, the College completed the Charter version of the Association for the Advancement of Sustainability in Higher Education's (AASHE) Sustainability, Tracking Assessment & Rating System (STARS). As a result of all of the work faculty, staff, students and administrators have contributed to making the campus more sustainability, SUNY-ESF received a STARS Silver rating and plans to reach a Gold rating by 2014.

#### **Challenges**

The Self-Study also identified a number of institutional challenges requiring attention to maximize the College's potential to achieve the goals outlined in its strategic plan, including those related to sustainability. With input from the campus community, including the President's Cabinet, the Provost's Academic Council, the SUNY-ESF Board of Trustees, and the Self-Study Steering Committee, they have been consolidated into eleven broad areas of focus as follows.

- Challenge 1: Obtaining adequate operational resources within a constrained environment
- Challenge 2: Attracting and retaining quality, diverse faculty and staff within a constrained environment
- Challenge 3: Rectifying inefficiencies created by an aging administrative infrastructure
- Challenge 4: Establishing and defining the College's position/brand in a changing global arena
- Challenge 5: Enhancing and institutionalizing assessment practices to help drive institutional objectives
- Challenge 6: Meeting enrollment objectives in the face of new competitive programs within and outside SUNY
- Challenge 7: Sustaining strong and vigorous Ph.D. programs that attract students, financially support their education and research and award degrees in a timely manner
- Challenge 8: Achieving diversity goals within our student population
- Challenge 9: Engaging effectively the campus community in understanding and addressing institutional goals
- Challenge 10: Fitting ESF's strategic plan within the SUNY Strategic Planning Objectives to obtain benefits of System membership
- Challenge 11: Maintaining effective relationships with Syracuse University and other partners

#### Recommendations

SUNY-ESF has developed several recommendations to address these challenges, including institutional recommendations focusing on financial resources and enhancing the efficiency of operations, developing a plan for recruiting under-represented minorities to the faculty and student populations, thoroughly assessing institutional technology needs, and continuing to work with faculty and staff to improve assessment initiatives. In response to the in-depth review of the campus' integration of sustainability efforts into its curriculum, research and operations, SUNY-ESF recognizes the very significant progress it has made in making the campus more sustainable, however we have identified several opportunities for further improvement in meeting our sustainability goals.

#### **Institutional Recommendations**

Advancing many of the institution's goals is dependent on acquiring additional financial resources. The associated recommendations are as follows:

- Continue to increase enrollment of out-of-state undergraduates through maintenance of strong national visibility and marketing initiatives.
- Increase enrollment of tuition-paying graduate students through the development of focused Master's Degree programs feeding strong employment markets.
- Build upon the success of the ESF Foundation's Centennial Campaign to enhance private giving by reinvesting Foundation proceeds to increase the size of the development staff.
- Increase sponsored research funding by focusing faculty hiring in fields having significant opportunities for extramural support (e.g. ESF's new initiatives in environmental health and renewable energy management), and through hands-on assistance from the Research Office in helping faculty identify appropriate funding opportunities.
- Increase indirect cost recovery from sponsored programs by focusing on grant opportunities that permit reasonable indirect charges, including federal agencies and some private organizations.

- Continue to develop the newly introduced summer program (2010), concentrating on distance-learning and short-term field experiences.
- Maintain strong visibility and value to SUNY to ensure System understanding of ESF's mission and the special challenges that derive from that mission.

Obtaining adequate financial resources to meet institutional goals also requires achieving greater operational efficiencies. Recommendations for achieving financial efficiency are as follows:

- Reduce energy costs by reducing energy dependence on high cost Syracuse University steam by installing high efficiency power plants in new ESF buildings, by adding solar panels and wind turbines where possible to ESF facilities, by acting on the recommendations of the recent New York Power Authority audit, by making energy efficiency a primary criterion in new building construction and in renovation projects, and by enacting new recommendations that will come from the recently formed ESF energy management team.
- Renegotiate the Accessory Instruction and Related Services Agreement with Syracuse University to include terms that meet the needs of both institutions.
- Work with Upstate Medical Center and other Central New York SUNY institutions to identify services that may be shared to reduce costs to all institutions.

