

Transforming the University

**Preliminary Recommendations of the
Task Force on Collegiate Design: CNR, COAFES, CHE**

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December 12, 2005

*“Change is the law of life. And those who look only to the past or present
are certain to miss the future.”*

–JFK

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ACKNOWLEDGEMENTS

We would like to acknowledge the contributions of many that assisted us in our deliberations, including Susan Engelmann, the Working Groups of the New College, the department heads of the College of Natural Resources and the College of Agricultural, Food, and Environmental Sciences, Dean Susan Stafford, Dean Charles Muscoplat, Dean Shirley Baugher, Dean Robert Elde, Dean Jeffrey Klausner, Associate Dean Ann Hill Duin, Associate Dean Mel Baughman, the focus group participants, our numerous and engaged stakeholders, and those who corresponded with us or sent us comments.

EXECUTIVE SUMMARY

Integration of the broad range of scholarship present in the College of Agricultural, Food and Environmental Sciences, the College of Natural Resources, and the Food Science and Nutrition Department provides a host of new opportunities to achieve even greater excellence in research, teaching, and outreach. Our review and discussions over the past three months lead us to believe that this consolidation will enhance the University's natural biological and social science contributions to the environment, production agriculture, human health, food systems, and natural resources.

The mission of the New College relates to the applied life sciences, focusing on scholarship supporting agriculture, environment, food systems, and natural resources. Our work should benefit humans and sustain the ecosystems upon which society depends. The principles guiding the college include interdisciplinary teams conducting fundamental and translational research to enhance the educational opportunities for students and to improve the quality of life in Minnesota and beyond.

Our key recommendations are summarized below, organized around the five Strategic Areas in the President's Repositioning report. Some of our key recommendations include formation of clusters of departments with opportunities and principles for reconfiguration, establishment of a University-wide Institute of the Environment, enhancing interdisciplinary efforts with other units, expansion of scholarly activities related to translational biology, and further development of public engagement.

Recruit, nurture, challenge, and educate outstanding students who are bright, curious, and highly motivated. Students reflect the strength of any University unit. The recruitment of top students and providing an excellent learning environment is central to achieving excellence. Joint degrees between disciplines should be achievable via a streamlined process. Because the 21st century is said to be the century for biology, we recommend that the Council of Biological Deans be re-established in order to maximize curricula development for attracting and educating top quality students in forward-looking areas.

Recruit, mentor, reward, retain and involve in the decision process world-class faculty and staff who are innovative, energetic, and dedicated to the highest standards of excellence. We must strategically invest in faculty with competitive salaries, start-up packages, and on-going staff support. Faculty should be provided "intellectual mobility" to foster interdisciplinary scholarly activity and disciplinary evolution. Faculty participation in units such as the proposed system-wide Institute of the Environment must be both rewarded and evaluated.

Promote an effective organizational culture that is committed to excellence and responsive to change. To provide greater opportunities for interaction and to provide opportunities for reconfiguration of departments, we recommend the formation of three clusters of existing departments, renaming of departments when appropriate, and development of methods for evaluation of three free-standing departments. We recommend that two of these clusters be

charged to reconfigure themselves into a smaller number of departments within a two-year time frame. Reconfiguring into larger departments will allow sufficient faculty turnover and critical intellectual mass to provide excellence in teaching, collaborative research and public engagement. We recommend the developments of an “Allied Department” concept to increased communication across college structures. Timelines are suggested for instituting these changes with the naming of the college and the initiation of cluster activity being achieved by July 1, 2006.

The name of the new college should be determined using a broad consultative process. It should be named by either using familiar and/or new key words relating to the work of the college.

We recommend the formation of the Institute of the Environment, to coalesce the University’s tremendous resources in environmental education and research. This Institute must be System-wide, embracing the talent from all across the University. Core faculty having joint appointments with the Institute and their tenure homes will be accountable to the Institute Director as well as their department heads, and funds will follow faculty effort to the Institute. We recommend that this Institute must have physical space with labs and offices for the core faculty and staff. The Institute would have its home in the New College in Saint Paul, and the Director would report to the Provost.

Translation of advancements in fundamental sciences to applications in agriculture, food, renewable resources and the environment will be an increasingly important focus of the New College. Enhancement of translational biology is recommended by increasing investment in the Department of Plant Biology and by the New College establishing joint appointments between the New College and other units. We recommend that new priority themes for the merged college be developed. Moreover, new technologies and instrumentation for biological research and teaching will require planned investments.

Exercise responsible fiscal stewardship by setting priorities, and enhancing and effectively utilizing resources and infrastructure. A number of efficiencies will be realized by our recommendations. We believe our recommended structural changes will allow for the needed flexibility to respond to and anticipate new research directions and allow faculty to reconfigure in such a way as to maximize the return on investments.

Communicate clearly and credibly with all of our constituencies and practice public engagement responsive to the public good. Public engagement has always been a hallmark of the units involved in this merger, especially through Research and Outreach Centers and other off-campus sites. Public engagement should be expected and evaluated for all faculty, staff, and students. Partners in outreach activities should be established or reinforced.

The new college culture should encourage the development of assessment tools for measuring progress toward excellence. Investments should always be assessed relative to improving quality within the new college.

Deliverable #1. Recommendations for a strategy to position the University as one of the premier research institutions in the world dedicated to environmental research, food systems, and renewable resources. The strategy should bring the intellectual and disciplinary diversity of the University, currently dispersed across multiple colleges, to bear on national and global issues regarding the environment, food, and renewable resources.

Issues regarding the environment, food, and renewable resources are at the heart of the mission of the New College formed from the merger of COAFES and CNR (hereafter called New College). Because of the interdisciplinary nature of these issues and their impact on the public, effective relationships between the New College and other colleges, the public and external stakeholders are critical. Therefore, we recommend that the University embrace a strategy that enables and rewards interdisciplinary interactions, encourages and rewards outreach and public engagement at all scales (local to global), actively engages the expertise of the faculty in designing and providing leadership for the future directions of the college, and invests in recruiting and retaining excellent faculty in the areas of food, natural resources, animal and plant sciences, renewable energy, and the environment. Our guiding principles for achieving excellence are detailed in Appendix B.

