

## **ACADEMIC PROGRAM REVIEW SELF-STUDY**

**Name of Unit: College of Forest Resources**

**Degrees:**

- **Bachelor of Science in Forest Resources with a Major in Environmental Science and Resource Management**
- **Bachelor of Science in Forest Resources with a Major in Paper Science and Engineering**
- **Minor in Environmental Science and Resource Management**
- **Minor in Streamside Studies**
- **Master of Science**
- **Master of Forest Resources in Sustainable Forest Management**
- **Master of Environmental Horticulture**
- **Doctor of Philosophy**

**Year of last review: 1996**

**Chair: Gordon Bradley**

**Self-study coordinator: Steve West**

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## **SECTION I: EXECUTIVE SUMMARY**

### **Mission Statement of the College of Forest Resources**

*To generate and disseminate knowledge for the stewardship of natural and managed environments and the sustainable use of their products and services*

### **Summary of Findings of Self-study**

Unprecedented changes have characterized this 10-year reporting period for the College of Forest Resources (CFR). The leadership, organizational structure, modes of operation, and curricula are new. This self-study report briefly documents these changes and their positive effects on College function. CFR is presently an undepartmentalized college without subdivision. A new set of faculty bylaws helps govern College operations along with a new set of guidelines for annual faculty work planning and faculty promotion, merit, and tenure. CFR faculty, staff, and students engage in strategic planning, meeting each year to review progress on the current plan, which is reset every three years. The CFR Planning Committee works with the CFR community to implement the plan and assesses progress. About a third of CFR faculty members have retired in this period and all but three replaced in the last two years. CFR's finances are solid with two areas of concern: inadequate funding of teaching assistantships and underfunded operation budgets of CFR centers. Both shortfalls are addressed with funding from unfilled faculty positions. With leadership from CFR Development staff (3.5 FTE), CFR raised \$20.1M during the eight-year University of Washington (UW) Creating Futures campaign, exceeding the campaign goal of \$17M, a testament to the strength of the College's alumni and constituent relations. At the beginning of the fiscal year the value of CFR endowments was \$31M. CFR currently provides its faculty with three endowed chairs and seven endowed professorships. The College's IT team (now 4 FTE) provides a reliable computing environment for the main campus, the UW Botanic Gardens, the Center for Sustainable Forestry at Pack Forest near Eatonville, WA and the Olympic Natural Resources Center in Forks, WA.

CFR has consolidated its undergraduate teaching from seven former programs into two curricula: Environmental Science and Resource Management (ESRM) and Paper Science and Engineering (PSE). Both curricula are growing, the ESRM major by double digits in each of the last three years. Fall 2008 undergraduate enrollment is 252 majors. The ESRM curriculum has options for Landscape Ecology and Conservation, Restoration Ecology and Environmental Horticulture, Sustainable Forest Management, and Wildlife Conservation. The PSE curriculum has a Business Option. Both curricula require a capstone experience for graduation and both offer UW honors tracks at the departmental and college levels. Minors are available in ESRM and Streamside Studies. An assessment program for the undergraduate curricula and the Master of Forest Resources (Sustainable Forest Management) started this year. At the graduate level, 13 previous programs have been reduced to four, two for learned degrees (MS and PhD) and two for professional degrees, a Master of Forest Resources (MFR) in Sustainable Forest Management and a Master of Environmental Horticulture (MEH). CFR has participated in three NSF-sponsored Integrative Graduate Education and Research Traineeship (IGERT) programs in the past seven years. CFR faculty members also teach in the Biology Department, the Program on the Environment, THE Daniel J. Evans School of Public Affairs, the College of Engineering, and the Center for Quantitative Science, generating about 30% of CFR's student credit hours, a total not properly accounted for by the UW. Overall trends in student credit hours, enrollment,

graduation rates, and student evaluations are positive. An assessment program for the graduate program is being developed by the CFR Curriculum Committee for implementation next year. Efforts to diversify CFR have been positive, with women now comprising about half of CFR undergraduate enrollment and students from underrepresented groups about 16%, a doubling of these percentages from the early 1990s. In the same period about half of CFR faculty hires have been women and 13% persons of color.

CFR is engaged in biological, physical, and social science aspects of environmental inquiry with emphasis on terrestrial environments spanning a gradient from urban settings to wildlands. Much research centers on the Pacific Northwest, but work continues in more than 12 foreign countries. New initiatives in research include phytoremediation, both at the whole plant and molecular levels, remote sensing, bio-energy, and climate change. Several CFR faculty members were co-receivers of the Nobel Peace Prize for their contributions to the International Panel on Climate Change. The NSF-funded National Ecological Observatory Network (NEON) has selected CFR's Wind River Canopy Crane Research Facility as the Pacific Northwest core site. Research funding declined in the recent past due to faculty retirements, but with the addition of new faculty, proposals for grant funding in the last two years have increased 55% and funding is expected to increase, either matching or exceeding previous levels. Although some labs have been renovated in support of new research, many labs need updating. Outreach activities are either handled centrally through the Northwest Environmental Forum and the Denman Lecture Series, or through CFR's research centers and cooperatives, including the Center for International Trade in Forest Products, the Center for Sustainable Forestry at Pack Forest, the Pacific NW Cooperative Ecosystem Study Unit, the Olympic Natural Resources Center, the Stand Management and Precision Forestry Cooperatives, the Water Center, the UW Botanic Gardens, and the Wind River Canopy Crane Research Facility.

### **Brief Outline of Recent or Pending Major Changes**

As substantive as these changes have been, another possible change is on the horizon. The majority of the Faculty of CFR voted on November 5, 2008 to join the newly formed College of the Environment (CoEnv) as a core unit. Assuming that this initiative goes forward over the next year, CFR will become a school within the CoEnv led by a Director reporting to the Dean of CoEnv. The term of the Dean of CFR ends 1 July 2009. As presently envisioned, the School would retain all elements of CFR and initially would function largely as it does now except for changes in leadership. Over time changes would be expected in research, teaching, and service reflecting interactions with other faculty and units in CoEnv and the priorities of the larger College. At present it is not clear which units from the Seattle campus will join CoEnv, but as CFR is the largest of the units proposed for inclusion, it will have a strong role. The positive results of the changes documented in this self study enable CFR to bring an attractive and growing instructional program, a productive young faculty, and an established set of outreach programs to the CoEnv. CFR is well prepared for the challenges of environmental stewardship, whether as a college or a school within CoEnv.

## **SECTION II: ORGANIZATION AND GOVERNANCE**

### **A. Organization**

The College of Forest Resources (CFR) (see organization chart, Appendix A.1) is one of 17 colleges and schools within the University of Washington (UW), all directed by Deans or Acting Deans. All Deans report to the President and Provost. The Office of the Dean provides support to the Dean in meeting the responsibilities of the executive officer of the College, including College-level coordination of undergraduate and graduate instruction, coordination of the research program, administration of research funds, administration of College lands, and administration of support services. CFR is structured as a single faculty unit headed by a Faculty Chair and operating under a set of bylaws (See faculty bylaws, Appendix A.2). Although undepartmentalized, the faculty function as a department under the policies and rules of the UW as set forth in the Faculty Handbook. Faculty recommend standards of academic programs and administer curricula; govern student recruitment, advising, grading, and graduation; conduct faculty searches and vote on recruitment of faculty; recommend on promotion, merit, and tenure; administer faculty teaching and workload assignments; participate in program development; and recommend on development and allocation of facilities. Standing committees (some elected and some appointed) report to either the Dean or the faculty as a body and assist in the functions assigned to the Office of the Dean and the faculty. Ad hoc committees and advisory councils are also established when appropriate. Where appropriate, committee representation includes faculty, students, and staff (see committee list, Appendix A.3).

CFR's centers and cooperative programs offer opportunities for multi- and interdisciplinary inquiry. CFR administers six interdisciplinary centers, three of them jointly with other UW units. These centers generally focus on research and outreach; one center administers an interdisciplinary undergraduate academic program. Programs like the Stand Management Cooperative and the Precision Forestry Cooperative are organized as research cooperatives, with members from private industry and government agencies. Others are organized as consortia or networks, drawing on the expertise and interests of faculty, students, and staff from CFR and throughout the UW. CFR also collaborates with Washington State University and with federal agencies. The U.S. Forest Service, the U.S. Geological Survey, and the National Park Service house personnel at CFR who hold faculty appointments. Where appropriate, advisory boards and policy committees composed of external stakeholders provide input and guidance to CFR and to its research and outreach centers and programs (See advisory committees, Appendix A.4).

Interdisciplinary initiatives within the CFR are also enhanced by faculty joint appointments with the Colleges of Ocean and Fishery Sciences and Engineering, adjunct appointments with several UW units, and affiliate faculty who come from a wide range of external public and private natural resource and environmental agencies and organizations. CFR faculty participate in two undergraduate interdisciplinary programs (Program on the Environment and Quantitative Science) and three graduate interdisciplinary programs (Quantitative Ecology and Resources Management, a concurrent master's degree program with the Evans School of Public Affairs, and the cooperative Peace Corps International Master's Degree).

## **B. Budget**

Key Points (all table references appear in Appendix B)

The State and Local Allocations comprise the core funding for carrying out the business of the College. Other than required salary increases, these sources have been static for many years, far more years than are shown in Table 1.A. Table 1.B shows the general budgeted categories of these funds: salaries for faculty, TA/RAs, and staff, and operations. The distribution across these categories is for the most part constant, with faculty salaries budgeted at 61% and staff salaries, largely committed to centers, at 32%. The apparent increase in TA/RA salaries starting 07-08 is due to a small amount of reinstated State funding for CINTRAFOR, which in recent years had been provided in another form. Operations are budgeted at an inadequate 4%. Table 1.C shows the distribution of these core funds across three general functions: administration, instruction, and centers. On a budgeted basis, centers currently have around 24% of available core funds.

Other than the Dean's salary, the faculty salaries in the administrative budgets are vacant faculty positions, which are an important tool in balancing CFR's books. Faculty salaries move between administrative and instructional budgets as retirements occur and as new faculty are hired at entry levels. These "Dean's reserves" flow to both instructional and center budgets and cover long-standing shortages in TA and operations funding, along with administrative supplements. They also form an important source of flexible funding for new initiatives and nonrecurring special support. The increase in faculty salaries in center budgets reflects the two recently filled partial Precision Forestry positions, approved by the legislature many years ago; a percentage of their effort is directed toward specific precision forestry objectives.

Tables 4, 5, and 6 compare actuals with budgets. Table 5.B highlights the inadequate TA funding in the instructional budget, currently averaging \$130,000/year. Requests for increased permanent TA funds have been made for several years without success. Recently opportunities to make requests have been curtailed. The 07-08 increase in instructional budget staff salaries shown in Table 5.C reflects the 40% return of retired faculty; these are centrally funded and appear in nonfaculty object codes.

The majority of CFR operations funding resides in center budgets. Table 5.D highlights the inadequate operations funding in all areas, requiring around \$200,000 per year to solve. In addition to recent enormous increases in fuel costs for ONRC and Pack Forest, general operations costs for all units will continue to increase with inflation and the reassignment of various costs from central offices to individual units.

Table 7 displays grant activity and related funding. The decrease in grant activity related to numerous faculty retirements is now turning around with the hiring of new faculty in cutting edge areas. In the relevant two-year period, the submission of new grant proposals has increased by 55%. Research Cost Recovery is also increasing, although still inhibited by the long-standing issue of the USFS PNW Station, one of our major funders, not allowing indirect costs.

CFR has a long history of generous donors. In the recent campaign \$20,138,283 was raised in both current use and endowed funds. Table 8 summarizes the type and scale of CFR endowments. These are primarily restricted funds, dedicated to student, faculty, and center support.

### **C. Resources**

CFR has mechanisms to ensure the highest and best use of resources. Out of strategic planning has come a change in faculty recruitment. Rather than replacing in kind, CFR seeks faculty who can create new knowledge through collaborative and innovative research while also contributing to professional responsibilities at both undergraduate and graduate levels. The “faculty profile” process, involving the entire faculty, informs the Dean of emerging faculty needs. Similarly, staff vacancies are not necessarily filled in-kind. Recently two silo-type fiscal tech positions were replaced with two fiscal analysts with responsibility to integrate the full life cycle of budgetary issues, providing better service to faculty and addressing many audit concerns.

CFR encourages faculty, staff, and student committee membership, creating an environment where ideas emerge from all sectors of CFR. In addition the Resources Committee and the Elected Faculty Council specifically advise the Dean regarding resources. Since 1995 CFR has held an annual all-college planning event, where all members of the college can provide input about all aspects of CFR. Resource issues emerging from the 2008 meeting are three-year goals to improve CFR facilities, including green technology, and to increase funding for CFR, including a commitment to increase self-sustaining revenue by 15%.

CFR has invested heavily in IT resources and their security in order to better leverage other resources. The 4.0 FTE IT unit is supplemented by an additional 1.0 FTE working with CFR and UW data and their web display and use. This group facilitates use of technology in teaching, faculty and student recruitment, collaborative processes, and information sharing. Through the CFR network, employees can securely access their files from anywhere.

CFR has a 3.5 FTE Development and Alumni Relations staff. In the recent campaign \$20,138,283 was raised in both current use and endowed funds. CFR’s 80 endowments are primarily restricted funds, dedicated to student (52 current endowments, which are leveraged with RA and TA positions), faculty, and center support. Post-campaign, CFR Development will focus on developing relationships with untapped foundations, whose missions may align well with CFR centers. They will also steward existing donors and alumni. CFR’s Distinguished Alumni Seminar, providing students with real-life examples of career possibilities, also fosters a life-long connection to CFR.

CFR has many centers that focus faculty and student resources on interdisciplinary and outreach functions. The Dean is currently carrying out an internal review of centers, many of which must manage physical facilities. Directors and leaders at each center are charged with effective resource management. While these external facilities are mostly in good shape, CFR’s main campus facilities are greatly in need of updating. Anderson Hall is scheduled for a “restore the core” update soon. An ongoing goal is to have one laboratory renovation funded in each minor modifications cycle; Bloedel (Hall) 254 and Bloedel 209 are recent examples. With residual



funds from earlier projects a video conferencing capability was included in the renovation of Bloedel 292, and Bloedel 311 was remodeled into workspaces for TAs, visitors, and retired 40% faculty.

CFR has a long history of sharing resources. It is not unusual for CFR faculty to teach courses owned by other units. Receiving credit for this has been a continuing battle, and student credit hours figures routinely follow unit prefixes rather than the resources used to generate them (Section III D.ESRM.2). CFR also provides direct funding to other units, such as TAs and administrative funding for Center for Quantitative Studies (CQS).

#### **D. Staffing**

CFR has several mechanisms to promote faculty development and to document and reward productivity, e.g., periodic workshops, mentoring, work planning, an interactive faculty data base, and a documented promotion, merit, and tenure (PMT) process. Developed primarily to provide a collegial and efficient transition into CFR for new faculty, the orientation and mentoring program is also available to veteran faculty. The program is multi-faceted and designed in modular components. The basic components include workshops and work planning; workshop elements appear in Appendix II D.1.

Work planning for all faculty is conducted on an annual basis. Faculty develop a work plan and then meet with the Faculty Chair to discuss activities for the coming year. Teaching responsibilities are projected seven quarters in advance to facilitate course planning and scheduling with the Office of Student and Academic Services. Topics discussed include teaching, undergraduate advising and research, graduate program (including advising, teaching, and support), research program (including current and planned activities), and service to CFR, UW, and the professional community. An essential part of work planning is identifying areas where CFR can direct resources to ensure the maintenance of a strong program for faculty members.