Aside from recommendations specifically related to achieving financial flexibility, the following are recommended:

- Develop a new five-year academic plan to identify and address high priority areas for advancing the mission of the College.
- Continue to invest a portion of the salary savings from faculty retirements in merit raises to recognize and retain high performing faculty members.
- Develop an enhanced plan for adding under-represented populations to the faculty.
- Consider new ways to facilitate spousal hires, e.g. through active programs with nearby SUNY and
  private colleges and universities. The ESF-wide approach to the search and selection process seemed
  highly desirable and effective.
- Continue to provide formal grant proposal writing training on an annual or more frequent basis, and
  provide attractive travel opportunities for promising young scholars (or scholars entering new research
  areas) to attend targeted grant-development workshops.
- Thoroughly assess institutional information technology needs now and in the future, and develop and implement a plan that meets those needs.
- Improve the utilization of information systems through enhancement of ESF's database system and through training of ESF employees on data systems managed by supporting agencies including the SUNY Research Foundation, SUNY, and other state agencies.
- Include documentation and dissemination of policies, procedures and protocols as part of employee performance programs where appropriate.
- Continue to seek and secure strategic alliances with external partners, public and private, academic and non-academic to advance institutional goals and service to society.
- Maintain strong relations with Syracuse University. Seek additional opportunities for coordination and cooperation.
- Continue to incorporate assessment and improvement as routine operational practices.
- Maintain effective visibility efforts. They advance almost every aspect of the College's agenda.
- Take advantage of the new energy in Faculty Governance to facilitate campus-wide communication and to engage the faculty and staff in meaningful dialog to promote understanding and consensus on major College issues.

#### **Sustainability Recommendations**

#### Education

SUNY-ESF was established based on the principles of sustainability and protection of the environment, independent of the terms used to describe this concept over the past 100 years. An assessment of faculty, educational offerings and General Education requirements reveals that sustainability issues are well integrated into teaching, research, and service at ESF. However, changes in how the College collects and reports data are needed in order to simplify the collection of sustainability-related, campus-wide information for future assessments.

- ESF's principles of sustainability provide an important first step in assisting faculty members with defining the types of sustainability-related teaching, research, and service they do. Identifying subprinciples that clearly identify how each principle relates to each department would further clarify the meaning of the principles for faculty at ESF.
- As course descriptions are reviewed, sustainability-related concepts should be added as appropriate to improve assessment of sustainability courses. Designate courses with a "Sustainability Emphasis."
- Programs such as the GA Colloquium on Teaching and Learning are not intended to teach sustainability, per se, but a discussion of sustainable practices (e.g. the reduction of paper usage by converting to web-based distribution of materials) is included. In the future the College could include a 'special topics' session as has been done with other selected topics that is devoted to sustainability and sustainable practices on-campus.
- The new Centennial Residence Hall provides opportunities for increased integration of sustainability between the academic and extracurricular aspects of college life. The incorporation of sustainability into the activities and culture of the new residence hall will greatly enhance the educational opportunities of the students.
- Consider how study abroad experiences related to sustainability could be integrated into all academic programs.

#### Research

The following steps taken over the next 5-10 years will help the research enterprise at SUNY-ESF evolve toward a more competitive and globally recognized position, particularly in fields that comprise the multi-disciplinary portfolio of sustainability research. These initiatives will be vital to enhancing the SUNY-ESF footprint, both in recognition and in financial support.

- As was done with the Empire Innovation and High Needs programs, search for and hire sets of faculty
  to include biological and physical scientists, engineers, landscape architects and social scientists who
  will integrate our sustainability research and academic programs.
- Determine the potential research productivity and financial flexibility provided by a net gain of one or more new faculty per year over the next ten years.
- Increase emphasis and support of large, multi-institutional collaborative proposals. Although proposal numbers (260/year) and success rates (30% on proposals < \$2.5 M are quite high, relatively few large and long-term proposals have been funded.
- Create incentive programs for Centers, Consortia and Institutes to develop collaborative, competitive research proposals, and continue to strive for formal partnerships with existing, private entities such as Upstate Freshwater Institute and the Onondaga Environmental Institute.
- Sponsor a college-wide retreat/event that highlights the Centers/Institutes/Consortia and brings state and national legislators to the College. Recognize a Center or Institute annually with a desirable and visible award.
- Work with private corporations, such as Honeywell, to further promote support of research and graduate programs, and with the ESF Development Office to create new modes of support for research, startup, and seed grants.