1.1. Strategically invest in world-class faculty with competitive salary and start-up packages. Implementing this recommendation would require allocating new resources or strategically reinvesting existing resources in the New College. We recommend that a proportion of resources be specifically targeted to priority areas, or themes, that bridge disciplines within the New College. These interdisciplinary investments, either new recruitment efforts or strategic investments in already premier faculty, will help forge new communities within the restructured college, as well as advance the priority themes. Investment in these cutting-edge, interdisciplinary areas will also draw high caliber faculty recruits.

1.2. Recruit bright, curious, and highly motivated undergraduate and graduate students and post-doctoral scholars. Merger and reconfiguration of the two colleges, and the adoption of priority themes, will provide opportunities to develop high quality programs to attract talented students and post-doctoral scholars. This will be attainable with first rate faculty who value teaching as well as discovery. The cost of education must be competitive and supported by merit- and need-based scholarships. The long-term strategy is dependent upon a teaching infrastructure that provides assistance to both students and professors. Students should have ready access to new communication technologies (e.g., Internet-based video conferencing) for classroom registration, learning, class participation, and evaluation. An on-going undergraduate research program for the New College that integrates the skills of faculty with the students is needed. National recruitment efforts should use new methods, including online techniques. We need a welcoming environment for students of color, with targeted mentoring for faculty and staff about diverse populations.

1.3. Develop appropriate assessment tools for measuring our progress toward excellence. Few metrics are in place to assess our progress promoting an effective organizational culture committed to excellence. Commonly used metrics generally relate to publication numbers,

classroom size, student numbers and profiles, and total dollars raised from external sources. We need to develop and add other benchmarking measures that will help evaluate progress.

1.4. Invest in the New College as the model for public engagement for the University. This college embodies the University's land grant mission and has perhaps the most diverse set of stakeholders in the University. With appropriate expectations, incentives, and rewards, public engagement can be significantly enhanced.

1.5. Develop priority themes for interdisciplinary activities, anchored in the New College, that address the environment, production agriculture, food systems and renewable resources. The New College would benefit from a document that presents its priority themes for the next five years. These themes will focus efforts into areas where the New College, together with collaborators in other disciplines, has the highest potential to address major challenges. The themes will build visibility for the New College's focus within and outside of the University, and guide investments in faculty, academic programs, and resources for interdisciplinary research. Development of themes should be faculty-driven, with input from colleagues in other colleges and from external stakeholders.

Deliverable #2. Recommendations regarding the optimal design, structure and organization of the New College.

The New College's broad mission is characterized by interdisciplinary programs of large scope. The task force therefore created guiding principles for the design of a structure that would serve the college's organizational needs, meet strategic objectives, and facilitate faculty governance (see Appendices C and D). Based on these guiding principles, we recommend the following:

2.1. Academic departments in the New College should be organized in three clusters of related disciplines, plus three additional free-standing departments.

The proposed clusters are: Environmental Science, Policy and Management; Food, Nutrition and Animal Sciences; and Plant Sciences (as detailed in Appendix E). Three departments (Applied Economics, Rhetoric, and combined Biosystems and Agricultural Engineering/Bio-based Products) would remain free-standing. The clusters should be flexible, with porous boundaries to allow individual faculty to interact with multiple clusters as needed or desired. Clusters will foster:

- New communities for interchange around focused, shared strategic goals within the broader context of the college;
- Coordinated faculty hiring, joint faculty development through cluster hires, and joint appointments in interdisciplinary areas;
- Curriculum development and coordination of related academic programs;
- Development of coordinated outreach programs;

- Strategic planning, especially regarding development of interdisciplinary research opportunities and research infrastructure;
- Opportunities to reconfigure. Departments within clusters should be considered a pool for the evolution of new units (see also recommendation 2.2.c.); and
- Shared administrative and support functions among departments in a cluster.

We recommend that clusters be self-governed by an executive committee of department heads and directors of graduate studies, and that they determine for themselves the best manner in which to provide leadership for their cluster.

2.2. Departments in the New College should become larger, stronger and fewer in number than those found currently.

Larger departments generally provide more critical mass for achieving national and international prominence and more opportunities for attracting resources for program development. For example, larger departments can hire new faculty more frequently, offering opportunities for renewal and flexibility to reinvest resources to meet new program goals. Selected mergers and faculty transfers, plus strategic reinvestment, will provide the means for departmental growth. Specific recommendations for changes in departmental structure within the New College are:

2.2a. The Departments of Bio-based Products and Biosystems and Agricultural Engineering should merge to form a larger department. This merger will bring together two departments that are focused on resource engineering, applications technology, and environmental management.

2.2b. Departments within the Environmental Sciences cluster and within the Plant Sciences cluster should consider and implement new configurations, including mergers or restructuring, within a two-year timeframe. This follows the rationale described above that larger departments, within limits, provide more critical mass and the opportunity for renewal to maintain or achieve national and international prominence. We recommend that committees consisting of faculty, staff, and students be empowered to provide guidance on reconfiguration design and implementation. A possible joint relationship of this department with another appropriate college may be considered.

2.2c. The Department of Rhetoric should be strengthened and renamed, emphasizing programs in science and technical communications. Strong scientific and technical communications skills are needed by students and researchers in the disciplines of the New College. Other factors affect the status of this department, including the Task Force on Writing. In the interim, we recommend that the Department of Rhetoric receive resources to enable it to play a leadership role in the University Writing Initiative and to expand scholarship in scientific communications related to the New College. A possible joint relationship of this department with another appropriate college may be considered.

2.3. Facilitate individual faculty choice of departmental affiliation. In addition to departmental restructuring, allowing some movement of individual faculty among departments in

the New College would help build programs and retain high quality faculty. This may be achieved by new joint appointments or by moving an individual's academic home. Guiding principles for this "free agency" within the New College can be developed by faculty and department and college leaders. The window for free agency should be two years from the onset of the New College, in coordination with and support of the reconfiguration process. Movement between colleges in exceptional cases may also be desired, and should involve consultation among units and, optimally, centrally defined criteria and processes.

2.4. Consider further the organization and administration of the Research and Outreach Centers (ROCs) and the Cloquet Forestry Center. We recommend that a working group be constituted to address the organization and administration of the ROCs/Cloquet in the context of the missions of the ROCs and the tenure homes of their faculty members. The working group should define the optimal organization of ROCs to facilitate excellence in research and outreach programs, balance with the missions of units on campus, and administrative efficiency.