Criteria for PMT are consistent with the UW Handbook. In order to ensure that all faculty are evaluated using the same criteria, a uniform data set has been developed. This central database is maintained and used by the College Promotion, Merit, and Tenure Committee in making PMT decisions. The database accumulates and archives data on the performance measures outlined in Appendix II D.2. Each faculty member is provided with a listing of the contents of his/her database for the last three calendar years for verification/correction. In addition to the database information, each individual is asked to submit a current CV and a statement providing further explanation of activities or events that may influence interpretation of his/her portfolio by the committee. In addition to promotion and merit pay, faculty are recognized with sabbatical opportunities and a growing number of professorships and chairs.

Staff employees are similarly evaluated on an annual basis on such topics as progress toward previously set goals, performance of job duties and responsibilities, team participation, service orientation, noteworthy achievements, goals for the next review period, training needed/desired for the next review period, and any other management support needed/desired. The current Dean

is a strong advocate of staff training and has funded many training opportunities for developing improved job skill sets and for general advancement purposes.

Each Spring Quarter, CFR holds a recognition event, providing a formal opportunity to recognize the achievements of the entire CFR community--students, staff, faculty, and administrators--through a variety of award categories. Recognition includes a framed certificate and in some cases a gift certificate.

On an on-going basis individuals can recognize others at any time through the CFR Stars Program. Any person can get a Starbucks gift card, funded by the Dean, to give to any other member of CFR as recognition of an activity that furthers CFR's mission, vision, and goals.

## **SECTION III: FACULTY, TEACHING, AND DEGREE PROGRAMS**

### **A. Teaching Responsibilities**

CFR faculty teaching responsibilities are determined during work planning sessions each year with the Faculty Chair. Faculty are encouraged to maintain a balanced portfolio that includes a well established teaching, research, and service program, thus assuring a reasonable and equitable load among all faculty. All faculty are expected to teach a regularly scheduled course each quarter that they are on the state payroll. The general rule to insure an equitable teaching load among faculty is that their respective portfolios will include a lower and upper division course and a graduate course. Lower division courses are usually CFR service or core courses, while upper division courses are required in various CFR curriculum options. Graduate courses are specific to faculty expertise. During annual work planning sessions, teaching responsibilities are projected out seven quarters to facilitate course planning and academic advising.

CFR faculty often participate in interdisciplinary teaching either through the Program on the Environment, CQS, or NSF-funded IGERT (Integrative Graduate Education and Research Traineeship) collaborative teaching programs. Faculty are encouraged to contribute their expertise to the broad programs of the UW and participation is worked out during the annual work planning process. Discussions between the Faculty Chair and interdisciplinary unit directors to achieve reasonable resource distributions are held prior to committing CFR faculty resources. Seldom is it the case where one unit buys out the time of a faculty member, rather an assignment of the student credit hours is made to the respective faculty members unit. However, a persistent issue is the UW's ability to track student credit hours for faculty teaching in units outside CFR (Section III D.ESRM.2). While this is a problem, it seldom detracts from CFR faculty participating in interdisciplinary teaching efforts. In cases where an interdisciplinary course is heavily enrolled, sharing or covering entirely the cost of TA support may be negotiated to offset demands on CFR resources.

### **B. Instructional Effectiveness**

All courses taught by CFR faculty are required to be evaluated using forms provided by the UW Office of Educational Assessment. These are administered at the end of each quarter and results are returned to the faculty member, Dean, and Faculty Chair. If the evaluations are low, the Faculty Chair consults with the faculty member about how the deficiencies might be addressed. In most cases, faculty are encouraged to consult with the UW Center for Instructional Development and Research (CIDR), where an extensive array of services is available to improve teaching effectiveness. CFR has enjoyed a productive relationship with CIDR over the years in course development, course evaluation, peer review of teaching procedures, and curriculum assessment protocols, and CFR TAs are encouraged to take advantage of CIDR programs. CIDR, CFR workshops on teaching, and IGERT programs have been the primary means of keeping abreast of best teaching practices and innovations. CFR has benefited from the involvement of many of its faculty and students in three UW IGERTs and the resulting transfer of many IGERT innovations into CFR's mainstream teaching and curricula. These include computer technology, interdisciplinary and transdisciplinary work, group authored research papers, field oriented seminars, and team teaching.

A peer review process has been implemented to serve two important functions. First, evaluation is required as a component of CFR's PMT decisions. Second, the peer review process generates constructive discussions about teaching that lead to improved teaching standards.

### **C. Teaching and Mentoring outside the Classroom**

1. CFR faculty are involved in undergraduate student learning and development in many ways outside of classroom teaching. In CFR's Environmental Science and Resource Management (ESRM) program, designated faculty advisers for each of the four program options guide students through the option and associated internship and career opportunities. In the Paper Science and Engineering (PSE) program, designated faculty provide program and career advising, as well as make program admission decisions. PSE faculty also help juniors and seniors set up formal internships, and mentor students through their final design capstone projects. Faculty in both programs supervise students in independent study and research opportunities, which can be lab or field based.

Both ESRM and PSE engage students in research, internship, and other educational opportunities outside the classroom. For example, ESRM students can spend spring quarter in Costa Rica with a CFR faculty member, get credit for formal internships (Appendix III C.1), or participate in undergraduate research. All ESRM students are exposed to the field in the program's core courses, which have required field trips, and many continue to take field-intensive coursework throughout their academic careers. Field trips provide students with greater interaction with faculty, contributing to student development, mentoring, and advising and providing excellent experiential learning opportunities. (CFR's field trips were recently highlighted by the Sierra Club Magazine.) PSE students are required to participate in formal internships that are evaluated by both the faculty and the employer. PSE students also conduct research in a design capstone and have opportunities to participate in undergraduate research projects with CFR faculty.

CFR offers undergraduate Honors in both majors at both the College and University levels (Appendix III C.2 & 3). The University-level program, coordinated in conjunction with the UW Honors program, includes courses outside CFR designed as Honors sequences. The College-level program follows similar programs in requirements (Fisheries for ESRM and Engineering for PSE).

The ESRM and PSE majors both have a capstone or internship as a required component to the degree. The ESRM capstone requirement is flexible. Students can either complete an independent undergraduate research thesis, an independent or group senior project, or complete the Restoration Ecology Capstone coursework to fulfill the requirement. All require faculty signatures and a form to be filed, thus allowing for uniformity and accountability in the process (Appendix III C.4). PSE students all complete an internship course, PSE 497, and a design capstone in PSE 487 and 482. Evaluation in these courses comes from employers and/or peers as well as faculty, and exposes students to real-world problems they may face after graduation.

2. During the past decade, the quantity of highly qualified applicants to CFR's graduate program has consistently exceeded the numbers that can be admitted; CFR has thus focused on recruiting

a diverse graduate student body, working with the UW GO-MAP program. CFR also participates in student recruitment fairs and conferences, including MANRRS (Minorities in Agriculture, Natural Resources, and Related Sciences), SACNAS (Society for the Advancement of Chicanos and Native Americans in Science), and SAF (Society of American Foresters). The CFR website is a major recruitment tool that provides links to faculty research and relevant requirements and coursework. CFR tracks the success of recruitment methods by asking applicants how they heard about CFR, and uses this information to continually refine its recruitment strategies.

Faculty mentor graduate students on an individual basis. All graduate students are assigned a temporary chair during the admissions process who helps students with initial course planning and starts them thinking about their research or project. Graduate students then establish a permanent supervisory committee (Appendix III C.5) with a permanent committee chair by the end of their second quarter. A professional graduate advisor in CFR's Office of Student and Academic Services provides more general advising and assistance with graduate school policies and procedures, and tracks student progress with specific forms. Student progress is tracked by the supervisory committee using the program of study form (Appendix III C.6 & 7) submitted by the end of the student's second quarter and filed in the student's permanent file. The form indicates all relevant timelines and benchmarks, and requires a yearly meeting of the supervisory committee. At orientation, graduate students receive the CFR Graduate Student Guide, which outlines all relevant academic standards, procedures, and requirements (Appendix III C.8). It is also posted on the CFR website at [http://www.cfr.washington.edu/academicPrograms/graduate/cfr\\_redbook.pdf](http://www.cfr.washington.edu/academicPrograms/graduate/cfr_redbook.pdf).

A self-subscribed student job list with daily postings is maintained by the Office of Student and Academic Services. CFR participates in an annual UW Environmental Career Fair in January that hosts relevant employers to the field (all non-academic). Career resource information is provided in the Student and Academic Services office and on the CFR website. Students are also referred to the UW Center for Career Services for individual career counseling. For graduate students seeking academic careers, most preparation and advising is done individually by faculty.

3. CFR provides training and support for Academic Student Employees (ASE) appointees and potential appointees by requiring all new graduate students to complete CFR 500, a 1-credit orientation course. In this course, the ASE union gives a presentation, and CFR/UW policies and procedures are outlined. To complete the course, students must also complete a safety seminar taught by Environmental Health and Safety (Appendix III C.9), which covers both field and lab safety. ASE appointments also require a form that defines the duties of the ASE and is signed by both parties (Appendix III C.10 & 11), which then generates an appointment letter. All new TA ASEs are referred to the CIDR TA conference; this is also recommended for continuing TAs. RAs receive training and support from their faculty supervisors because their roles and duties vary.

## D. Degree/Certificate Programs

### Undergraduate Degrees

Degree	Major	Option	Minor
Bachelor of Science in Forest Resources	Environmental Science and Resource Management	4 Options—1. Landscape Ecology and Conservation, 2. Restoration Ecology and Environmental Horticulture, 3. Sustainable Forest Management, 4. Wildlife Conservation.	Environmental Science and Resource Management
Bachelor of Science in Forest Resources	Paper Science and Engineering	Business Option	None.
None—Minor Only	None	None	Streamside Studies

### Graduate Degrees

Degree	Research Interest Groups (no formal degree coding)
Master of Science (MS)	Bioresource Science and Engineering; Forest Ecology; Forest Soils; Forest Systems and Bioenergy; Restoration Ecology and Environmental Horticulture; Social Sciences; Sustainable Resource Management; Wildlife Science
Master of Forest Resources (MFR)	The MFR in Sustainable Forest Management degree is an SAF accredited professional degree; there is only one curriculum/pathway.
Master of Environmental Horticulture (MEH)	The MEH degree is a professional degree; there is only one curriculum/pathway.
Doctor of Philosophy (PhD)	Bioresource Science and Engineering; Forest Ecology; Forest Soils; Forest Systems and Bioenergy; Restoration Ecology and Environmental Horticulture; Social Sciences; Sustainable Resource Management; Wildlife Science

### BS in Forest Resources with a Major in Environmental Science and Resource Management (ESRM)

1. The ESRM major requirements are outlined in detail in the appendix (Appendix III D.1). Students in the major take courses in composition, calculus, statistics, biology, chemistry, economics, communication, and earth science as supporting courses, generally outside CFR or at a community college before transfer. They then continue into CFR core courses, learning at the 200 level about sustainability in social and ecological contexts and at the 300 level about environmental assessment with further exploration of sustainability in a seminar format. Students then have a choice of one of four options that directs their restricted electives: Landscape Ecology and Conservation, Restoration Ecology and Environmental Horticulture, Sustainable Forest Management, and Wildlife Conservation; or they can choose from upper level ESRM course offerings to create their own course of study. To complete their degree, all students must complete the capstone requirement, which can take three

forms: a yearlong restoration capstone, a senior project, or a senior thesis. These choices are outlined in a form (Appendix III C.4) and supervised by faculty. ESRM has very different requirements from CFR's other undergraduate major, Paper Science and Engineering.

2. ESRM was started in 2004, so the overall UW Office of Academic Programs (OAP) summary data are not very telling about trends. Undergraduate enrollment tracking spreadsheets are provided in the appendix (Appendix III D.2); they show significant ESRM growth since 2004. The spreadsheet is based on the Registrar's Census Day data, and is consistently used by CFR to monitor trends on a quarterly basis. CFR faculty also teach in Quantitative Science, Biology, and Program on the Environment, among other UW programs. Because the OAP summary of student credit hours tracks only by unit prefixes, a spreadsheet (information obtained from UW Registrar's Office) is included in the appendix (Appendix III D.3) that shows CFR's actual student credit hours and that the OAP summary underestimated CFR student credit hours by about 31%. Overall, CFR feels that trends in student credit hours, enrollment, and overall student evaluations are positive.
3. ESRM benefits the UW by providing a general environmental science major based on the concept of sustainability that is open to all students. ESRM is a unique program in which students learn how to think critically about and solve environmental problems, ultimately benefitting the region, Washington state, and the nation by providing well-educated environmental and natural resource managers for city, state, and federal government, non-profit, NGO, and industry positions.
4. ESRM desired learning objectives are included in the Assessment Plan in the appendix (Appendix III D.4). It outlines expected knowledge sets, skill sets, and the development of comprehension, integration, and meaning. It also states the educational objectives of the program and outlines implementation and assessment strategies both for ESRM and the related Master in Forest Resources in Sustainable Forest Management. Since the ESRM program is relatively new and the options were added in 2007, monitoring and assessment of the core and option courses, collection of exit survey data (Appendix III D.5), and overall assessment is done on an annual basis. CFR graduates have a high level of placement and CFR academic programs receive positive reviews from employers, peer institutions, and the College Visiting Committee.
5. ESRM will become even more productive through continued increases in major enrollment and development of a course enrollment policy that redirects instruction from under enrolled courses to larger courses. The assessment plan will be used to continually monitor program quality and make adjustments as necessary. An alumni survey five years after graduation will be developed to solicit additional data about preparation and placement of graduates.

#### BS in Forest Resources with a Major in Paper Science and Engineering (PSE)

1. The PSE major is an ABET-accredited (Accreditation Board for Engineering and Technology) engineering major. PSE majors generally have two points of entry into the program: freshmen direct entry and junior pre-engineering. All students must apply to the major and are evaluated for strength in natural science, math, and engineering. All entering majors take PSE 201, Introduction to Pulp, Paper, and Bioproducts, coupled with PSE 202, Pulp and Paper Lab and Field Studies. The complete program of study is outlined in the appendix (Appendix III D.6). Freshmen then continue to complete their math, chemistry, and other basic requirements that are similar to other UW pre-engineering programs before focusing on the major PSE and supporting Chemical Engineering coursework. Juniors and

transfers focus on PSE courses and Chemical Engineering since they have completed the pre-engineering coursework. Students also pick technical electives or choose to complete the Business Option, which is noted on the transcript. Before graduation, all students participate in an internship as well as a capstone design project.