- Develop programs similar to the new Environmental Medicine/Hill collaboration, in which modest annual contributions by ESF, SU, UMU and the VA Hospital are used to stimulate teams to pitch collaborative proposals to major funding agencies such as National Institutes of Health.
- Develop additional venues for ESF faculty and staff to brainstorm together in looking to future research
  areas that are vital to global health and sustainability, and within the reach of College resources, vision
  and goals.
- Actively pursue ESF research connectivity with the SUNY system, which represents the fourth largest
  university system in the United States in research expenditures. New programs with Binghamton
  University in technology transfer and with Upstate Medical University in Environmental Medicine are
  current examples; additional opportunities exist to include SUNY Buffalo, Stony Brook and Albany.
  Research proposals that highlight the "Power of SUNY" are likely to receive enhanced attention from
  granting agencies.
- In the next version of the ESF Promotion and Tenure guidelines, add a "sustainability" parameter to the teaching, research or outreach responsibilities of each faculty member.
- Add a sustainability criterion to the annual Exemplary Researcher Award, or create a new award to include a seminar and recognition ceremony.
- Establish linkages between ESF's research programs and the AASHE STARS program to increase student and staff involvement with campus-wide sustainability issues (Sustainability Tracking, Assessment & Rating System is a program that measures and encourages sustainability in all aspects of higher education, see Chapter 4).
- To foster cross-campus awareness and collaboration in sustainability research, establish a Faculty seminar series and add a sustainability section to the student "Spotlight on Research" annual poster symposium.
- Use the existing Seed Grant programs to catalyze new research programs in sustainability.
- Through indirect funding and perhaps private development support, strengthen linkages with those
  groups in the US Forest Products Industry with responsibility for strategic visioning and sustainability
  initiatives. Maintain representation on USDOE, USDA, and Forest Service panels that establish and
  "roadmap" research priorities. Provide travel support and recognition for this activity.
- Work with the ESF Foundation to identify opportunities for funding specific research initiatives through the ongoing Centennial Campaign.

#### **Demonstration**

ESF is well-positioned to align its campus master plan and sustainability plans with the new SUNY Strategic Plan regarding energy issues and demonstration projects. We can also explore ways to bring greater focus to the sustainability efforts on campus to improve ESF's current practices of engaging internal and external constituencies with the following recommendations.

- Establish sustainability performance metrics based on the STARS rating system for members of the President's Cabinet.
- Clearly identify the Office of Sustainability
- Engage the campus in a discussion of environmental stewardship and sustainability to determine the need to change the College mission and vision.
- Continue to utilize State University Capital Funding, supplemented by grants from federal, state and local partners, to implement the bulk of the College's sustainability demonstration projects.
- Examine additional private/public partnerships as a way to finance sustainability projects and access potential tax benefits associated with renewable energy projects.
- Examine the development of a dedicated sustainability fund, based on a share of the economic savings realized from certain projects, to help develop a source of funds for environmentally beneficial demonstration projects.

- Engage in additional discussions with faculty and staff to determine how to find more opportunities to link existing and future research interests and sustainability projects.
- Review the sustainability communications efforts to internal and external audiences to determine where students and faculty can enhance the effort.
- Develop and publish a sustainability report.
- Review existing planning documents and develop future sustainability plans consistent with the new SUNY strategic plan.

SUNY-ESF has much to be proud of over its one hundred years and especially in the ten year window of the Middle States Review. Through the campus-wide process of conducting the Self-Study and reviewing the College's compliance with the 14 MSCHE standards of excellence in higher education, we have identified challenges to overcome while moving forward, and also a significant number of opportunities. Many initiatives have already been undertaken to adjust College operations and goals as a result of this Self-Study process.



## MSA Middle States Commission on Higher Education 3624 Market Street, Philadelphia, PA 19104-2680 Phone: 267-284-5000 Fax: 215-662-5501 www.msche.org

#### Certification Statement:

Compliance with MSCHE Requirements of Affiliation and Related Entities Policy (For SUNY State-Operated Institutions Effective October 1, 2009)

An institution seeking initial accreditation or reaffirmation of accreditation must affirm that it

meets or continues to meet established MSCHE rec Entities" policy.	quirements of affiliation and "Related
This signed statement should be attached to the exerciport.	ecutive summary of the institution's self-study
SUNY College of Environmental Son (Name of Institution)	cience and Forestry
The State University of New York represents that the program of the SUNY System. The undersigned he Commission's compliance requirements for this instrumentary's policies pertaining to MSCHE standard	reby certify that SUNY recognizes the stitution and will uphold State
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(Campus President)	April 15, 2011 (Date)
	April 29, 2011
(Chair, SUN¥ Board of Trustees)	(Date)