Deliverable #3: Recommendations regarding units in other parts of the University whose placement and connections should be reviewed in relationship to the newly formed college.

Complementary interactions between units often evolve as interdisciplinary fields develop. Flexible means are needed to foster closer communication between such units.

3.1. Streamline the process for graduate students to obtain joint degrees.

Complex and multidisciplinary research issues require that joint degree programs be readily available to attract high quality graduate students and to enable them to address society's needs. A uniform framework across the University will allow creation of joint degrees without requiring extensive discussion of curricula committees. Readily available joint degree programs will foster interaction among faculty in wide-ranging disciplines. This recommendation is an action item for the Graduate School, and a successful framework that could be used as a generic model is the Joint Degree Program in Law, Health, and the Life Sciences (<http://www.jointdegree.umn.edu/>).

3.2. Develop an "allied department" concept after examining current working models of unit alliances.

Many departments outside the New College are important to its mission, and those inside the New College are important to the missions of other colleges. We envision alliances as formal relationships between departments in different colleges, where they may share graduate or undergraduate programs, have administrative consultation, etc. Allied departments create synergies that are beneficial to both colleges. Existing examples of unit alliances include Plant Biology (joint between New College and CBS), Animal Science (allied with College of Veterinary Medicine), and Food Science and Nutrition (allied with the AHC). These and other examples should be studied and guidelines developed for conceptualizing and approving allied departments.

3.3. New College and CBS should coordinate their activities and opportunities at their respective off-campus facilities.

These off-campus facilities include UMore Park, six research and outreach centers, Cloquet Forestry Center, Landscape Arboretum, Cedar Creek, and Itasca Biological Field Station. Faculty, staff, and students in both colleges, and others in the University, are missing research and educational opportunities because these facilities are not well known or their uses coordinated among colleges. Administrative efficiencies at the University level could be realized by having the facilities work more closely together on administrative issues, capital requests, research support, etc.

Deliverable #4: Recommendations for a longer-term strategic plan and strategies for the development of the college.

The New College must be structured in a way that encourages recruitment, mentoring and retention of excellent faculty and students in the areas of environment, food, and renewable resources, and allows for the structure to continue to evolve to meet changing demands and new research directions.

We recommend these specific actions and timetable to achieve long-term strategic goals for the college, noting that each recommendation will require adequate allocation of resources to achieve the stated goals:

4.1. The new college should be named by July 1, 2006. This process should use focus groups of prospective and current students, staff, alumni, stakeholders, and faculty to test possibilities (see recommendation 8.1).

4.2. Clusters should be actively engaged by July 1, 2006 (see recommendation 2.1). Department structure reconfigurations with the aim of creating fewer, larger departments should occur by July 1, 2008 (see recommendation 2.3).

4.3. The process of defining priority themes (see recommendation 1.5) should be broadly consultative, with input from stakeholders and University colleagues outside of the college. This process should be completed by the end of spring semester, 2007, and should include the communication of the chosen themes to the community.

4.4. The merger of the Departments of Bio-based Products and Biosystems and Agricultural Engineering should be complete by July 1, 2007, including selection of a new departmental name (see recommendation 2.2a).

4.5. Develop guidelines for faculty “free agency” by October 1, 2006. We feel that change of departmental affiliation should be initiated by faculty with concurrence by administration. Movement by a faculty member should be governed by intellectual and disciplinary focus rather than by financial considerations or personality conflicts (see recommendation 2.4).

4.6. Develop guidelines for cross-unit alliances by July 1, 2006. An alliance is a formal relationship between departments in different colleges. Examples include a shared graduate or undergraduate program, administrative consultation, financial connections or other connections (see recommendation 3.2).

4.7. A working group should be constituted to address the organization and administration of the ROCs and Cloquet Forestry Center by July 1, 2006. A recommendation should be made by January 1, 2007 (see recommendation 2.5).

4.8. A committee on metrics of excellence should be formed by July 1, 2006. This committee should report by November 1, 2006, on how to implement a suite of metrics on teaching, research and outreach for the New College (see recommendation 1.3). An external review committee should evaluate implementation and progress toward excellence as measured by the metrics on a regular basis.

4.9. Formation of Planning Committee for initiation of the Institute of the Environment by July 1, 2006. The Institute should be up and running by January 1, 2007 (see recommendation 5.1).

4.10. Develop and implement strategies for enhancing translational biology through joint appointments and other investment in faculty by December 31, 2006 (see recommendation 6.1).

4.11. Communication staff should develop and implement strategies to support increased public engagement by July 1, 2006 (see recommendation 7.2).

Deliverable #5: Recommendations for a strategy to enhance the University’s potential to become one of the premier research institutions in the world dedicated to environmental research. The strategy should bring the current intellectual and disciplinary diversity of the University, currently dispersed across multiple colleges, to bear on global environmental issues.

5.1. We recommend the formation of the Institute of the Environment.

Although the New College will have a “cluster” in Environmental Science, Management, and Policy, a broader unifying body is needed. The University of Minnesota is rich in talent and expertise in environmental science, management and policy. Faculty are engaged in environmental research and education in nearly every academic college across multiple campuses. Perhaps due to the volume and diversity of activities, environmental research and

education remain fragmented and have not reached their full potential. A strategy that facilitates coordination and fosters interaction in environmental research and teaching will contribute to our excellence as a research university. An Institute of the Environment will:

- Provide a means for coordination of the widely dispersed and diverse work of faculty, students and staff in environmental sciences, management and policy.
- Provide a highly visible point of entry for undergraduate and graduate students and postdoctoral scholars interested in environmental science, management and policy (i.e., one-stop shopping).
- Improve recruitment and retention of top-notch students, postdoctoral scholars, and faculty. We should not lose stellar students and faculty to other universities that have more visible and coherent environment programs. This will help us attract a more diverse student body.
- Facilitate faculty collaboration across disciplines on cutting-edge environmental problems and opportunities. Agencies funding environmental research often require interdisciplinary teams, and the University of Minnesota will be better able to respond to such “big science” research opportunities.
- Greatly improve the recognition of University of Minnesota work on the environment to donors, funding agencies, and diverse stakeholders.