2. The OAP Summary data does not break out the PSE major, so CFR's tracking spreadsheet is in the appendix (Appendix III D.2). It shows steady growth in PSE enrollment, with a target of no more than 80 students in the major at the current faculty levels. PSE experienced some low enrollment for a few years, which resulted in a low level of degrees granted, but as students continue to move through the major, these numbers will grow. These data are from the UW Registrar's Office to account for CFR faculty teaching outside the College.
3. PSE benefits the UW by offering an engineering program with hands on experience for students, strong ties with industry, and a unique engineering perspective. PSE students are in high demand in industry, with placement of almost 100%. It benefits the region, Washington State, and the nation by educating top-quality engineers for one of the nation's largest industries. It is also a part of an area of great growth with new research and interest in bioenergy and biofuels. (CFR's graduate research area in PSE was recently renamed Bioresource Science and Engineering.)
4. PSE was extensively examined and received ABET accreditation renewal in 2007. The PSE self study outlines the educational objectives: 1) Graduates of the PSE program will have strong technical capability. They will have the essential knowledge and basic skills required for technical careers in the pulp, paper, and allied industries. 2) Graduates of the PSE program will be excellent problem solvers. They will be able to creatively resolve problems and exercise sound professional judgment in open-ended projects such as designing processes or solving product and production problems. 3) Graduates of the PSE program will have the intellectual maturity to work well within their professional organization and to contribute to society at large. Specific outcomes are outlined for each objective and assessed in the program and coursework. The recent ABET review was very favorable, with only a few minor curricular changes required. PSE students are also assessed by employers and faculty at the completion of their PSE internships.
5. PSE productivity is currently fairly high for an engineering program with the current number of faculty, but PSE continues to actively recruit top students around the state. PSE is also developing a course enrollment policy to redirect instruction from under enrolled courses to larger courses. The assessment plan will be used to continually monitor program quality and make adjustments as necessary.

#### Master of Science (MS)

1. CFR's MS program was significantly revised in 2004 by combining separately coded program areas into one general MS program with standard requirements. All MS students now follow a similar path through the degree, guided by the Graduate Student Guide (Appendix III C.8). They begin the program by attending a required orientation and safety course, CFR 500, and then in their second quarter, the core course CFR 509, Analysis of Research Problems. They then work with their supervisory committee to fill in categories of requirements in disciplinary knowledge, research design and quantitative analysis, current topics, and thesis research. Before beginning their thesis research, students must defend their research proposal to make sure it is of the quality and scope appropriate for a thesis. All MS degrees require 45 credits total, 9 of which must be thesis credits. Students in the MS



program are in a research interest group (these groups are defined by and voted on by CFR faculty). The MS degree is a learned degree requiring a research thesis, unlike CFR's two other internship/project based professional degrees, the MEH and the MFR.

2. The MS program has seen a significant increase in the number of women enrolled in and completing the program, even while overall enrollment has declined somewhat in the last few years. Data are tracked from the UW Registrar's Office; autumn graduate enrollment is included in the appendix (Appendix III D.7). The decline in MS enrollment is attributed to faculty research programs ending with retirements. With the recent hiring of twelve new faculty MS enrollment is expected to increase.
3. The MS program directly benefits the UW, the region, Washington State, and the nation by research that often relates to environmental science and natural resource sustainability, the research and inquiry skills learned by graduates, and the positions they fill upon graduation in all sectors of government, non-profits, and industry.
4. MS students are expected to learn the basics of sound scientific inquiry and research, with a grounding of coursework in a specific research area (Appendix III D.8). As a part of the MFR assessment plan, the core course CFR 509 is assessed using pre- and post-test methodology. Since the completion of assessment plans for ESRM and MFR programs last year, the CFR Curriculum Committee plans to design a similar plan for the remaining graduate programs this year. Currently, to evaluate placement and program satisfaction all CFR graduates are given an exit survey (Appendix III D.5), the results of which are distributed to the faculty and administration. The institutions that are considered peer programs vary by research interest area, but would include Oregon State, Yale, North Carolina State, Duke, and Michigan
5. The graduate program assessment plan under development will examine how quality and productivity can be improved. Overall, CFR feels that MS program quality and productivity have been high over the last decade.

#### Master of Forest Resources in Sustainable Resource Management (MFR (SFM))

1. The MFR (SFM) was granted Society of American Foresters (SAF) accreditation and is one of the few SAF accredited masters programs in the country. In this program (Appendix III D.9), students take CFR 500 and 509 with MS students, but are also required to take CFR 526, Advanced Silviculture, which builds on skills learned in undergraduate programs. There are four areas of directed electives: Forest Biology/Ecology, Forest Management, Forest Measurements and Forest Policy/Administration. A capstone project in collaboration with an outside client is required, along with other credits to reach the required 45 for the degree. The MFR is a professional degree and not a learned research-based degree like the MS, and has a forestry focus, unlike the MEH.
2. Because the MFR (SFM) program started in 2006, there are little enrollment data. The main MFR (SFM) faculty adviser recently retired and a new faculty adviser is implementing a recruitment program, so significant growth in the next few years is expected.
3. The SAF-accredited MFR (SFM) program directly benefits the UW, Washington, state, the region, and the nation by training professional forest managers with land management decision making and problem solving abilities; it is the only program of its kind in Washington state. Its graduates are ready to fill management level positions in government and industry.

4. The MFR (SFM) is a relatively new program. It is SAF accredited and will be regularly reviewed following the assessment plan (Appendix III D.4), which also outlines the learning objectives in three categories: basic skills and knowledge, land management decision making and problem solving abilities, and breadth of understanding about the place of professional forestry in society, with specific objectives in each category. Institutions that are considered peer programs are Oregon State and Michigan, which also have MFR-type degrees with SAF accreditation.
5. The established assessment plan for the MFR (SFM) will examine how program quality and productivity can be improved.

#### Master of Environmental Horticulture (MEH)

1. The MEH program was started in 2004 for professionals in the area of horticulture to continue their education and professional skills. It is a coursework-based degree, with 29 credits coming from a designated list, a selection of related electives, and finishing with 9 credits of professional internship to total at least 45 credits. Students must give a formal public presentation on their internship to graduate. An outline is found in the Graduate Student Guide (Appendix III C.8).
2. Because the MEH program started in 2004, there are little enrollment data. The main faculty adviser for the MEH has left the UW, and two new faculty are developing a MEH recruitment and advising plan.
3. The MEH program directly benefits the UW, Washington state, the region, and the nation by training professional environmental horticulturalists with decision making and problem solving abilities. It is the only program of its kind in the region. MEH graduates are ready to fill management level positions in the field.
4. MEH students graduate with the ability to understand and apply current research in their practice in the field of horticulture, including selection and management of landscape plants, plant propagation, and plant protection. Since this program is relatively new, there are too few graduates for a useful assessment. The peer program in the state is at Washington State University.
5. The graduate program assessment plan currently under development will examine how MEH program quality and productivity can be improved.

#### Doctor of Philosophy

1. The PhD program was significantly revised in 2004 by combining separately coded program areas into one general program with standard requirements. All PhD students now follow a similar path through the degree, and are guided by the Graduate Student Guide (Appendix III C.8). They attend a required orientation and safety course, CFR 500, and a core course in their second quarter, Analysis of Research Problems, CFR 509. They then work with their supervisory committee to fulfill requirements in disciplinary knowledge, research design and quantitative analysis, and current topics. PhD students take a qualifying exam to assess academic and scholarly standards before proceeding to the General Exam. The General Examination is a defense of the research proposal, which if successful, is followed by dissertation research and writing. Once the dissertation is complete, students take the Final Exam and defend their dissertation. All PhD students must complete 90 credits total, 30 of which can come from a related MS, and 27 credits of dissertation work.

2. PhD enrollment has been relatively steady, but declined slightly in the last few years. Data are tracked from the Registrar's Office and the Autumn Graduate Enrollment is included in the appendix (Appendix III D.7). The slight decline in enrollment is attributed to faculty research programs ending with retirements. With the recent hiring of twelve new faculty, enrollment is expected to increase.
3. The PhD program directly benefits the UW, Washington State, the region, and the nation by the knowledge generated relating to environmental science and natural resource sustainability, and through positions filled by graduates in academia, government, and industry.
4. PhD students are expected to be excellent individual researchers when they graduate from the program. While some teach, having learned the skills required for the classroom, this is not a requirement because most graduates work in non-academic environments. The PhD program is customized to fit students' interests and goals and is completed by a negotiation process and regular meetings with the supervisory committee and chair. The institutions that are considered peer programs vary by research interest area, but would include Oregon State, Yale, North Carolina State, UC Berkeley, UC Davis, Duke, Colorado State, and Michigan.
5. The graduate program assessment plan currently under development will examine how program quality and productivity can be improved. Overall, CFR feels that PhD program quality and productivity has been high over the last decade.

## **SECTION IV: DIVERSITY**

Increasing the diversity of CFR faculty, staff, and students has been a priority for many years, and there has been positive progress over the last decade. CFR staff and faculty serve on the UW-wide Diversity Council and regularly bring back best practice ideas to enhance diversity efforts. Student diversity is tracked by examining the student population in detail based on quarterly registrar's reports, and comparing the diversity enrollment each autumn (Appendix IV.1) to the UW diversity profile. This report is circulated to faculty, staff, and students through email so that all members of CFR are knowledgeable about CFR diversity and aware of the tracking process. In Autumn 2008, women comprised almost half of CFR students and over 16% came from underrepresented groups, percentages double those from the early 1990s. Tracking has shown a fairly steady rise in both gender and ethnic diversity, and efforts to recruit and retain more diverse students are ongoing.

Faculty and staff diversity is promoted by creating an inclusive environment and by hiring practices. CFR's staff population is slightly more diverse than the faculty, and diversity is considered when hiring new staff. For faculty hiring, regular faculty code procedures are followed, and efforts are made to interview diverse candidates. Even so, CFR's current faculty population is not very diverse, although since 1990, 47% women and 13% persons of color have been hired into ladder faculty positions, percentages far above CFR's current faculty profile.

Multiple approaches, varying by target populations, are used to recruit diverse students. The support and expertise from the UW GO-MAP and OMAD programs are very helpful, and CFR participates in all events supported by these programs, especially student fairs in which students can be directly recruited. Diversity is featured on the CFR website (<http://www.cfr.washington.edu/aboutTheCollege/diversity.shtml>), which includes CFR's diversity plan ([http://www.cfr.washington.edu/aboutTheCollege/diversity\\_plan08-09.pdf](http://www.cfr.washington.edu/aboutTheCollege/diversity_plan08-09.pdf)) (Appendix IV.2). Undergraduate student diversity recruitment includes attending OMAD fairs and events, visiting diverse high school and community colleges (like Yakima Valley CC), and reaching out to students at diversity conferences like SACNAS (Society for the Advancement of Chicanos and Native Americans in Science). Graduate students are recruited by outreach similar to that for undergraduates, as well as by participating in the Western and National Name Exchange with the help of GO-MAP, and emailing information about CFR programs to these students with email follow-up. Through GO-MAP, CFR generally receives a Graduate Opportunity Program (GOP) fellowship, targeting diverse applicants, and couples this award with CFR scholarship money to attract top diverse graduate students. Diversity is also considered in choosing CFR fellowship nominees, and funds are provided for GOP fellowship and other diverse nominees to visit CFR and participate in GO-MAP Visiting Student Days. For the last few years CFR has successfully recruited its top GOP student.

To retain diverse students, CFR seeks to provide an open and supportive environment for all students. Students are encouraged to approach the Office of Student and Academic Services with any issues, which are addressed on an individual basis. This may include providing emergency scholarships, referral to the OMAD Instructional Center for tutoring and academic assistance, personal counseling and advising, and helping students join organizations of interest. A comprehensive graduate orientation encourages student cohesiveness and promotes student

interaction. During the orientation, mentoring opportunities with more experienced graduate students are offered to incoming students. In Autumn 2008 CFR sponsored a booth and sent two graduate students to the national SACNAS conference. Both students reported a transformative and inspirational experience that was also supportive of their research. CFR has also sponsored booths and sent students to the Minorities in Agriculture, Natural Resources, and Related Sciences (MANRRS) conference in Portland, OR.

Even though the field of forestry today is far different than it was even 20 years ago, perceptions of the field are traditionally male and Caucasian. This probably has a constraining effect on CFR's applicant pool, but at present over half of its graduate students are women, a big change from 10 years ago. A renewed interest in the environment in general, increasing role models for women and persons of color, and concerns with environmental justice have probably broadened CFR's applicant pool.

When CFR was facing low enrollment challenges, non-traditional students were queried for opinions about the undergraduate curriculum. This helped shape the proposal to combine CFR's undergraduate programs into a more general and flexible major friendlier to transfer students. Curricular revisions were also designed to create a cohesive group of students via required core courses that address sustainability from diverse social, economic, and ecological perspectives. Four years after this change, there have been steady increases in enrollment and a more diverse enrollment.

## **SECTION V: RESEARCH AND CREATIVITY**

CFR faculty conduct creative research in environmental and natural resources. CFR research is rated highly both nationally and internationally and is conducted using the newest techniques in remote sensing and molecular technology. Much of the research involves fieldwork. Research programs reflect many disciplines, but the focus is on the integrating theme of sustainability in natural and managed environments that include wilderness and park-like ecosystems, intensively managed planted forests, and urban ecosystems. CFR conducts research in biological sciences (forest ecology, stream ecology, restoration ecology, environmental horticulture and urban forestry, ecophysiology, forest soils, phyto and bioremediation, forest health--insects, diseases and fire, forest systems and bioenergy, and wildlife ecology), physical sciences (forest hydrology and watershed science, paper science and engineering, and biofuels), social sciences (human dimensions of natural resources and urban forestry, economics, forest products marketing, and international trade), management sciences (forest management and measurements and silviculture), and remote sensing and modeling. CFR was a pioneer in tree nutrition research and is involved in specific focused research projects, including the Demonstration of Ecosystem Management Options (DEMO) study, Fire and Mountain Ecology, rare plant care and conservation, and forest canopy research. A major focus of CFR's current research is studying the effects of climate change on the world's forests and researching sustainable bio-based products and sources of energy that better serve society.

Typically grant and contract funding has been approximately \$8 million per year, but in FY 07 a downturn in funding to \$5.6 million occurred because of seven faculty retirements and moves, and the subsequent hiring of twelve new faculty. New faculty members have been very active in grant writing and it is anticipated that research funding will increase in the near future.

Faculty, postdoctoral research associates, research staff, and graduate and undergraduate students are involved in conducting the bulk of CFR research. Much of the research is conducted in Washington State, but researchers are also working in Oregon, California, Alaska, and other U.S. states, and countries including Brazil, Canada, Mexico, Costa Rica, Japan, China, Germany, Indonesia, Australia, Honduras, and Chile.

Along with other units on campus, CFR has participated in three NSF IGERT (Integrative Graduate Education and Research Traineeship) programs in the past five years (Urban Ecology, International, and Bio-fuels). The Urban Ecology IGERT studied interactions between humans and ecological processes in urbanizing environments. The International IGERT on multinational collaboration on environmental challenges focused mainly on China, particularly Sichuan Province. The Biofuels IGERT is a collaborative program with the College of Engineering and is exploring the conversion of wood products to fuel. A hallmark of the program is the recruitment and involvement of Native American students in the program. CFR is also a component of the NSF funded NEON (National Ecological Observatory Network) program through the Wind River Canopy Crane Research Facility.

Much of CFR research is conducted through Centers, briefly described below.

The *Center for International Trade in Forest Products (CINTRAFOR)* is directed by Professor Ivan Eastin and conducts research on the changing character of global trade, secondary manufacturing options for the forest products sector, and environmental tradeoffs. A major emphasis has been on China and Japan.

The *Center for Sustainable Forestry at Pack Forest* is located about 60 miles south of Seattle near Eatonville, WA in the Cascade Mountain foothills and is directed by Associate Professor Greg Ettl. Pack Forest demonstrates the concepts of sustainable forestry and provides services such as forest certification consulting and technology transfer and provides opportunities for research on forest nutrition and the use of biosolids.