5.2. We recommend that the Institute, or any strategy adopted by the University, be system-wide.

A system-wide approach is essential for the success of the Institute. Because of the widespread expertise at the University of Minnesota, it is essential that the strategy be inclusive of the entire University community and not restricted to just New College or just the Twin Cities campus. For example, one highly successful interdisciplinary graduate program, Water Resources Science, has 110 graduate faculty from 26 departments across 11 colleges from the Twin Cities and Duluth campuses. Only a strategy that provides opportunities for participation from faculty outside of New College will succeed. We further recommend that the Institute have its home in the New College on the St. Paul campus, given the concentration of departments and faculty devoted to environmental research. Finally, given the recommendation that this be system-wide, we recommend that the Director of the institute report to the Provost.

5.3. Faculty contribution in the Institute must be both evaluated and appropriately compensated.

Under the University’s budget model, department heads are often reluctant to allow their faculty to contribute teaching time, research ICR, and outreach effort to other units. A core group of faculty must be responsible and accountable for moving the Institute forward. It is critical that their appointment and salary reflect this effort. This may be through joint appointments or other formal arrangements for distributed or shared effort (see Appendix D). To insure the success of this new entity, faculty must also be accountable to the Institute for their effort. Faculty should be evaluated for meeting agreed-upon performance criteria related to their effort in the Institute and their merit increases should be linked to this performance.

It is imperative that this not be a barrier for faculty, but be facilitated by changes in faculty culture. The faculty must have “intellectual mobility” for this to be successful. Because faculty

tenure is granted by the University and not by departments (unlike many institutions), the University could become a national leader in interdisciplinary scholarly activity by developing guidelines for allowing faculty to use a certain percentage of their appointment (for example, 10–20%) in other units without the burden of joint appointments. University-wide guidelines for intellectual mobility need to be developed that define its boundaries and responsibilities for faculty; the Institute of the Environment could serve as the model for the rest of the system.

5.4. A physical presence of the Institute is required.

The interactions, incubation of ideas, and communication needed to promote excellence cannot be successful through a virtual coalition. For faculty from different backgrounds and academic cultures to achieve transdisciplinary interactions and true synergy, they must have a mechanism to get to know one another and find their common and complementary interests. The top environmental programs in the country all have an interdisciplinary school or institute that has a building or physical presence. Space dedicated to the Institute could serve as a “gathering place” and should accommodate its administration, core faculty, and related units such as the Water Resources Center, the Conservation Biology Graduate Program, and the President’s Initiative on the Environment and Renewable Energy (PIERE).

5.5. A recommended model for The Institute of the Environment.

The Institute of the Environment represents a horizontal structure that fosters interaction among all environmental faculty in the University of Minnesota system (see Figure 1, Appendix F). It should be made up of faculty membership, not departmental membership. It would be housed in the New College. Because the number of such faculty is large (~ 150), we propose that faculty participate in one of two ways. Core Faculty (approximately 20–50 faculty) would share appointments between the Institute and a tenure-home department. Expectations of core faculty would be clearly defined, and performance and promotion and tenure decisions would be evaluated by both the home department and the Institute (see Figure 2, Appendix F). We anticipate that core faculty will instruct core courses for interdisciplinary programs such as the Water Resources Science and Conservation Biology degree programs and that their research will be largely devoted to interdisciplinary environmental inquiry. Focus Groups recommended that membership in the Core Faculty be competitive and require a demonstrated record of interdisciplinary interactions in environmental research. It is recommended that there be physical space dedicated to the Institute for administration and Core Faculty offices and labs. In addition, faculty could participate as Affiliate Faculty, who would not have joint appointments. These faculty might formalize their participation through ad hoc arrangements regarding specific team teaching or specific ICR distributions, etc., or through the concept of intellectual mobility. Such faculty might have some but not all of their research and teaching invested in interdisciplinary environmental areas. Leadership of the Institute would be provided by a director reporting directly to the Provost. Focus Group input indicates that the director must have an international reputation in environmental research.

There are existing models of shared faculty in horizontal structures at the University of Minnesota as well as elsewhere. Models at the University include the Cancer Center, the Bell Museum, the Department of the History of Science, and the Center for Bioethics.

Interdisciplinary programs related to the environment (Water Resources Science graduate program, Conservation Biology graduate program, Environmental Science, Policy and Management undergraduate program, sustainability studies minor program, etc.) might be housed in the Institute. Relevant centers and the President's Initiative on the Environment and Renewable Energy (PIERE) could also be part of this Institute. Sharing of administration of these academic and research programs would afford cost savings and allow for better coordination across programs.

This unit might be funded through ICR attributions of core faculty, tuition revenue of interdisciplinary courses, grants and contracts, and investment by the University through O&M allocations.

Deliverable #6: Recommendations on how to coordinate and support closer ties in research and teaching of environmental, food, and renewable resources with advances in the biological sciences.

Many units at the University of Minnesota have an emphasis in the biological sciences. The New College translates modern concepts in biology into methodologies and products useful for society. Contributing to the enhancement of biological research, teaching, and outreach must be a high priority for the New College.

6.1. Enhance the Plant Biology department in the area of translational biology.

Plant Biology, a department with roots in CBS due to its emphasis on the fundamental biology of plants, is a joint department with COAFES because the research and teaching of Plant Biology faculty are highly relevant to the activities of New College. The current funding for the Plant Biology Department largely comes from CBS. To foster greater interaction with New College, we recommend that funding for Plant Biology move towards more equitable support either by enhancing the New College investment or by encouraging joint appointments, or both, with the emphasis of new investments put on translation of advances in basic plant biology to applications in agriculture, natural resources, food and bioproducts.

6.2. Regularly budget for acquisition of new biological technologies.

New technologies needed by New College faculty, staff, and students should be identified and communicated to the New College administration through well defined procedures as soon as the technologies are recognized as important for placing the University in the top group of research universities. Such technologies include those that enhance computational biology, genomics, metabolomics, and other emerging disciplines, and investment in such technologies must command a high priority in order for the University to maintain or establish disciplinary leadership.

6.3. Curriculum development in biology should actively involve New College faculty.

The biological sciences will be an ever-increasing component of advances in New College fields of endeavor. Thus, the biological curricula are extremely important to New College faculty and students. New College faculty are encouraged to participate actively in defining curricula and teaching in appropriate biological graduate programs. New College should plan to teach translational courses that connect basic biological research and its applications. We recommend that the Council of Biological Deans be re-constituted and provide the leadership to implement this recommendation.

6.4. Foster interactions with the EEB Department.

The activities of the Department of Ecology, Evolution, and Behavior (EEB) are of critical importance to the New College. Ecology is important to the understanding of biological systems such as managed forests and agroecosystems, and evolution is central to the explanation of change in biological systems. Fostering enhanced interactions with EEB should be a part of the New College agenda. We recommend that EEB remain in CBS, given its excellent intellectual fit. An alliance of EEB with departments in the Environmental Sciences, Management and Policy cluster within the New College should be considered.

Deliverable #7: Recommendations on how the New College can be a model for the promotion of active public engagement.

Strong public engagement is essential if the University is to rise to top rank. Ultimately, all financial and social support comes from "satisfied customers," whether it's tuition, research grants, gifts, legislative appropriations, or public support. The University's commitment to public engagement is demonstrated by the recent creation of the Office for Public Engagement, and the New College can play a central role in this effort.

7.1. Public engagement should be expected and evaluated for all faculty, staff, and students.

Public engagement (see Appendix G) is the cornerstone of a land grant institution. It is not a diversion of resources away from the research mission of the University. Instead, it can enhance the academic experience for faculty, staff, and students by providing a richer context for the work that is done. Public engagement can also provide an effective vehicle for interacting with new and diverse audiences. At the international level, public engagement aids in propelling the University toward being among the top three public research universities by exposing the world to the University and the University to the world.

7.2. Develop and implement communication strategies to support increased public engagement.

Internal communication will reinforce the expectation and measures (see Appendix E) of public engagement for all faculty, staff, and students. External communication will help the public, including new and diverse audiences, get access to and become more engaged with the work of the University.

7.3. Optimize the partnership with Extension and develop new partners.

The New College needs to examine carefully its research and outreach efforts, and working with Extension, determine the most efficient means to work with citizens, stakeholders, and communities to share relevant information. New partnerships with other academic units not traditionally linked to Extension should be formed to strengthen both college and Extension outreach efforts. Potential examples include working with Academic Health Center on nutrition and healthy lifestyles, Humphrey Institute and Landscape Architecture on urban design to protect natural resources, and the Institute of Technology on renewable energy. Many other opportunities exist.

7.4. Better utilize units already positioned for broad public engagement.

Units in the New College that are already highly involved in public engagement (Landscape Arboretum, Bell Museum, Research and Outreach Centers, Cloquet) need to work more closely together. Alignment of New College and other University academic programs and public engagement opportunities at these facilities needs to be improved. These units can work with the Office for Public Engagement, both to share the expertise from these units with others who are less experienced in public engagement, and to form new partnerships with other units.

Deliverable #8: Recommendations regarding the name and mission of the New College.

The name and mission of the college should address all strategic action areas. Naming and mission will assist in recruiting the best students, faculty and staff. The name and mission also establish an organizational culture committed to excellence, help set priorities, and assure public engagement.

8.1. We propose that naming of the college employ one of the following approaches.

Approach 1: use familiar key words drawn from CNR, COAFES, and Food Science and Nutrition to describe the new college activities. Key words might include the words agriculture, natural resources, food, environment, renewable resources, sciences.

Approach 2: use “new words” that would be a departure from words used in the past. Such an approach could also use additional key words from above. Words to consider include translational life sciences, applied life sciences, sustainability, agri-sciences, systems

Through a broad consultative process, the administration should develop a process for selecting a name using one of the approaches noted above. See also recommendation 4. We recognize the importance of agriculture to the University of Minnesota and its mission. We recommend that the word “agriculture” and “natural resources” be considered in the final choice of the college name.

8.2. We recommend the following be the foundation of the mission of the New College:

New College's faculty investigate diverse areas of inquiry related to the applied life sciences, focusing on agriculture, environment, food systems, and natural resources. The College's research, teaching and outreach activities address management, conservation and renewal of environments and food systems in ways that benefit humans and the ecosystems upon which society depends. Scholarship in this area will impact a broad student population and expose them to modern techniques and novel ideas that support a successful and sustainable society. The principles guiding the college include addressing society's problems with interdisciplinary teams, conducting fundamental and translational research leading to vital applications, transforming education, and public engagement at the local, regional, and global levels. The research, teaching, and outreach will be made richer by the use of world class information technology. All of these practices will be carried out in an environment guaranteeing academic freedom and rewarding excellence.

V. APPENDICES

APPENDIX A: METHOD FOLLOWED /CONSULTATION AND COMMUNICATION USED BY TASK FORCE

Methods followed:

The Task Force met face to face every Friday from September 16 through December 9. The Strategic Positioning portal was used as a central resource library, for agenda posting, membership roster group emails and document version control. Each deliverable was assigned a “lead” task force member who provided leadership to develop the recommendations, rationale and relationship to the five key strategic positioning areas. Co Chairs met weekly and used email daily to manage and lead the task force.

Consultation and Communication:

Below are listing of consultation and communications.

- **Deans:** Face to face meetings with Deans Baugher, Elde, Klausner, Muscoplat, Stafford.
- **Associate Deans:** Face to face and written documentation with Mel Baughman and Ann Hill Duin.
- **Department Heads:** Written documentation based on set of targeted questions asking for vision of the department, linkage charts to other units.
- **New College website** <http://www.newcollege.umn.edu> a website created by Associate Deans in CNR and COAFES to post comments from citizens and post documents from twenty working groups made up of faculty and staff.
- **Working Groups:** Associate Deans met with task force to create specific charge statements for certain working groups that addresses the deliverables for the task force: Department Structure, Curriculum Development, Outreach/Extension/Public Engagement, Graduate Programs, Undergraduate, Research. Reports from these working group data/reports were reviewed by task force members.
- **Key Stakeholders in CNR and COAFES:** Bob Stine, Anne Kapuscinski and Dave Johnson, task force members worked with CNR and COAFES administration to identify 24 stakeholders to present at a Forum on October 20 to give their perspective. Emails from the three chairs of the task force were sent to the CNR and COAFES official stakeholder list asking for advice for the new college to be created.
- **Research and Outreach Center:** Written documentation requested from COAFES administration.
- **Other Universities:** Phone interviews, mission statements, web research from websites were conducted with more than 12 institutions that have related programs.
- **NewCo Animal Science/CVM:** Discussions with Animal Science Department Head.
- **College Design Science/Engineering** : Discussions with Task Force Chairs regarding common issues.
- **Joint Degree Programs:** Discussions with Task Force Chairs about joint program issues.