The *Pacific Northwest Cooperative Ecosystems Studies Unit (PNW CESU)* is a cooperative venture between 18 leading academic institutions in the Pacific Northwest region, one state agency, and eight federal land management and natural resource research organizations. The University of Washington (UW) serves as host to the PNW CESU. To date, the U.S. has been divided into 17 bio-geographic regions, each served by a distinct CESU, with all regions connected in one national network. The overarching goal of the CESU Network is to improve the scientific base for managing federal lands by providing resource managers with high-quality scientific research, technical assistance, and education. Since beginning in October 2000, over 250 projects have been funded through the PNW CESU Cooperative Agreement.

The *Olympic Natural Resources Center (ONRC)* is directed by John Calhoun and is located on the Olympic Peninsula in Forks, WA. It conducts research on forest and marine management that balances sustainable commodity production with the maintenance of ecological systems, particularly on the Olympic Peninsula. The director reports to the Deans of the Colleges of Forest Resources and Ocean and Fishery Sciences.

The *Rural Technology Initiative (RTI)* is directed by Professor Bruce Lippke and is a joint program with Washington State University started in 2000. RTI is largely an outreach program, but recently has been involved with research on the future of Washington's forests. Professor Lippke is also the president of the Consortium for Research on Renewable Industrial Materials (CORRIM), which involves 15 research institutions. Recently CORRIM has been conducting life cycle carbon research.

The *Water Center (TWC)* was directed by Professor Anne Steinmann in the Department of Civil and Environmental Engineering until September 2008 and now has an acting Director, Professor Robert Edmonds. TWC promotes research to shape future forest practices affecting water quality, salmonid species, and management of streamside forests to protect biodiversity. It involves four Schools and Colleges on campus (Forest Resources, Ocean and Fishery Sciences, Engineering, and the Evans School).

The *Stand Management Cooperative (SMC)* and *Precision Forestry Cooperative (PFC)* are directed by Professor David Briggs and are developing new ways to make forests more productive and forestry processes more efficient. SMC is funded by cooperators and conducts

field research in California, Oregon, Washington, and British Columbia. It has four components: silviculture, nutrition, wood quality, and modeling. The mission of the PFC, one of Washington State's Advance Technology Initiatives, is to develop advanced technologies to improve the quality and reliability of information needed for planning, implementation, and monitoring of natural resource management, to ensure sustainable forest management, and increase the competitiveness of Washington's forest sector.

*University of Washington Botanic Gardens (UWBG)* is comprised of the *Center for Urban Horticulture*, the 230-acre *Washington Park Arboretum*, and the 60-acre *Union Bay Natural Area*. Until February 2008 UWBG was directed by Professor David Mabberley and currently has an acting director, Sandra Lier. Research focuses on urban plant selection, physiology of urban plants, rare plants, urban restoration, urban forestry, and use of remote sensing tools, such as LiDAR, in urban environments for tree inventories.

*The Wind River Canopy Crane Research Facility (WCCRF)* is directed by Professor Jerry Franklin and is located in the USDA Forest Service's Gifford Pinchot National Forest north of Stevenson, WA near the Columbia River. WCCRF is located in an old-growth forest and consists of a large construction crane that can access 1,100 trees via a gondola. Research has largely focused on quantifying carbon pools and fluxes into and from the forest, but much research has also been conducted on the ecology of the forest canopy. Recently, the site was selected as the core site for Pacific Northwest Domain of the NSF funded NEON (National Ecological Observatory Network). The Pacific Northwest Domain is one of 20 domains nationwide.

**In what ways have advances in your discipline, changing paradigms, changing funding patterns, new technologies and trends, and other changes influenced research, scholarship, or relative activity in your unit?** In the last five years, research and scholarship in CFR have been strongly influenced by regional, national, and international concerns about the environment. The need to develop alternative energy sources including cellulosic biofuels using forest residues is an important focus. Forest health in the western North America has declined dramatically in the past decade with larger and more destructive fires, and outbreaks of insects, such as the mountain pine beetle, and disease. Some of the changes in forest health have been attributed to global warming and increasing tree stress resulting in mortality. Use of forest residues for biofuels can contribute to reducing the fire danger in the western U.S. and improving forest health. The influence of global warming on forests has been a major focus of research and several CFR faculty were co-receivers of a recent Nobel Peace Prize for their contribution to International Panel on Climate Change (IPCC).

New technologies have also been incorporated into CFR research including molecular techniques and DNA analysis, LiDAR, GPS, GIS, and new instruments for forest measurements. While CFR has always conducted research across the wide range of multiple uses of forest lands, the concept of ecosystem services drives a considerable portion of current research.

There is also great concern about the sustainability of forest management and the influence of urban growth on forest ecosystems in the Pacific Northwest. To this end, CFR established the Northwest Environmental Forum, which brings together decision makers and stakeholders to



apply science and policy to critical environmental and natural resources management challenges. One pressing concern is keeping the Puget Sound region in forest cover despite population increase and land use change.

**How does your unit align the pursuit of scholarly interest by individual faculty with the future intellectual direction and expectations of the academic unit, school, college, and University?** CFR's academic niche at the UW is to study the key principles and processes that explain the behavior and interaction of biotic and social systems along gradients from urban to wild land settings. CFR studies human-influenced natural resource and environmental systems through an interdisciplinary approach in collaboration with UW and external partners. The Provost's stated themes for the UW are climate, energy and water; urbanization and conservation; global ecosystems and environmental health; and human dimensions of the environment. These correlate closely with the themes of CFR.

**How are junior faculty members mentored in terms of research and creative productivity?**

As previously mentioned in the staffing section of this report, CFR has instituted an extensive process to introduce, orient, and inform new faculty of all resources and services available to them to insure their success in teaching and research. In addition, junior faculty members are encouraged to form alliances for the purpose of writing research proposals with other CFR faculty and faculty in other units across the UW as well as federal agency scientists who are located on and off campus. Junior faculty members have submitted proposals to city, county, state, and federal agencies, as well as non-profits like the Nature Conservancy. In particular, new faculty have been encouraged to submit competitive proposals to the National Science Foundation, the USDA, and DOE. New faculty have also worked with state and federal legislators to obtain research funding, particularly related to bioenergy.

**What elements promote faculty productivity and what elements impede that productivity?**

The presence of USDA Forest Service (USFS) and USDI Geological Survey (USGS) personnel, the Cooperative Ecosystem Studies Unit, and Washington State University faculty in CFR promotes faculty interactions and productivity. A considerable proportion of CFR research funding comes from the USFS and USGS. Infusion of ideas from new faculty has also promoted faculty productivity as well the ability of CFR faculty to work with researchers in other UW units and nationally and internationally. Other factors promoting productivity include CFR's annual recognition event where faculty research is recognized, availability of computer resources, and annual faculty retreats. Remodeled research labs have increased productivity as has the CFR Analytical Laboratory for nutrient analysis. Labs in Bloedel and Winkenwerder Halls have been newly remodeled to foster research in phytoremediation, plant molecular biology, and biofuels. New lab facilities are available at the Center for Urban Horticulture along with excellent greenhouse facilities. Field sites are readily available, including the Wind River canopy crane, the nearby City of Seattle Cedar River watershed, the Olympic Natural Resources Center, and CFR's Center for Sustainable Forestry at Pack Forest. Considerable research is conducted on land owned by the WA State Department of Natural Resources, USFS, National Park Service, and private industry. To the extent possible considerable start-up funds have been made available to new faculty and some travel funds are available for faculty and graduate students to attend scientific meetings. In addition many faculty have taken advantage of sabbatical leaves to increase productivity through the development of proposals, new research

directions, and collaborations. CFR has three endowed chairs and seven endowed professorships to award to faculty for periods as long as five years.

Factors impeding productivity are the declining availability of research funding and in recent years, productive senior faculty transitioning toward 40 per-cent employment or retirement. Although some CFR labs have been remodeled in Winkenwerder and Bloedel, most labs are of 1960s vintage and out of date.

**What steps has the unit taken or what plans are in place to reduce or eliminate barriers?**

Regarding the declining availability of research funding, CFR strategic planning efforts are directed at new research initiatives. This includes work by the New Initiatives Group as well as tasking Development staff to seek foundation and other private funding opportunities. Efforts to improve the physical space in CFR buildings is an on-going process with small improvements made as new faculty are hired and as CFR is able to advance in the UW's schedule of building improvements.

**For interdisciplinary units how do you balance the productivity expectations of home departments and those of the interdisciplinary unit?** Interdisciplinary research is actively encouraged in the CFR and across the UW. Opportunities for interdisciplinary collaboration are brought to the attention of faculty and graduate students. A balance is sought during the work planning sessions between faculty and the Faculty Chair (Section III.A).

## **SECTION VI: COLLABORATIONS AND INTERDISCIPLINARITY**

Faculty, staff, and students in the College of Forest Resources (CFR) collaborate strongly within the College and with other UW units (College of Ocean and Fishery Sciences, College of Engineering, College of Built Environments, College of Arts and Science (biology, zoology, and geography), Burke Museum, Program on the Environment, Evans School, and Health Sciences). CFR collaborates intensively with other universities across the nation including Yale, Iowa State, University of Michigan, Washington State University, and Oregon State University. International collaboration includes MOUs with University of British Columbia, Seoul National University, University of Guadalajara, and University of Chile, and collaborative research in Vienna, Helsinki, Norway, and Germany. CFR regularly hosts natural resource groups from around the world.

CFR offers outreach services centrally and through its interdisciplinary centers mentioned in Section V, providing a broad array of continuing education, professional development, technology transfer, and public education programs. Many events are accredited by professional organizations such as the Society of American Foresters.

CFR outreach and research centers develop their own calendar of activities. They also coordinate to sponsor College-wide events, such as the Denman Forestry Issues Series, under the direction of the Outreach Steering Committee. In the last five years, the Denman Series has covered Federal land management policy, wildfire in the West, invasive species, global change, the changing Northwest forest, water supply and storm water issues, sustainable urban ecosystems, Native American forestry, biofuels and bioenergy, and ecosystem restoration. A joint CFR-UW Alumni Association lecture series, Sustaining our Northwest World, has presented programs on: When Humans and Nature Collide (Are the cities for birds, Bats in managed forests, Challenges of forest stewardship); From Fire to Flowers (Strategies and challenges for managing fire in the West, Form and textural contrast in garden design and plant selection, Who shapes the visual landscape?), Tales of the Forest (A warmer Pacific Northwest, Climbing, research, and teaching, Insects and the forests of the Pacific Northwest), Creating Futures since 1907 (History of forestry in the U.S., A view from the Commissioner of Public lands Natural resource issues in the Pacific Northwest: the next century), and Rare Plant Conservation in the Pacific Northwest. CFR's Distinguished Alumni Seminar Series welcomes home alumni who have gone on to become leaders in the private, public, and non-governmental sectors in the U.S. and the world. Outreach events presented by CFR and its centers are listed on the CFR website events calendar. Also available on the website are CFR publications and fact sheets on topics ranging from traditional forest management and products, natural resource economics and policy, and emerging areas such as phytoremediation, forest canopy research, and benefits of urban forests.

**Describe and discuss ways in which your unit collaborates with other units at the University or at other institutions – include relationships with other units in planning and in the development of future initiatives.** CFR faculty collaborate with other UW units including Engineering (Civil and Environmental, Chemical, and Mechanical), Biology, Business School, Oceanography and Fisheries, Architecture and Urban Planning (now College of Built Environments), the Evans School of Public Affairs, and UW Bothell (UW Restoration Ecology

Network). The Water Center is a collaboration of four of these units (Civil and Environmental Engineering, Forest Resources, Ocean and Fishery Sciences, and the Evans School). CFR has also participated in three NSF IGERT (Integrative Graduate Education and Research Traineeship) programs in the past five years (Urban Ecology, International, and Bio-fuels). A coupled human-natural systems proposal was recently submitted to NSF that involves Forest Resources, Urban Planning, Public Health, Statistics, Biology, Engineering, Atmospheric Sciences, Fisheries and other departments, as well as practitioners and international collaborators. CFR has close contacts with the Outreach Education Office in the College of Forestry at Oregon State University and Washington State University Extension. CFR is also a component of the NSF funded NEON (National Ecological Observatory Network) program through the Wind River Canopy Crane Research Facility. CFR faculty members co-teach with colleagues in Fisheries, Biology, Engineering, Program on the Environment (POE), and the Business and Law Schools, and hold adjunct and joint appointments in other UW units.

**Do the faculty in your unit engage in or have opportunities to engage in interdisciplinary work?** One of the strengths of CFR is a focus in interdisciplinary work with a mix of biological, physical, and social sciences.

**Do relationships with other units or other kinds of interdisciplinary opportunities aid your unit in recruiting new faculty and graduate students?** Relationships with the Program on the Environment have aided in the recruitment of graduate students. Involvement with IGERT programs on campus has also aided in recruiting Native American PhD students (Biofuels IGERT) and PhD students interested in wildlife and human dimensions (Urban Ecology) and international relations (International IGERT). New faculty have been recruited because of interdisciplinary opportunities in remote sensing (LiDAR), human dimensions, and biofuels.

**In what ways, if any, do collaborations strengthen your graduate and undergraduate programs?** Collaborations are particularly important in developing CFR's undergraduate research program and CFR students have been well represented at the Annual UW Undergraduate Research Symposium. Collaborations with the Program on Climate Change have strengthened CFR's graduate program as has POE's Graduate Certificate program in Interdisciplinary and Policy Dimensions of the Earth Sciences. Staff of the CFR Office of Student and Academic Services meet regularly with staff of student advising offices in the Program on the Environment, the Department of Biology, the College of Ocean and Fishery Sciences, the Department of Atmospheric Sciences, the College of Built Environments, the School of Marine Affairs, and the Department of Environmental Health to advise students effectively across the University. This coordination benefits not only students but also the individual programs with enhanced recruitment and increased class enrollments.

**Describe how faculty contributions to interdisciplinary research, creative expression, teaching and training are acknowledged and rewarded in your unit.** Faculty contributions are rewarded as part of the data gathering in the faculty PMT process. The CFR annual Recognition event provides public recognition of excellence.

## SECTION VII: FUTURE DIRECTIONS

### Elements of the College of Forest Resources Strategic Plan

The sustainability of natural resources and environmental services will continue to be a predominant issue in the coming decades. College of Forest Resources (CFR) faculty provide scientific expertise related to the key principles and processes that explain the behavior and interaction of biotic and social systems along gradients from highly to minimally impacted terrestrial ecosystems, and collectively form a unique interdisciplinary base from which to play a leadership role in developing the science of sustainability. Through an interdisciplinary approach in collaboration with campus and external partners, the College studies human-influenced natural resource and environmental systems that focus on sustainable forestry, sustainable urban and wild land ecosystems, and sustainable natural resources enterprises.

CFR is committed to remaining relevant and responsive to its multiple constituents. CFR faculty, staff, and students have been actively engaged in strategic planning since 1995, and meet annually in September to review progress on strategic goals and objectives that are developed in 3-year cycles. These discussions, which are organized by the CFR Planning Committee and are facilitated by professional personnel, have helped CFR develop an organizational culture of openness, fairness, and inclusiveness where all points of view are solicited and respected.