- **Focus Groups with Faculty:** Worked with Dick Kruger to conduct 5 focus groups with senior and junior faculty identified by Department Heads to get input on structure for the new college, naming for the new college, formation of an Institute for the Environment.
- **Budget Overview FY 2005-6, COAFES and CNR:** Chairs were provided and used data from budget office and compact processes.
- **Public Engagement:** Meeting with task force with Vic Bloomfield, Associate Vice President to discuss the public engagement deliverable.
- **Communications/Stakeholder Issues:** Consulted with Grant Moos and Steve Baker in U Relations.
- **Resource Alignment Team:** Consulted with Patty Franklin, Leanne Wirkkula, and others regarding relevant issues and used the SP portal for central library resources.

Charge Letter:

September 15, 2005

TO: Provost's Academic Task Force on College Design: College of Natural Resources/College of Agricultural, Food & Environmental Sciences/College of Human Ecology
Allen Levine, *Co-chair*, Professor and Head, Department of Food Science & Nutrition, CHE/COAFES
Ronald Phillips, *Co-chair*, Regents Professor and McKnight Presidential Chair, Department of Agronomy and Plant Genetics, COAFES
Deborah Swackhamer, *Co-chair*, Professor, Division of Environmental Health Sciences, SPH/CNR
Adam Birr, Graduate Student, Department of Soil, Water, and Climate, COAFES
Jerry Cohen, Professor, Department of Horticultural Science, COAFES
David Johnson, Former President & CEO, Cenex/Land O'Lakes
Anne Kapuscinski, Professor, Department of Fisheries, Wildlife & Conservation Biology, CNR
Steve Polasky, Professor, Department of Applied Economics, COAFES
Robert Stine, Associate Dean and Director, Cloquet Forestry Center, CNR
Kathryn VandenBosch, Professor, Department of Plant Biology, CBS
Jim Marshall, Forest Resources Manager, UPM Blandin Paper Co (Grand Rapids, MN)

FROM: E. Thomas Sullivan, Senior Vice President for Academic Affairs and Provost

RE: Provost's Charge to Task Force on College Design: CNR/COAFES/CHE

Thank you for agreeing to serve on the academic strategic positioning Task Force on College Design: College of Natural Resources/College of Agricultural Food & Environmental Sciences/College of Human Ecology, under the leadership of co-chairs, Allen Levine, Ron Phillips, and Deborah Swackhamer. The efforts of this task force will be critical to the overall success of the University's transformative strategic positioning effort.

Attached are documents that, taken together, comprise the charge to your task force.

- Attachment A contains an articulation of the University's overall goal and assigns to the task force the responsibility of retaining an "eye on the prize." Each of the issues identified in Attachment A, which is part of the charge of every task force, must be addressed.
- Attachment B contains criteria to be addressed by each task force. These criteria are drawn from the action strategies identified in the strategic positioning report *Advancing the Public Good: Securing the University's Leadership Position in the 21st Century* (February 2005). It is critical that each task force consider how its work can further each of the five broad action strategies.
- Attachment C contains the mission and deliverables specific to your task force, along with the date on which your task force report and recommendations are due.

- Attachment D contains the criteria for decision making, taken directly from the February strategic positioning report. Each task force should use these criteria as a framework for decision making.
- Attachment E contains a diagram of the process to be used by each task force. Note in particular the periods of required consultation with stakeholders.

There are a number of resources available to you as you pursue your charge. These include the professional staff member assigned specifically to assist your task force, the Resource Alignment Team, a toolkit of documents and templates, and the professional staff of University Relations appointed to facilitate internal and external communication of progress through the strategic positioning process. The Resource Alignment Team is a consulting group charged with providing support to all task forces in the areas of cross-functional alignment, change management, and subject matter expertise as needed. Support also is available from the Steering Committee for your strategic area. Finally, Leanne Wirkkula has been appointed to serve as a liaison between the academic task forces and me. Leanne will be able to help task force co-chairs access needed support and assistance. Leanne may be reached at (612) 625-0563, wirkkula@umn.edu.

The success of your task force will depend upon creative, forward-looking thought that maintains constant focus on the broad goals for the institution as a whole rather than the self interest of particular individuals or groups. Your effort will require consultation with all potentially affected stakeholders, from deans to students and everyone in between. It will require dedication and persistence. And together with the work of the other task forces, it will help guide the University on our journey to become one of the top three public research universities in the world.

Thank you for accepting this important challenge. I look forward to meeting with you at the kick-off work session hosted by President Bruininks this Friday, September 16.

Attachments: 5

cc: Al Sullivan, Executive Associate Vice President for Office of Planning and Academic Affairs
Sue Engelmann, Staff to the Task Force on College Design: CNR/COAFES/CHE
Sharon Reich Paulsen, Assistant Vice President and Chief of Staff
Leanne Wirkkula, Assistant to the Provost

APPENDIX B. GUIDING PRINCIPLES FOR ACHIEVING EXCELLENCE

What does it mean to be among the top 3 research universities for the newly developed college?

1. Promote research that opens up whole new fields of endeavor
2. Adopt departmental and college structure to best promote existing and newly emerging fields of inquiry; reorganization of departments only where there are clear advantages
3. Solve problems with teams: interdisciplinary research, interdisciplinary education, interdisciplinary outreach that builds bridges among departments and outside entities
4. Promote translational research that adds value in harmony with the environment and leads to public goods that enhance society
5. Educate students to become creative problem solvers – not only experts in their chosen field
6. Make the needs of the student a top priority
7. Reward excellence in research, teaching, and outreach
8. Balance resources toward those programs performing at high standards
9. Provide world-class information technology and research facilities
10. Develop a University/State covenant toward these principles – State provides seed money to foster excellence
11. Expect service to the University
12. Maintain outreach to society with communication with stakeholders
13. Absolutely protect academic freedom

“Ideas are like a candle’s light. My flame sheds light; you can light your candle off of mine and get light without diminishing mine” (Betsy Bourke)

APPENDIX C. GUIDING PRINCIPLES FOR INTERNAL ORGANIZATION OF THE NEW COLLEGE

- 1) The overarching goal of organization of the units within the New College will be to facilitate greater excellence and prominence in research, teaching and outreach.
- 2) The college structure and the mission of its units should explicitly support the mission of the college and advance its priorities.
- 3) The college organization should be clear and transparent from the perspective of students and external stakeholders, in addition to its faculty and staff.
- 4) The college organization and governance should promote interactions across departmental and disciplinary boundaries rather than emphasizing ‘silos’.
- 5) Departments should each be organized around a focused, topical mission that is shared by its members and programs.
- 6) The units should play to the strengths of the institution. That is, deleterious changes should not be made to strong, well functioning units. Changes should create synergies that enhance strengths.
- 7) Mergers or other restructuring of departments should be considered if
 - synergy resulting from a larger, restructured unit would create broader critical mass and a more positive research culture in a desired area of excellence; or
 - the resulting unit would better support existing academic programs, reduce redundancy or fragmentation of programs, and create greater efficiencies.
- 8) Department structure should facilitate strategic investment. Programs to be targeted for strategic investment should be those that can achieve or maintain national prominence and which address key aspects of the college’s mission. Programs where there is little likelihood of national prominence should not be targeted for growth, especially if they are not central to the college’s mission or they do not have substantial local significance. This is especially true if there is overlap in goals with another unit in the University where the other unit is already stronger.
- 9) College organization should promote cost effective and efficient administration.

APPENDIX D. FACULTY PARTICIPATION IN THE NEW COLLEGE

While opportunities to establish new areas of excellence clearly exist, the new college once formed will already have a world-class faculty. To take full advantage of the expertise and experiences of its faculty, it is important to involve them in each step of the developmental process. Thus, the faculty of the new college should play a central role in college governance and consultation, a role fully consistent with the faculty's primary responsibilities for the teaching, research, and service missions of this University. Faculty participation in governance is critical to articulation of a) the academic values that give definition and purpose to the college, and b) the diversity of ideas, shared responsibilities, and collaborative spirit that are predicted to be critical to the goals of the New College. For these reasons, it is essential that the faculty's central place in the leadership of the college be maintained and enhanced. Within the new framework of college organization the voice of the faculty needs to be clearly and distinctly articulated as part of the needed close cooperation among faculty, administration, staff, and students that is at the core of the University of Minnesota's goal of academic excellence.

Mechanisms for faculty participation in the government of departments, clusters and the college should be established at each level where faculty should have responsibility. Although the principles of faculty governance should apply to all academic units, the forms of faculty governance may vary among units. For example, faculty input could consist of meetings of all faculty members of a department, cluster, or the college as a whole or it may take the form of faculty-elected consultative or executive committees. Irrespective of the system established, every academic unit should have a set of written rules and procedures for its governance, copies of which should be available to each faculty member to encourage their active engagement.

Budgetary policies and decisions directly affecting those areas for which the faculty should have primary responsibility—such as, but not limited to, curriculum, subject matter and methods of instruction, research, faculty status, admission of students and those aspects of student life which relate to the educational process—should be made in concert with the faculty. In areas where faculty may not have formal governance authority, faculty should generally be consulted on matters likely to have a significant impact on the personal and professional welfare of faculty, students and staff. Academic departments, clusters and the college are expected to have both specific as well as overlapping goals and areas of concern, necessitating the involvement of faculty at several levels in both the consultative and decision processes with the college. The overarching principle should be one of maximization of inclusion of faculty input into processes and proposals that impact them in order to use the vast expertise and experience available within the college.

This appendix is directed toward the role of the faculty in college governance. The participation of undergraduate and graduate students as well as postdoctoral fellows and research associates in University life is also critical to effective academic governance and nothing in this appendix should be deemed to diminish or supplant their participation within the college and on college, cluster and departmental committees.

APPENDIX E. PROPOSED DEPARTMENTAL STRUCTURE FOR THE NEW COLLEGE

The outline below presents the proposed organization of existing departments of the College of Agricultural, Food and Environmental Sciences and the College of Natural Resources. Because of the interdisciplinary nature of the mission of the New College, the boundaries of the clusters should be porous, and departments or individual faculty may have interactions with more than one cluster. Cross-departmental activities may occur in the context of interdisciplinary graduate programs, centers or institutes, and multi-investigator research projects, and may also be facilitated by joint appointments.

Free-standing Departments

Department of Applied Economics

A New Department formed from merging Bio-based Products and Biosystems & Agricultural Engineering

Department of Rhetoric

Environmental Sciences, Policy and Management Cluster

Focus and Rationale: *The Environmental Sciences, Policy and Management Cluster investigates conservation and utilization of ecosystems and natural resources, and draws on broadly interdisciplinary expertise in biological and physical sciences, policy and management.*

Programs in the cluster will provide integrated, interdisciplinary training to students who seek careers involving creative applications in environmental resource management. This cluster has a very strong emphasis on outreach to stakeholders and continuing education for professional resource managers.

Department of Fisheries, Wildlife and Conservation

Department of Entomology

Department of Forest Resources

Department of Soil, Water and Climate

Food, Nutrition and Animal Sciences Cluster

Focus and Rationale: *The Food, Nutrition and Animal Sciences Cluster investigates basic and applied research related to animal and human health. This cluster has common programs related to food safety and animal/human nutrition. Programs in the cluster will provide integrated and interdisciplinary training to students interested in food systems that impact animals and humans. The cluster works with many stakeholders interested in food systems and food safety.*

Department of Animal Science

Department of Food Science and Nutrition

Plant Sciences Cluster

Focus and Rationale: The Plant Sciences Cluster engages in the biology of plants, their synthesis of foods and renewable materials, and their function and utilization in natural and managed ecosystems. Academic programs in the cluster will provide training in basic plant sciences and translation of advances in modern biology, including genomics and biodiversity, to biotechnology, agriculture, horticulture, forestry and natural resource management. The cluster conducts outreach through the Bell Museum, the Landscape Arboretum, Extension, and the Research and Outreach Centers, and interacts broadly with stakeholders including commodities groups and the horticulture industry.