On September 16-17, 2008 CFR faculty, staff, and students met to update the three-year strategic plan and to develop a revised set of three-year goals and objectives for 2008-2011 (see 2005-2008 Strategic Plan, Appendix F1 and 2008-2011 Strategic Plan, Appendix F2). CFR's mission, vision, and core values were reaffirmed at these meetings and remain as follows:

- **Mission:** *to generate and disseminate knowledge for the stewardship of natural and managed environments and the sustainable use of their products and services*
- **Vision:** *to provide world class, internationally recognized knowledge and leadership for environmental and natural resource issues*
- **Core values:** *open communication, respect, excellence, and accountability*

The goals developed for the 2008-2011 planning cycle are:

- *Increase morale and a sense of community*
- *Improve College facilities*
- *Increase funding for the College (for example, UW Botanic Gardens)*
- *Create a positive public image, both on and off campus*
- *Take a leadership role in making the College of the Environment successful*
- *Increase the number, quality, and diversity of students, faculty, and staff in the College*

There are several active areas for developing CFR's potential for academic and pedagogical leadership. The following initiatives have received and will continue to receive financial support from the College:

- Participation in the bioresource-based Energy IGERT with the College of Engineering, the Lawrence Livermore National Lab, and the Yakama and Quinault Nations. The

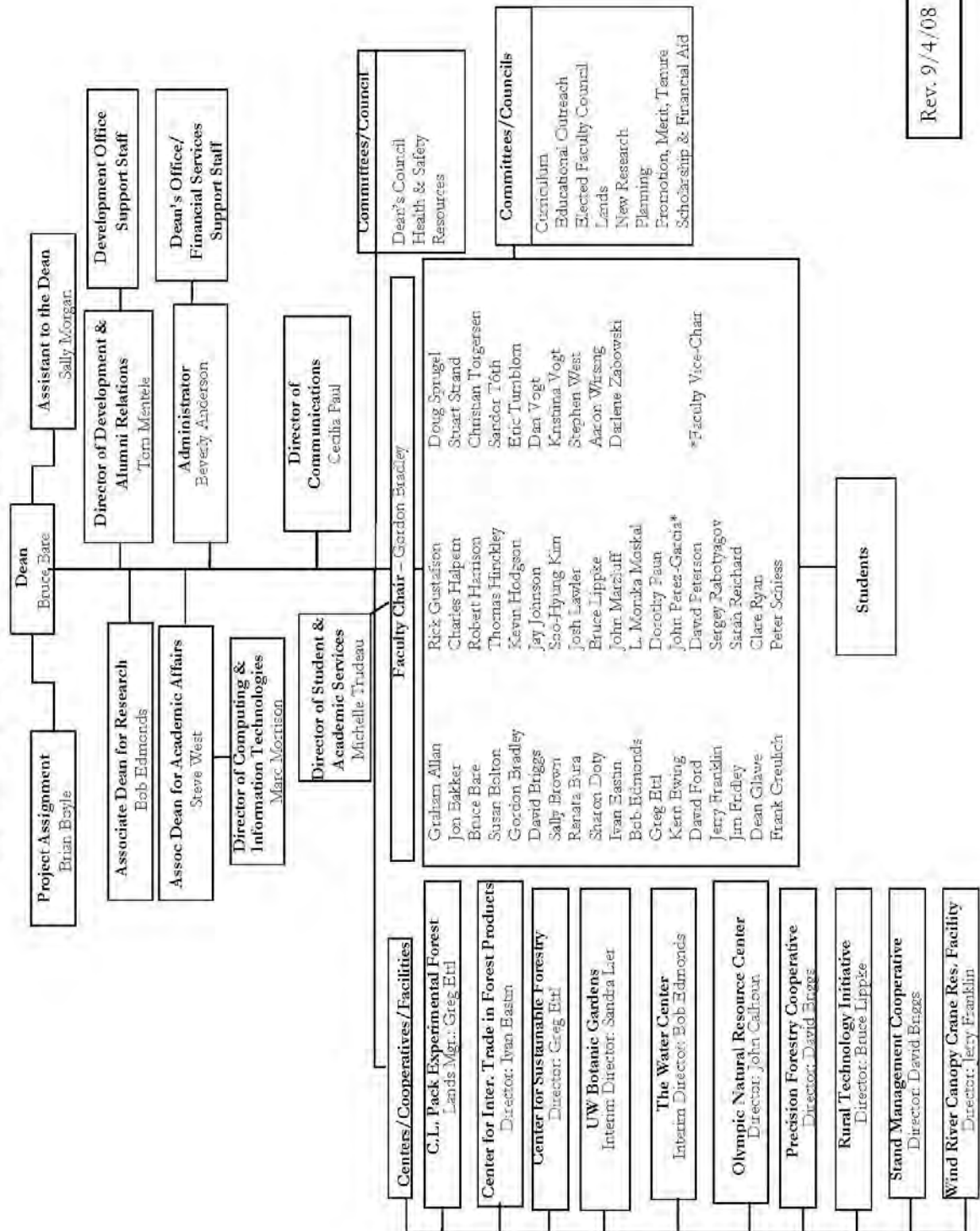
IGERT supports “the development of a multidisciplinary, multicultural graduate education and research program in Bioresource-based Energy for Sustainable Societies.”

- Continued development of the Northwest Environmental Forum, helping decision makers and stakeholders use science and policy to solve environmental and natural resource challenges. The Forum serves as a centralized information repository that enhances collaborative research aimed at long-term solutions. The Forum’s first project, “The Future of Washington’s Working Forest Land Base,” is an ongoing collaboration by representatives from forest companies, small landowners, environmental advocates, Native American tribes, the legislature, government agencies, and land conservation organizations to safeguard the future of a healthy forest land base in Washington State.
- With a potentially huge supply of material thinned from Washington forests, the state’s pulp and paper mills could become the “biorefining” backbone for turning woody plant material into fuel and other products. Estimates suggest that enough ethanol could be produced from crops, agricultural wastes, and forest wastes to lower U.S. gasoline consumption 30 percent by 2030. Turning woody material into fuel lags behind the technology of turning crops and agricultural wastes into ethanol, partly because it is harder to separate compounds like cellulose from lignin. Many fuels could be made from woody biomass, along with carbon fibers used for such things as aircraft parts and golf clubs, and high-value polymers. Creating new ways to use woody biomass would also make it more affordable to thin fire-prone eastern Washington forests and to enhance wildlife habitat in western Washington stands.
- In response to grand challenges in ecology and the environmental sciences, the National Science Foundation (NSF) has proposed a new and unprecedented long-term research and education platform—NEON, the National Ecological Observatory Network. Neon, Inc. has selected the College’s Wind River facility as the core site and headquarters for NEON in the Pacific NW Domain.

These ongoing disciplinary focus areas are important for CFR and the University, and research initiatives aligned with the current disciplinary niche of CFR will continue to be addressed. Other initiatives certainly will be forthcoming in the climate change arena as well. The largest changes in the short term for CFR, however, will result from joining the CoEnv. This union will alter leadership, organizational structure and function, teaching, outreach, and over the long term may result as yet unknown shifts in disciplinary focus. CFR stands well-prepared for these challenges.

## APPENDIX A.1: COLLEGE OF FOREST RESOURCES ORGANIZATION CHART

## UW College of Forest Resources Organization Chart



Rev. 9/4/08

## **APPENDIX A.2: COLLEGE OF FOREST RESOURCES FACULTY BYLAWS**

### **BYLAWS Final Approved COLLEGE OF FOREST RESOURCES**

In order to exercise the powers granted under Faculty Code, Section 23-43, and to advise the Dean as required in Section 23-43B, in an orderly and expeditious manner, the faculty of the College of Forest Resources establishes herewith, under Faculty Code, Section 23-45A, its organization and rules of procedures.

### **ARTICLE I PURPOSE AND FUNCTION**

Section 1. The purpose of the College of Forest Resources shall be to provide programs within the larger context of the University of Washington, whose mission is defined in University Handbook, RCW, 28 B-20.020 Vol. 1-1.

Section 2. The faculty of the College of Forest Resources, University of Washington, is the College's governing body, under The Faculty Code, Section 23-41.

Under Section 13-23 of the Faculty Code, the College faculty shares with its Dean the responsibility for such matters as:

1. Educational policy and general welfare
2. Policy for the regulation of student conduct and activities
3. Scholastic policy, including requirements for admission, graduation, and honors
4. Approval of candidates for degrees
5. Criteria for faculty tenure, appointment, and promotion
6. Recommendations concerning campus and University budgets
7. Formulation of procedures to carry out the policies and regulation thus established

Upon request, the Dean of the College shall provide a member of his or her faculty with information concerning salaries, teaching schedules, salary and operations budget requests, appropriations, allotments, disbursements, and similar data pertaining to the College.

Section 23-46H

Section 3. Pursuant to Section 23-43 of the Faculty Code, the faculty of the College of Forest Resources:

A. shall, with respect to academic matters,

1. determine its requirements for admission and graduation;
2. determine its curriculum and academic programs;
3. determine the scholastic standards required of its students;
4. recommend to the Board of Regents those of its students who qualify for the University degrees;
5. exercise the additional powers necessary to provide adequate instruction and supervision of its students;



- B. shall, with respect to personnel matters, make recommendations to its dean in accord with the provisions of Chapter 24 and of Section 25-41.

## ARTICLE II VOTING MEMBERSHIP

Members of the College faculty who are voting members of the University faculty shall be voting members of the College faculty, in accordance with the Faculty Code, Section 21-32:

- A. Except as provided in paragraph B of this Section the voting members of the University faculty are those faculty members holding the rank of (tenure, research track, and WOT): professor, associate professor, assistant professor, full-time instructor, or full-time lecturer.
- B. Notwithstanding the rank held, the following are not voting members of the faculty:

persons serving under acting or visiting appointments;  
persons serving under research appointments, holding less than 50% appointments;  
persons on leave of absence;  
persons serving under clinical or affiliate appointments;  
persons of emeritus status unless serving on a part-time basis;  
persons serving under adjunct appointments insofar as their adjunct appointments are concerned.

- C. Research faculty may vote on all personnel matters as described in the *Faculty Code* except those relating to the promotion to and/or tenure of faculty to the following ranks:

Senior Lecturer  
Assistant Professor  
Associate Professor  
Professor  
Associate Professor WOT  
Professor WOT

Section 13-31, April 16, 1956; S-A 32 May 8, 1967; S-A 37, February 8, 1971; Section 21-32A, 21-32C, March 6, 2001; all with Presidential approval.

- D. Voting Membership in Relation to Joint Appointment:

A faculty member who has the privilege of participation in governance and voting in the primary department may arrange with the secondary department(s) either to participate or not to participate in governance and voting in the secondary department(s). This agreement must be in writing and will be used for determining the quorum for faculty votes (Sec. 24-34 Part B7).

### **ARTICLE III COUNCILS AND STANDING COMMITTEES**

The College of Forest Resources has an Elected Faculty Council, various standing committees, and ad hoc committees that are formed and appointed by the Dean or Chair of the Faculty.

#### **College Elected Committees**

##### **Section 1. Elected Faculty Council**

In order to exercise the powers granted under the Faculty Code, Section 23-45, the College of Forest Resources Elected Faculty Council establishes herewith its structure, function, and rules of procedures.

##### **Structure, Election, and Function of the Elected Faculty Council, College of Forest Resources**

The Elected Faculty Council (EFC) of the College of Forest Resources ("College") is elected by the faculty as a whole and assumes the following structure, functions, and procedures as authorized by vote of the College faculty.

##### **Structure of the EFC**

- A. The EFC shall consist of five regular members with one alternate member. There will be no more than one member, regular or alternate, with the same primary interest area.
- B. Regular members shall be EFC voting members. The alternate member is encouraged to attend meetings but shall vote only when a regular member is absent.
- C. A quorum shall be defined as three members of the EFC and may include the alternate member. A motion shall require a quorum majority to pass.
- D. The term of office of EFC members shall be three years.
- E. EFC members will elect a Chair and Vice-Chair to serve for the following academic year by the tenth (10th) week of Spring Quarter. The term of office for the Chair will be one year with no reappointment during any 3-year term. The Chair shall be a voting member of the faculty from the associate or full professor ranks.
- F. The EFC shall meet at least once each quarter of the regular academic year.

##### **Election of EFC Members**

- A. Members of the EFC shall be elected during a regularly scheduled meeting of the general faculty or by electronic ballot as authorized by the faculty.
- B. A subcommittee of the serving EFC shall bring at least 2 nominees before the faculty for each vacant position. Additional nominations may be made from the floor. No current member of the EFC may be nominated.
- C. EFC members, including the alternate, shall be elected to serve staggered terms of office. An uncompleted term of office may be filled for the duration of the original term by special election.

## Function of the EFC

### A. The EFC shall:

1. Advise the Dean or as requested by members of the faculty on matters involving academic policy and practices, including priorities, resource, and salary allocations, and budgets.
2. Serve as part of any committee formed to evaluate Reorganization, Consolidation, or Elimination of Programs within the College.
3. Draft and periodically review bylaws of the College for discussion and consideration by the College faculty.
4. Provide other advice involving academic policy and practices to the Dean as requested by members of the College faculty.
5. Provide other advice to the Dean or Faculty Chair as requested by either.

### B. The Chair shall serve to:

1. Lead the regular meetings of the EFC and set the agenda for the Council.
2. Serve as a member of the College Resources Committee.
3. Serve as a member of the College Planning Committee.

### C. The Vice-Chair shall serve in the role of Chair whenever necessary.

### D. Meetings of the EFC may be called by the Dean, EFC Chair, or, in their absence, their designated replacements.

## Changes to the Structure and Function of the College EFC.

Amendments to the structure and function of the EFC may be made when such changes are submitted to all faculty and are discussed at a regularly scheduled faculty meeting. Amendments must be approved by a quorum majority of voting faculty.

## Section 2. Promotion, Merit, and Tenure Committee

The Promotion, Merit, and Tenure (PMT) Committee consists of six members at the rank of Professor or Associate Professor, that represent the breadth of the College faculty interest areas as well as research or WOT faculty. Vacancies on the committee are filled from a list of nominees proposed and voted on by the faculty. The committee selects its own Chair. The Chair of the College of Forest Resources Promotion, Merit, and Tenure Committee shall be elected from among the members of the Committee for a term not to exceed three years.

The functions of the Promotion, Merit, and Tenure Committee are to:

1. Formulate and periodically review criteria for implementation of University Policy for faculty appointment, promotion, and tenure (University Handbook, Vol. II, Section 13-23{5} and 13-31{4-5}). Proposed changes in criteria shall be referred to faculty for approval.
2. Evaluate procedures for appointment, promotion, and tenure decisions and to change these as necessary while maintaining congruence with relevant University Handbook directives.

3. Serve as an advisory panel to the Dean relative to recommendations for PMT review and decisions concerning College of Forest Resources faculty (University Handbook, Vol. II, Section 23-43[b]).

All criteria and procedures pursuant to recommendations for PMT decisions shall be consistent with University Handbook, Section 23-46 and Chapters 24 and 25.

#### Membership:

The College of Forest Resources Promotions, Merit, and Tenure Committee shall be composed of one chair and five members at the rank of Professor or Associate Professor, that represent the breadth of the College faculty interest areas. Each member serves a three-year term.

### Section 3. College Health and Safety Committee

The Washington Industrial Safety and Health Act, WAC 296-800-140, Accident Prevention Program, and WAC 296-800-130, Safety Committees – Safety Meetings Summary, mandates that all employers with eleven employees or more must have a Health and Safety Committee (HSC) in which employees have representation.