Department of Agronomy and Plant Genetics
Department of Horticultural Sciences
Department of Plant Biology (joint with CBS)
Department of Plant Pathology

APPENDIX F. FIGURES FOR STRATEGIC MODEL FOR THE INSTITUTE OF THE ENVIRONMENT

Figure 1. Model of relationship of Institute of the Environment and other UMN colleges. The administrative home would be New College, with faculty participation from throughout the UMN system.

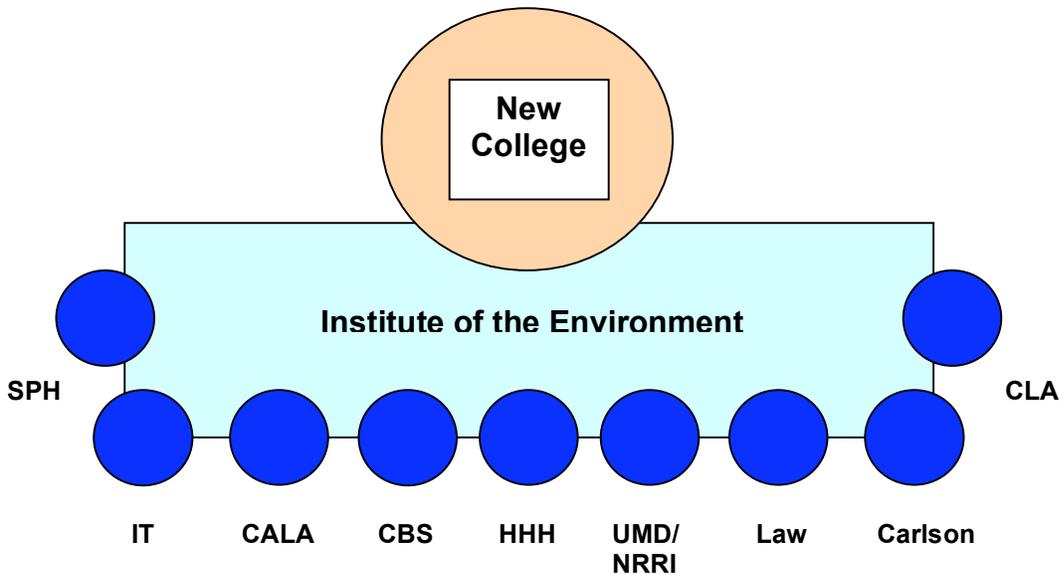
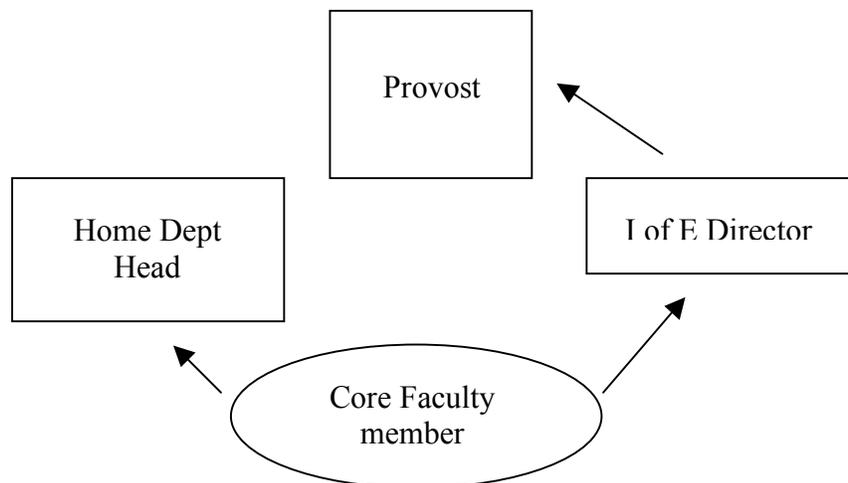


Figure 2. Reporting relationships for Core Faculty member within the Institute of the Environment. Both Department Head and Institute Director will provide evaluation of faculty performance.



APPENDIX G. PUBLIC ENGAGEMENT

Public Engagement at the University of Minnesota

Public engagement is at the heart of the units that make up the New College. To a large degree, these units define and carry out the core land grant mission of the University. However, with the creation of a new college and an increased emphasis on public engagement at the University, new opportunities exist.

To become a model, the New College should fully embrace the Council on Public Engagement's goal to "incorporate public engagement as a permanent and pervasive priority in teaching, learning, and research activities..." (www.umn.edu/civic/about/index.html). The University's definition of engagement is "the partnership of university knowledge and resources with those of the public and private sectors to: 1) enrich scholarship, research, and creative activity; 2) enhance curriculum, teaching and learning; 3) prepare educated, engaged citizens; 4) strengthen democratic values and civic responsibility; 5) address critical societal issues; and 6) contribute to the public good."¹ This definition is broad enough to encompass all facets of work done in NewCo and to include all faculty, staff, and students.

Evaluating and rewarding public engagement for faculty, staff, and students

The reward system must be strengthened to foster public engagement by all members of the New College. For faculty and staff, public engagement should be part of their annual performance review and salary adjustment. For Tenure/Tenure Track faculty in particular, public engagement needs to become a meaningful part of the promotion and tenure process to ensure significant participation. Creation of the new college offers an excellent opportunity for departments to revise their promotion and tenure criteria to strengthen the public engagement component. This could be reinforced by strengthening the University-wide Promotion and Tenure criteria related to public engagement. With new criteria in place, it becomes incumbent upon department heads and Promotion and Tenure committees to appropriately apply them.

¹ *Resource Guide and Recommendations for Defining and Benchmarking Engagement*, Committee on Institutional Cooperation (2005).

APPENDIX H: NEW COLLEGE WORKING GROUPS REPORTS

The purpose of the Working Groups was to support the Academic/College Design Task Force in completing its charge from the Provost.

Twenty working groups were integrated under three clusters to most efficiently share information with the Task Force. The chairs of each Working Group convened as the cluster committee to ensure integration of efforts and to avoid inconsistent efforts and duplication.

Final Reports of Working Groups: Compilation Report

Posted on the New College website <http://www.newcollege.umn.edu>