The College Health and Safety Committee is established by UW Administrative Policy Statement 10.11, UW Health and Safety Committees. This policy statement defines the scope, organization, and compliance responsibility and procedures of Health and Safety Committees at the University. The College follows the policies and regulations for the HSC.

#### Responsibilities:

The Committee recommends action to the Dean to resolve health and safety concerns presented to the committee by employees of the College of Forest Resources or other sources. Typical tasks and responsibilities include: review and evaluate safety and health inspection reports; review and evaluate accident investigation reports; review and evaluate accident/illness prevention programs of the various entities within the College; and review safety related material provided by Environmental Health and Safety (EH&S) and other regulatory agencies.

#### Membership:

Election Guidelines are established by the University and are overseen by EH&S. The College follows these guidelines in the election and appointment of Committee members. These Guidelines state Committee members consist of elected representatives, management appointees, and union representatives.

Four members are elected from the College staff and faculty, three are appointed by the Dean, and one student representative is appointed by the Dean. The Dean is responsible for completing committee membership. The committee elects its own Chair and members serve a two year term as determined by the Election Guidelines.

### Section 4. Curriculum Committee (undergraduate and graduate)

#### Responsibilities:

The College of Forest Resources Curriculum Committee is responsible for overseeing the undergraduate and graduate programs of the College and reviews and approves all planned

changes to courses and programs before those requiring a faculty vote are brought before the faculty for final action. Periodically, the Committee reviews the academic programs of the College in order to ensure that they are current and appropriate to the demands of the clients served.

**Membership:**

Membership of the Curriculum Committee consists of: the Vice Chair of the Faculty (who serves as Chair of the committee), one faculty from each of the undergraduate curricula, two other faculty who represent as much of the breadth of the College faculty interest areas as well as research or WOT faculty when possible, one undergraduate student representative, and one graduate student representative. The Associate Dean of Academic Affairs, the Director of Student and Academic Services, and the Faculty Chair are *ex-officio* members. The Chair of the Curriculum Committee solicits nominations for vacant positions on the Curriculum committee which are then voted on by the faculty during a regularly scheduled meeting of the general faculty or by electronic ballot as authorized by the faculty. Members will serve a two year term and student representatives will serve on an annual basis.

### **College Standing Committees**

#### **Section 5. College Educational Outreach Steering Committee**

**Responsibilities:**

The College Educational Outreach Steering Committee is responsible for the Denman Forestry Issues Series and all educational outreach events organized and sponsored by the College.

**Membership:**

Membership of the College Educational Outreach Steering Committee consists of the Associate Dean of Research (who serves as Chair of the Committee), the Directors of College of Forest Resources Centers that offer educational outreach, the Washington State University Extension Forester located at the College, the Research Coordinator of the Pacific Northwest Cooperative Ecosystems Study Unit, the College Communications Director, and a student representative. The Faculty Chair serves as an *ex-officio* member. Membership is determined by reason of administrative assignment. The Committee Chair selects the student representative.

#### **Section 6. College Lands Committee**

**Responsibilities:**

The College Lands Committee is responsible for recommending policies to guide the management of all lands and their associated facilities under the College's jurisdiction.

**Membership:**

Membership of the College Lands Committee consists of the Associate Dean of Research (who serves as Chair of the Committee), the Directors of the College's properties (the Olympic Natural Resources Center, Center for Sustainable Forestry at Pack Forest, Wind River Canopy Crane Research Facility, and UW Botanic Gardens), a Director of one of the Research Centers without property, a faculty member with interest in College Lands, and a student representative.

Committee members are appointed by the Dean with most members determined by reason of administrative assignment. The student representative will serve a one year term.

## Section 7. College Planning Committee

### Responsibilities:

The College Planning Committee (CPC) serves to solicit the views of the entire College community and is responsible for facilitating the formation and continual updating of the College's strategic vision and plans. Recommendations from the CPC are referred to the Dean for action.

### Membership:

Members include the Faculty Chair, the College Administrator, Chair of the Elected Faculty Council, and two representatives each from the College Centers, staff, and College faculty. Members who are not determined by reason of administrative assignment and the Committee Chair are appointed by the Dean and serve terms at the discretion of the Dean.

## Section 8. College Scholarship and Financial Aid Committee (undergraduate and graduate)

### Responsibilities:

The College Scholarship and Financial Aid Committee is responsible for distributing the available scholarship/fellowship funds in accordance with College of Forest Resources Scholarship Policy and fund stipulations and for recommending adjustments to policy as necessary.

### Membership:

Members include the Associate Dean of Academic Affairs (who serves as Chair of the Committee), Chair of the Faculty, Director of Student and Academic Services (*ex-officio*), Graduate Program Coordinator of Student and Academic Services (*ex-officio*), College Administrator (*ex-officio*), the Assistant Director of Development (*ex-officio*), and three faculty members. Members who are not determined by reason of administrative assignment are appointed by the Dean in consultation with the Committee Chair and serve at the discretion of the Dean.

## Section 9. New Research Group

### Responsibilities:

The New Research Group is responsible for increasing the sustainable research-funding base of the College. In achieving its mission the New Research Group looks for promising opportunities to: 1) maintain existing interdisciplinary activities; 2) initiate new cutting edge research opportunities; and 3) create interdisciplinary research teams to address cross-disciplinary problems.

### Membership:

Membership of the New Research Group consists of the Associate Dean of Research (who serves as Chair of the Committee), five additional faculty members, and a student representative. The

Associate Dean of Research is responsible for Committee membership in consultation with the Dean and the Associate Dean of Academic Affairs. Members serve terms at the discretion of the Dean.

### **Advisory and *ex-officio* Committees and Councils**

#### **Section 10. College of Forest Resources Visiting Committee**

**Responsibilities:**

The College Visiting Committee reviews academic, research, and educational aspects of the College as viewed from outside the university environment.

**Membership:**

Members represent governmental agencies, non-governmental organizations, and the business community. Members are appointed by the Dean and serve at the Dean's discretion.

#### **Section 11. Dean's Council**

**Responsibilities:**

The Dean's Council discusses administrative, operational, and funding issues that have a bearing on all programs of the College. As topics warrant, additional College members are invited to attend council meetings.

**Membership:**

Membership is determined by reason of administrative assignment and consists of the Dean (who serves as Chair of the Committee), Associate Dean of Research; Associate Dean of Academic Affairs, Chair of the Faculty, Vice-Chair of the Faculty, Dean's Assistant, and the College Administrator.

#### **Section 12. College Resources Committee (space, computing, and budget)**

**Responsibilities:**

The Resources Committee advises the Dean on all matters related to space, budgets, and computing resources. The Dean makes final decisions on the allocation of resources.

**Membership:**

Committee Membership is the same as the Dean's Council with the addition of the Chair of the Elected Faculty Council, and is determined by reason of administrative assignment. As topics warrant, additional College members are invited to attend committee meetings.

#### **Section 13. Council of Center Directors**

**Responsibilities:**

The Council of Center Directors serves to inform the Dean of their respective programs, including budgets and educational outreach.

**Membership:**

Membership is determined by reason of administrative assignment and consists of the directors of all College Centers which are the Center for International Trade in Forest Products, Olympic Natural Resources Center, Precision Forestry Cooperative, Stand Management Cooperative, The Water Center, UW Botanic Gardens, and the Wind River Canopy Crane Research Facility. The Dean serves as Chair of the Council.

**Section 14. College Volunteer Campaign Committee**

**Responsibilities:**

The Volunteer Campaign Committee supports the Dean in securing funding support to help meet the UW Campaign: Creating Futures money raising goals.

**Membership:**

Members are appointed by the Dean with the counsel of the College Director of Development and serve at the discretion of the Dean.

**ARTICLE IV  
FACULTY INTEREST AREAS**

The College faculty is organized into discipline-based faculty Interest Areas for the purposes of review and admission of graduate students, nomination of graduate students for recruitment fellowships, and collective decisions regarding resources accruing to interest areas. Faculty members self-select membership in one or more areas. Although faculty may participate in more than one interest area, faculty members have voting privilege in only one. An Interest Area leader is selected by the Interest Area membership. Faculty Interest Areas, consisting of at least three faculty members, are formed by an affirmative majority vote of the eligible College of Forest Resources faculty, and dissolved by a majority vote of the members of the Interest Area. The Interest Area leader will notify the Chair's office if there is a vote to dissolve.

**ARTICLE V  
VACANCY IN OFFICE**

Definition. A vacancy in either elected office or appointed committee membership can occur through such processes as resignation, termination of employment, or failure to attend at least half of the meetings of any committee without advanced notification.

**ARTICLE VI  
QUORUM**

A quorum for any meeting of the College of Forest Resources faculty shall consist of at least half the voting members of the faculty.



## **ARTICLE VII VOTING**

A proposed action of the College of Forest Resources faculty under the authority of the Faculty Code, Sections 23-43 and 23-44, is effective if passed by a quorum majority of its voting members present at a meeting. For voting in a meeting, voting may occur orally, by show of hands, or by paper ballot. Voting may also occur by electronic ballot as authorized by the faculty.

## **ARTICLE VIII FACULTY MEETINGS, ORDER OF BUSINESS, AND AGENDA**

**MEETINGS.** At least three meeting(s) of the faculty shall be held during each academic quarter. An annual calendar of meeting dates shall be established prior to the beginning of the Autumn Quarter by the Faculty Chair. Meeting dates will not be changed unless there is a major emergency, with information to the faculty regarding cause for change. Special meetings shall be held when called by the Faculty Chair, when requested by the Dean, or when requested in writing by 50 percent of the voting membership of the College faculty. The Dean will preside at one of the meetings of the College Faculty per quarter.

**ORDER OF BUSINESS.** The Faculty Chair shall, with input from individual faculty members, councils, committees, and the Dean, determine the order of business.

**AGENDA.** The agenda shall be developed by the Faculty Chair with input from individual faculty members, councils, committees, and the Dean. Agenda items shall be distributed to faculty prior to each meeting.

## **ARTICLE IX SELECTION OF FACULTY CHAIR AND VICE CHAIR**

**FACULTY CHAIR.** The Faculty Chair shall be appointed for a period of 3 years renewable for, at most, one additional consecutive 3-year term upon nomination, faculty vote, and administration approval.

Operating as an ad hoc committee, the EFC shall be charged with finding suitable candidates for the Faculty Chair position. The names of these nominees will be brought before the general faculty of the College during a regularly scheduled meeting. Additional nominations and self-nominations may be made from the floor during this meeting.

During the nomination meeting, or a subsequent regularly scheduled meeting of the general faculty, or by electronic ballot as authorized by the faculty, the acceptability or non-acceptability of the candidates shall be determined by secret, quorum majority vote. If the number of candidates identified as acceptable to the faculty is less than two, the EFC shall re-initiate the search for additional candidates.

Of the two or more candidates found to be acceptable, a ranking by secret ballot shall be made. This vote shall be done during a regularly scheduled meeting of the general faculty, or by electronic ballot as authorized by the faculty.

Names of acceptable candidates and their relative ranking by the general faculty will be brought before the Dean of the College for final selection of the Faculty Chair.

Selection of the Faculty Chair will occur in May of the academic year prior to taking office on July 1.

**FACULTY VICE CHAIR.** The Faculty Vice Chair will be appointed for a period of one year.

Operating as an ad hoc committee, the EFC shall be charged with finding suitable candidates for the Faculty Vice Chair position. The names of these nominees will be brought before the general faculty of the College during a regularly scheduled meeting. Additional nominations and self-nominations may be made from the floor during this meeting.

During the nomination meeting, or a subsequent regularly scheduled meeting of the general faculty, or by electronic ballot as authorized by the faculty, the acceptability or non-acceptability of the candidates shall be determined by secret, quorum majority vote. If the number of candidates identified as acceptable to the faculty is less than two, the EFC shall re-initiate the search for additional candidates.

Of the two or more candidates found to be acceptable, a ranking by secret ballot shall be made. This vote shall be done during a regularly scheduled meeting of the general faculty, or by electronic ballot as authorized by the faculty.

Names of acceptable candidates and their relative ranking by the general faculty will be brought before the Faculty Chair who will make the final selection of the Vice Chair.

Selection of the Faculty Vice Chair will occur in May of the academic year prior to taking office on July 1.

## **ARTICLE X PARLIAMENTARY AUTHORITY**

Roberts's Rules of Order Newly Revised shall be the parliamentary authority. The rules contained in College of Forest Resources Faculty Bylaws shall govern the faculty in all cases to which they are applicable and in which they are not inconsistent with the bylaws or special rules of order of this University.

## **ARTICLE XI AMENDMENTS**

These bylaws may be amended at any regularly scheduled faculty meeting by two-thirds vote of those present provided notice of intent is given at the previous regular meeting or when

submitted in writing to all faculty at least two weeks prior to the meeting at which action is taken. The bylaws may be amended by mail ballot or by electronic ballot by two-thirds of those voting providing that the requirements for a quorum established in Article VI have been met in the ballots returned and that the proposed changes and rationale have been circulated to all voting faculty at least two weeks prior to the date on which the ballots will be tallied.

### **APPENDIX A.3: COLLEGE OF FOREST RESOURCES COMMITTEES**

#### ***Elected Faculty Council (meets monthly during the academic year):***

The Elected Faculty Council (EFC) consists of six faculty elected by their colleagues for a three-year term. The Chair is selected by vote of the Council at its first meeting in Autumn Quarter.

##### ***Members:***

Eric Turnblom, Associate Professor (Chair) (through June 2010)  
 Darlene Zabowski, Professor (Vice Chair ) (through June 2011)  
 Greg Ettl, Associate Professor (through June 2009)  
 Rick Gustafson, Professor (through June 2009)  
 Rob Harrison, Professor (through June 2011)  
 Sandor Toth, Assistant Professor (through June 2010)  
 Alternate (TBD)

##### ***Mission:***

The EFC advises the Dean on matters of academic policy, including priorities, resource and salary allocation, and budgets.

#### ***Faculty PMT Committee (meets every two weeks during the academic year):***

The Faculty PMT Committee consists of six faculty elected for a three-year term, one of which is elected chair.

##### ***Members:***

David Briggs, Professor (Chair) (through June 2009)  
 Ivan Eastin, Professor (through June 2009)  
 Greg Ettl, Associate Professor (through June 2010)  
 Rob Harrison, Professor (through June 2009)  
 Tom Hinckley, Professor (through June 2010)  
 Clare Ryan, Associate Professor (through June 2011)

##### ***Mission:***

The Faculty PMT Committee prepares faculty promotion, merit and tenure recommendations to the faculty and Dean. The Committee also develops and updates the specific criteria used in these deliberations following procedures and processes defined in the Faculty Handbook

#### ***Health and Safety Committee (meets monthly):***

##### ***Members:*** (\*appointed by Dean, \*\*elected)

David Zuckerman, UW Botanic Gardens, Arboretum Grounds Supervisor (Chair)\*\*  
 Margery Cooper, College Staff (Alternate Chair and Recorder)\*  
 Neal Bonham, UW Botanic Gardens, Gardener \*\*  
 Kevin Hodgson, Professor\*  
 Zareen Khan, Research Associate\*\*  
 Steve West, Professor\*  
 Mike Wetzal, Research Technician\*\*

##### ***Mission:***

The College Health and Safety Committee recommends action to the Dean to resolve health and safety concerns presented to the committee by employees of the College of Forest Resources or other sources.

***Curriculum Committee (meets every two weeks during the academic year):***

Faculty members are elected for a two-year term; student members are appointed to a one-year term. The Faculty Vice-Chair serves as the committee Chair.

***Members:***

John Perez-Garcia, Professor (Chair) (through June 2009)  
 Jon Bakker, Assistant Professor (through June 2010)  
 Susan Bolton, Assistant Professor (through June 2009)  
 Jay Johnson, Professor (through June 2009)  
 Sergey Rabotyagov, Assistant Professor (through June 2010)  
 Jason Sharp, Undergraduate Student (through June 2009)  
 Katy Stuart, Graduate Student (through June 2009)  
 Gordon Bradley, Professor and Chair of Faculty (ex officio)  
 Michelle Trudeau, Director of Student and Academic Services (ex officio)  
 Steve West, Professor and Associate Dean for Academic Affairs (ex officio)

***Mission:***

The Curriculum Committee is responsible for overseeing the undergraduate and graduate programs of the College and reviews and approves all planned changes to courses and programs before those requiring faculty action are brought before the faculty for final action. Periodically, the Committee reviews the academic programs of the College in order to ensure that they are current and appropriate to the demands of the clients served.

***Educational Outreach Steering Committee (meets at least annually):***

Membership consists of the Associate Dean of Research (who serves as Committee Chair), directors of the College's research and outreach centers and cooperatives, the PNW-CESU Co-Leader, the WSU Extension Forester, and the Communications Director

***Members:***

Bob Edmonds, Professor and Associate Dean of Research (Chair)  
 Dave Briggs, Professor and Director, Stand Management Cooperative and Precision Forestry Cooperative  
 John Calhoun, Director, Olympic Natural Resources Center  
 Ivan Eastin, Professor and Director, Center for International Trade in Forest Products  
 Bob Edmonds, Professor and Interim Director, The Water Center  
 Greg Ettl, Associate Professor and Director, Center for Sustainable Forestry at Pack Forest  
 Jerry Franklin, Professor and Director, Wind River Canopy Crane Research Facility  
 Don Hanley, Professor and WSU Extension Forester  
 PNW Cooperative Ecosystems Study Unit Co-Leader and NPS Research Coordinator  
 Sandra Lier, Interim Director, UW Botanic Gardens  
 Bruce Lippke, Professor and Director, Rural Technology Initiative  
 Cecilia Paul, Communications Director

***Mission:***

The College Educational Outreach Steering Committee is responsible for the Denman Forestry Issues Series and all educational outreach events organized and sponsored by the College.

***Lands Committee (meets at least annually):******Members:***

Bob Edmonds, Professor and Associate Dean of Research (Chair)  
 John Calhoun, Director, Olympic Natural Resources Center

Greg Ettl, Associate Professor and Director, Center for Sustainable Forestry at Pack Forest  
Jerry Franklin, Professor and Director, Wind River Canopy Research Facility  
Andrew Larson, Student Representative  
Sandra Lier, Interim Director, University of Washington Botanic Gardens  
Bruce Lippke, Professor and Director, Rural Technology Initiative  
John Marzluff, Professor

***Mission:***

The College Lands Committee is responsible for recommending policies to guide the management of all lands and their associated facilities under the College's jurisdiction.

***Planning Committee (meets quarterly during the academic year):***

***Members:***

Beverly Anderson, College Administrator  
Gordon Bradley (Chair), Professor and Faculty Chair  
Bob Edmonds, Professor and Associate Dean for Research  
Rick Gustafson, Professor  
Fred Hoyt, UW Botanic Gardens Facilities and Grounds Manager  
Soo-Hyung Kim, Assistant Professor  
Josh Lawler, Assistant Professor  
Bruce Lippke, Professor and Director of Rural Technology Initiative  
Thomas Mentele, Development and Alumni Relations Director  
Sally Morgan, Assistant to the Dean  
Cecilia Paul, Communications Director  
John Perez-Garcia, Professor and Faculty Vice-Chair  
Alicia Robbins, Student Representative  
Clare Ryan, Associate Professor  
Nevada Smith, Assistant to the Faculty Chair  
Michelle Trudeau, Student and Academic Services Director  
Eric Turnblom, Associate Professor  
Steve West, Professor and Associate Dean for Academic Affairs

***Mission:***

The College Planning Committee (CPC) serves to solicit the views of the entire College community and is responsible for facilitating the formation and continual updating of the College's strategic vision and plans. Recommendations from the CPC are referred to the Dean for action.

***Scholarship and Financial Aid Committee (meets three times yearly):***

***Members:***

Stephen West, Associate Dean of Academic Affairs (Chair)  
Gordon Bradley, Professor and Chair of Faculty  
Rick Gustafson, Professor  
Soo Kim, Assistant Professor  
Darlene Zabowski, Professor  
Michelle Trudeau, Director of Student and Academic Services (ex officio)  
Amanda Davis, Graduate Program Coordinator, Student and Academic Services (ex officio)  
Beverly Anderson, College Administrator (ex officio)  
Caroline Rosevear, Assistant Director of Development (ex officio)

*Mission:*

The College Scholarship and Financial Aid Committee is responsible for distributing the available scholarship/fellowship funds in accordance with CFR Scholarship Policy and fund stipulations and for recommending adjustments

Advisory and ex officio Councils include:

***Dean's Council (meets weekly during the academic year):***

*Members:*

Bruce Bare, Dean (Chair)  
Bob Edmonds, Professor and Associate Dean of Research  
Steve West, Professor and Associate Dean of Academic Affairs  
Gordon Bradley, Professor and Chair of Faculty  
John Perez-Garcia, Professor and Vice-Chair of Faculty  
Sally Morgan, Dean's Assistant  
Beverly Anderson, College Administrator

*Mission:*

The Dean's Council discusses administrative, operational and funding issues that have a bearing on all programs of the College. As topics warrant, additional College members will be invited to attend council meetings.

***Council of Center Directors (meets twice yearly):***

*Members:*

Bruce Bair, Dean (Chair)  
Dave Briggs, Professor and Director, Stand Management Cooperative and Precision Forestry Cooperative  
John Calhoun, Director, Olympic Natural Resources Center  
Ivan Eastin, Professor and Director, Center for International Trade in Forest Products  
Bob Edmonds, Professor and Interim Director, The Water Center  
Greg Ettl, Associate Professor and Director, Center for Sustainable Forestry at Pack Forest  
Jerry Franklin, Professor and Director, Wind River Canopy Crane Facility  
Sandra Lier, Interim, Director, UW Botanic Gardens  
Bruce Lippke, Professor and Director, Rural Technology Initiative

***Resources Committee (meets quarterly during the academic year):***

*Members:*

Bruce Bare, Dean (Chair)  
Bob Edmonds, Professor and Associate Dean of Research  
Steve West, Professor and Associate Dean of Academic Affairs  
Gordon Bradley, Professor and Chair of Faculty  
John Perez-Garcia, Professor and Vice Chair of Faculty  
Eric Turnblom, Associate Professor and Chair of Elected Faculty Council  
Sally Morgan, Dean's Assistant  
Beverly Anderson, College Administrator

*Mission:*

The College Resources Committee advises the Dean on all matters related to space, budgets, and computing resources. As topics warrant, additional College members will be invited to attend committee meetings. The Dean makes final decisions on the allocation of resources.



#### **APPENDIX A.4: COLLEGE OF FOREST RESOURCES EXTERNAL ADVISORY BOARDS/COMMITTEES**

##### ***College of Forest Resources Visiting Committee (meets quarterly):***

Brian Boyle, Visiting Committee Chair; UW College of Forest Resources

James Dooley, CEO, Silverbrook, Ltd. and Chief Technology Officer, Forest Concepts LLC

Mark Doumit, Executive Director, Washington Forest Protection Association

Gene Duvernoy, President, Cascade Land Conservancy

Bov Eav, Station Director, USDA Forest Service Pacific Northwest Research Station

Maureen Frisch, Vice President, Simpson Investment Company

Tom Hanson, President, CFR Alumni Association

Roger Hoesterey, Northwest Regional Director, Trust for Public Lands

Jeff Koenings, Director, Washington Department of Fish & Wildlife

Jim Peters, Chair, Squaxin Island Tribe

Cassie Phillips, Vice President, Weyerhaeuser Company

Court Stanley, President, Port Blakely Tree Farms

Richard Stroble, President and CEO, Merrill and Ring, Inc.

Doug Sutherland, Washington State Commissioner of Public Lands

Bettina Von Hagen, Vice President, Ecotrust

Janet Wainwright, Janet Wainwright Public Relations, Inc.

Tom Wolford, Executive Director, Washington Pulp and Paper Foundation

Barbara Wright, Board Member, Arboretum Foundation

***The Water Center Advisory Board (meets annually)***

Kurt Beardslee, Executive Director, Washington Trout

David Brock, Habitat Program Manager, Washington Department of Fish & Wildlife

David Brookings, Director, Snohomish County Public Works Surface Water Management

Harold Brunstad, Member, Washington Farm Forestry Association

Kevin Buckley, Stormwater Permit Coordinator, Seattle Public Utilities

Linda Crerar, Policy Assistant to the Director, Washington Department of Agriculture

Bill Derry, Vice President, CH2M Hill Inc.

Bill Eckel, Manager, Rural and Resource Programs, King County Water and Land Resources

Jayna Ericson, Education/Outreach Coord., Kitsap County Surface Stormwater Management

Brian Fransen, Fisheries Biologist, Weyerhaeuser Company

Sono Hashisaki, Founder, Springwood Associates

Andy Haub, Water Resources Engineer, City of Olympia Public Works

Heather Kibbey, Surface Water Manager, City of Everett

Joan Lee, Water Solutions Program Manager, Parametrix

Mike Mactutis, Environmental Engineering Manager, City of Kent Public Works

Pam Maloney, Water Resources Planning Manager, City of Bellevue Utilities

Douglas Martin, Fisheries Biologist, Martin Environmental

Christopher May, Stormwater and Urban Stream Habitat Lead, Seattle Public Utilities

Stan Miller, Spokane County Public Works (retired)

Ed O'Brien, Stormwater Engineer, Washington Department of Ecology

George Pess, Fisheries Biologist, Northwest Fisheries Science Center

Timothy Quinn, Chief Habitat Scientist, Washington Department of Fish & Wildlife

Stephen Ralph, Senior Aquatic Ecologist, Stillwater Sciences, Inc.

Martin Raphael, Wildlife Ecology Team Leader, USDA Forest Service PNW Research Station

Tim Romanski, Fish and Wildlife Biologist, USDI U.S. Fish and Wildlife Service

Harold Smelt, Surface Water Manager, Pierce County Public Works and Utilities

Dave Ward, Snohomish County Public Works, Surface Water Management

Maurice Williamson, Member, Washington Farm Forestry Association

Bruce Wulkan, Stormwater Program Manager, Puget Sound Partnership

***Center for International Trade in Forest Products Executive Board (meets annually)***

Bruce Bare, Dean, UW College of Forest Resources

Catalino Blanche, Forest Biologist, USDA Cooperative State Research, Education, and Extension Service

Troy Defrank, Forest Products Program Manager, Washington Office of Trade and Economic Development

Ivan Eastin, Professor and Director, UW Center for International Trade of Forest

John Gorman, Corporate Forester, Green Diamond Resource Company

Joe Guizzetti, CEO, Buffelen

Barbara Kuhn, International Business Programs Coordinator, Bates Technical College

Craig Larsen, President, Softwood Export Council

Bruce Lippke, Professor and Director, UW Rural Technology Initiative

Lynn Michaelis, Market and Economic Research Director, Weyerhaeuser Company

Tom Nelson, Forest Policy Director, Sierra Pacific Industries

Paul Owen, Vice President, VanPort International

Robert Tichy, Research Engineer, Washington State University, Wood Materials and Engineering Lab

To be appointed, USDA Forest Service Pacific Northwest Research Station

To be appointed, Washington Department of Natural Resources

***Olympic Natural Resources Center Policy Advisory Board (meets twice yearly)***

Brando Blore, Member, AWPPW Local 155

Tim Cullinan, Science and Bird Conservation Director, Audubon Washington

Rod Fleck, Attorney for City of Forks, WA

Dale Hom, Supervisor, USDA Forest Service, Olympic National Forest

William Laitner, USDI National Park Service, Olympic National Park (retired)

Bruce Mackey, Lands Steward, Washington Department of Natural Resources

Bert Paul, Forks Outfitters

Guy McMinds, Natural Resources Advisor, Quinault Indian Nation

Norm Schaaf, Vice President, Merrill and Ring

Curt Smitch, Thompson Smitch Consulting (Chair)

Richard Wilson, President, Bay Center Mariculture Company

***Stand Management Cooperative Policy Committee (meets twice yearly)***

David Briggs, Director, UW Stand Management Cooperative  
Candace Cahill, Rayonier Forest Resources  
Dennis Creel, Hampton Resource, Inc.  
Steve Fairweather, Mason, Bruce & Girard  
Jim Flewelling, Biometrics Consultant  
Connor Fristoe (alt. Steve Wickham, Plum Creek Timber Company  
Jake Gibbs, Lone Rock Timber Company  
Randall Greggs, Green Diamond Resource Company  
Robert Handford, Dyno Nobel  
Mark Hanus, ImageTree Cooperation  
Scott Holmen, Olympic Resource Management  
Greg Johnson, Weyerhaeuser Company  
Terry Kendall, J.R. Simplot  
Scott Ketchum, Forest Capital Partners  
Roberta King (alt. Peggy Leonard) King County Department of Natural Resources  
Bruce Larsen, University of British Columbia Faculty of Forestry  
Alan Levy, Agrium, Inc.  
Chris Lipton, Longview Timberlands, LLC  
Douglas Maguire, Oregon State University College of Forestry  
Bill Marshall, Cascade Timber Consulting  
Gene McCaul (alt. Scott Swanson) West Fork Timber Company  
George McFadden, USDI Bureau of Land Management  
Scott McLeod, Washington Department of Natural Resources  
Gerry Middleton, FP Innovations-Forintek Canada  
John Mitchell, TimberWest, Coast Timberlands  
Louise de Montigny, British Columbia Ministry of Forests Research Branch  
Michael Mosman, Port Blakely Tree Farms  
Charles Peterson, USDA Forest Service Pacific Northwest Research Station  
Jim Plampin, Quinault Department of Natural Resources  
Doug Robin, Oregon Department of Forestry  
Dave Rumker, Campbell Group  
Brad Shelly, West Coast Lumber Inspection Bureau  
Allen Staringer, Pacific Denkmann  
Dan Stransky, Forest Systems, Inc.  
Dean Stuck, Hancock Forest Management  
Karl Walters, FORSight Resources, LLC

***Precision Forestry Cooperative Policy Committee (meets twice yearly)***

Craig Campbell, Boise Cascade Corporation Timberland Resources

David Crooker, Plum Creek Timber Company

Suzanne Flagor, Seattle Public Utilities, Watersheds Division

Sherry Fox, Tree Management Plus, Inc.

John Gorman, Simpson Investment Company

Pete Heide, Washington Forest Protection Association

Edwin Lewis, BIA - Yakama Agency Forest Management

John Mankowski, Washington Department of Fish & Wildlife

Rex McCullough, Weyerhaeuser Company

John Olsen, Potlatch Corporation

Charley Peterson, USDA Forest Service Pacific Northwest Research Station

Mike Renslow, Spencer B. Gross, Inc.

Bryce Stokes, USDA Forest Service Forest Operations Research National Program

Paula Swedeen, Washington Department of Fish and Wildlife

David Warren, The Pacific Forest Trust

Laurie Wayburn, The Pacific Forest Trust

Maurice Williamson, Forestry Consultant

Appendix B: Table 1 - BUDGETED STATE/LOCAL FUNDS										
A.	CFR State and Local Sources of Funds - Permanent (centrally supported benefits not reflected in these numbers)									
BUDGETED	by Source		2005-06	% Chg	2006-07	% Chg	2007-08	% Chg	2008-09	
		Regular State	\$5,525,961	3.7%	\$5,732,225	6.2%	\$6,087,151	4.1%	\$6,336,904	
		Local Fund Allotment	\$75,774	3.1%	\$78,093	4.2%	\$81,383	4.5%	\$85,015	
		Total	\$5,601,735	3.7%	\$5,810,318	6.2%	\$6,168,534	4.1%	\$6,421,919	
B.	CFR State and Local Sources of Funds - Permanent (centrally supported benefits not reflected in these numbers)									
BUDGETED	by Object Code		2005-06	% of Total	2006-07	% of Total	2007-08	% of Total	2008-09	% of Total
		Faculty salaries	\$3,417,254	61.0%	\$3,564,207	61.3%	\$3,722,936	60.4%	\$3,889,774	60.6%
		TA/RA salaries	\$150,631	2.7%	\$154,538	2.7%	\$261,501	4.2%	\$266,488	4.1%
		Staff salaries	\$1,805,473	32.2%	\$1,850,981	31.9%	\$1,949,955	31.6%	\$2,025,065	31.5%
		Operations	\$228,377	4.1%	\$240,592	4.1%	\$234,142	3.8%	\$240,592	3.7%
		Total	\$5,601,735	100.0%	\$5,810,318	100.0%	\$6,168,534	100.0%	\$6,421,919	100.0%
C.	CFR State and Local Sources of Funds - Permanent (centrally supported benefits not reflected in these numbers)									
BUDGETED	by Function		2005-06	% of Total	2006-07	% of Total	2007-08	% of Total	2008-09	% of Total
		Administrative Budgets	\$1,232,434	22.0%	\$1,189,002	20.5%	\$1,469,025	23.8%	\$1,592,271	24.8%
		Instructional Budgets	\$3,203,843	57.2%	\$3,367,863	58.0%	\$3,232,281	52.4%	\$3,315,571	51.6%
		Center Budgets	\$1,165,458	20.8%	\$1,253,453	21.6%	\$1,467,228	23.8%	\$1,514,077	23.6%
		Total	\$5,601,735	100.0%	\$5,810,318	100.0%	\$6,168,534	100.0%	\$6,421,919	100.0%

Appendix B: Table 2 - BUDGETED STATE/LOCAL FUNDS - Detail by Object Code and by Function										
A.	CFR State and Local Sources of Funds - Permanent (centrally supported benefits not reflected in these numbers)									
BUDGETED	Faculty Salaries		2005-06	% of Total	2006-07	% of Total	2007-08	% of Total	2008-09	% of Total
		Administrative Budgets	\$568,669	16.6%	\$505,590	14.2%	\$764,950	20.5%	\$857,725	22.1%
		Instructional Budgets	\$2,848,585	83.4%	\$3,005,121	84.3%	\$2,848,212	76.5%	\$2,915,337	74.9%
		Center Budgets	\$0	0.0%	\$53,496	1.5%	\$109,774	2.9%	\$116,712	3.0%
		Total	\$3,417,254	100.0%	\$3,564,207	100.0%	\$3,722,936	100.0%	\$3,889,774	100.0%
B..	CFR State and Local Sources of Funds - Permanent (centrally supported benefits not reflected in these numbers)									
BUDGETED	TA/RA Salaries		2005-06	% of Total	2006-07	% of Total	2007-08	% of Total	2008-09	% of Total
		Administrative Budgets	\$19,099	12.7%	\$19,595	12.7%	\$20,225	7.7%	\$20,729	7.8%
		Instructional Budgets	\$70,236	46.6%	\$72,063	46.6%	\$74,368	28.4%	\$76,231	28.6%
		Center Budgets	\$61,296	40.7%	\$62,880	40.7%	\$166,908	63.8%	\$169,528	63.6%
		Total	\$150,631	100.0%	\$154,538	100.0%	\$261,501	100.0%	\$266,488	100.0%
C.	CFR State and Local Sources of Funds - Permanent (centrally supported benefits not reflected in these numbers)									
BUDGETED	Staff Salaries		2005-06	% of Total	2006-07	% of Total	2007-08	% of Total	2008-09	% of Total
		Administrative Budgets	\$601,942	33.3%	\$620,072	33.5%	\$640,094	32.8%	\$670,072	33.1%
		Instructional Budgets	\$252,918	14.0%	\$258,569	14.0%	\$277,597	14.2%	\$291,893	14.4%
		Center Budgets	\$950,613	52.7%	\$972,340	52.5%	\$1,032,264	52.9%	\$1,063,100	52.5%
		Total	\$1,805,473	100.0%	\$1,850,981	100.0%	\$1,949,955	100.0%	\$2,025,065	100.0%
D.	CFR State and Local Sources of Funds - Permanent (centrally supported benefits not reflected in these numbers)									
BUDGETED	Operations		2005-06	% of Total	2006-07	% of Total	2007-08	% of Total	2008-09	% of Total
		Administrative Budgets	\$42,724	18.7%	\$43,745	18.2%	\$43,756	18.7%	\$43,745	18.2%
		Instructional Budgets	\$32,104	14.1%	\$32,110	13.3%	\$32,104	13.7%	\$32,110	13.3%
		Center Budgets	\$153,549	67.2%	\$164,737	68.5%	\$158,282	67.6%	\$164,737	68.5%
		Total	\$228,377	100.0%	\$240,592	100.0%	\$234,142	100.0%	\$240,592	100.0%
		Grand Total	\$5,601,735		\$5,810,318		\$6,168,534		\$6,421,919	



Appendix B: Table 3 - BUDGETED STATE/LOCAL FUNDS - Detail by Function and by Object Code										
A.	CFR State and Local Sources of Funds - Permanent (centrally supported benefits not reflected in these numbers)									
BUDGETED	Administrative Budgets		2005-06	% of Total	2006-07	% of Total	2007-08	% of Total	2008-09	% of Total
		Faculty Salaries	\$568,669	46.1%	\$505,590	42.5%	\$764,950	52.1%	\$857,725	53.9%
		TA/RA Salaries	\$19,099	1.5%	\$19,595	1.6%	\$20,225	1.4%	\$20,729	1.3%
		Staff Salaries	\$601,942	48.8%	\$620,072	52.2%	\$640,094	43.6%	\$670,072	42.1%
		Operations	\$42,724	3.5%	\$43,745	3.7%	\$43,756	3.0%	\$43,745	2.7%
		Total	\$1,232,434	100.0%	\$1,189,002	100.0%	\$1,469,025	100.0%	\$1,592,271	100.0%
B.	CFR State and Local Sources of Funds - Permanent (centrally supported benefits not reflected in these numbers)									
BUDGETED	Instructional Budgets		2005-06	% of Total	2006-07	% of Total	2007-08	% of Total	2008-09	% of Total
		Faculty Salaries	\$2,848,585	88.9%	\$3,005,121	89.2%	\$2,848,212	88.1%	\$2,915,337	87.9%
		TA/RA Salaries	\$70,236	2.2%	\$72,063	2.1%	\$74,368	2.3%	\$76,231	2.3%
		Staff Salaries	\$252,918	7.9%	\$258,569	7.7%	\$277,597	8.6%	\$291,893	8.8%
		Operations	\$32,104	1.0%	\$32,110	1.0%	\$32,104	1.0%	\$32,110	1.0%
		Total	\$3,203,843	100.0%	\$3,367,863	100.0%	\$3,232,281	100.0%	\$3,315,571	100.0%
C.	CFR State and Local Sources of Funds - Permanent (centrally supported benefits not reflected in these numbers)									
BUDGETED	Center Budgets		2005-06	% of Total	2006-07	% of Total	2007-08	% of Total	2008-09	% of Total
		Faculty Salaries	\$0	0.0%	\$53,496	4.3%	\$109,774	7.5%	\$116,712	7.7%
		TA/RA Salaries	\$61,296	5.3%	\$62,880	5.0%	\$166,908	11.4%	\$169,528	11.2%
		Staff Salaries	\$950,613	81.6%	\$972,340	77.6%	\$1,032,264	70.4%	\$1,063,100	70.2%
		Operations	\$153,549	13.2%	\$164,737	13.1%	\$158,282	10.8%	\$164,737	10.9%
		Total	\$1,165,458	100.0%	\$1,253,453	100.0%	\$1,467,228	100.0%	\$1,514,077	100.0%
		Grand Total	\$5,601,735		\$5,810,318		\$6,168,534		\$6,421,919	

Appendix B: Table 4 - BUDGETED compared with ACTUAL STATE/LOCAL FUNDS										
A.		CFR State and Local Sources of Funds - Permanent (centrally supported benefits not reflected in these numbers)								
BUDGETED	by Source		2005-06	% Chg	2006-07	% Chg	2007-08	% Chg	2008-09	
		Regular State	\$5,525,961	3.7%	\$5,732,225	6.2%	\$6,087,151	4.1%	\$6,336,904	
		Local Fund Allotment	\$75,774	3.1%	\$78,093	4.2%	\$81,383	4.5%	\$85,015	
		Total	\$5,601,735	3.7%	\$5,810,318	6.2%	\$6,168,534	4.1%	\$6,421,919	
		<i>Total - Actual</i>	<i>\$5,589,030</i>		<i>\$6,265,016</i>		<i>\$6,242,877</i>		<i>not available</i>	
B.		CFR State and Local Sources of Funds - Permanent (centrally supported benefits not reflected in these numbers)								
BUDGETED	by Object Code		2005-06	% of Total	2006-07	% of Total	2007-08	% of Total	2008-09	% of Total
		Faculty salaries	\$3,417,254	61.0%	\$3,564,207	61.3%	\$3,722,936	60.4%	\$3,889,774	60.6%
		TA/RA salaries	\$150,631	2.7%	\$154,538	2.7%	\$261,501	4.2%	\$266,488	4.1%
		Staff salaries	\$1,805,473	32.2%	\$1,850,981	31.9%	\$1,949,955	31.6%	\$2,025,065	31.5%
		Operations	\$228,377	4.1%	\$240,592	4.1%	\$234,142	3.8%	\$240,592	3.7%
		Total	\$5,601,735	100.0%	\$5,810,318	100.0%	\$6,168,534	100.0%	\$6,421,919	100.0%
ACTUAL	by Object Code		<i>2005-06</i>	<i>% of Total</i>	<i>2006-07</i>	<i>% of Total</i>	<i>2007-08</i>	<i>% of Total</i>	<i>2008-09</i>	<i>% of Total</i>
		<i>Faculty salaries</i>	<i>\$3,155,968</i>	<i>56.5%</i>	<i>\$3,452,192</i>	<i>55.1%</i>	<i>\$3,380,610</i>	<i>54.2%</i>	<i>not available</i>	
		<i>TA/RA salaries</i>	<i>\$362,986</i>	<i>6.5%</i>	<i>\$347,179</i>	<i>5.5%</i>	<i>\$375,086</i>	<i>6.0%</i>	<i>not available</i>	
		<i>Staff salaries</i>	<i>\$1,701,246</i>	<i>30.4%</i>	<i>\$1,870,387</i>	<i>29.9%</i>	<i>\$2,137,934</i>	<i>34.2%</i>	<i>not available</i>	
		<i>Operations</i>	<i>\$368,830</i>	<i>6.6%</i>	<i>\$595,258</i>	<i>9.5%</i>	<i>\$349,247</i>	<i>5.6%</i>	<i>not available</i>	
		<i>Total</i>	<i>\$5,589,030</i>	<i>100.0%</i>	<i>\$6,265,016</i>	<i>100.0%</i>	<i>\$6,242,877</i>	<i>100.0%</i>		
C.		CFR State and Local Sources of Funds - Permanent (centrally supported benefits not reflected in these numbers)								
BUDGETED	by Function		2005-06	% of Total	2006-07	% of Total	2007-08	% of Total	2008-09	% of Total
		Administrative Budgets	\$1,232,434	22.0%	\$1,189,002	20.5%	\$1,469,025	23.8%	\$1,592,271	24.8%
		Instructional Budgets	\$3,203,843	57.2%	\$3,367,863	58.0%	\$3,232,281	52.4%	\$3,315,571	51.6%
		Center Budgets	\$1,165,458	20.8%	\$1,253,453	21.6%	\$1,467,228	23.8%	\$1,514,077	23.6%
		Total	\$5,601,735	100.0%	\$5,810,318	100.0%	\$6,168,534	100.0%	\$6,421,919	100.0%
ACTUAL	by Function		<i>2005-06</i>	<i>% of Total</i>	<i>2006-07</i>	<i>% of Total</i>	<i>2007-08</i>	<i>% of Total</i>	<i>2008-09</i>	<i>% of Total</i>
		<i>Administrative Budgets</i>	<i>\$1,055,721</i>	<i>18.9%</i>	<i>\$1,167,081</i>	<i>18.6%</i>	<i>\$1,245,399</i>	<i>19.9%</i>	<i>not available</i>	
		<i>Instructional Budgets</i>	<i>\$3,335,262</i>	<i>59.7%</i>	<i>\$3,644,459</i>	<i>58.2%</i>	<i>\$3,482,728</i>	<i>55.8%</i>	<i>not available</i>	
		<i>Center Budgets</i>	<i>\$1,198,047</i>	<i>21.4%</i>	<i>\$1,453,476</i>	<i>23.2%</i>	<i>\$1,514,750</i>	<i>24.3%</i>	<i>not available</i>	
		<i>Total</i>	<i>\$5,589,030</i>	<i>100.0%</i>	<i>\$6,265,016</i>	<i>100.0%</i>	<i>\$6,242,877</i>	<i>100.0%</i>		

Appendix B: Table 5 - BUDGETED compared with ACTUAL STATE/LOCAL FUNDS - Detail by Object Code and by Function										
A.	CFR State and Local Sources of Funds - Permanent (centrally supported benefits not reflected in these numbers)									
BUDGETED	Faculty Salaries		2005-06	% of Total	2006-07	% of Total	2007-08	% of Total	2008-09	% of Total
		Administrative Budgets	\$568,669	16.6%	\$505,590	14.2%	\$764,950	20.5%	\$857,725	22.1%
		Instructional Budgets	\$2,848,585	83.4%	\$3,005,121	84.3%	\$2,848,212	76.5%	\$2,915,337	74.9%
		Center Budgets	\$0	0.0%	\$53,496	1.5%	\$109,774	2.9%	\$116,712	3.0%
		Total	\$3,417,254	100.0%	\$3,564,207	100.0%	\$3,722,936	100.0%	\$3,889,774	100.0%
ACTUAL	Faculty Salaries		2005-06	% of Total	2006-07	% of Total	2007-08	% of Total	2008-09	% of Total
		Administrative Budgets	\$336,556	10.7%	\$363,381	10.5%	\$347,901	10.3%	not available	
		Instructional Budgets	\$2,784,387	88.2%	\$2,980,335	86.3%	\$2,785,548	82.4%	not available	
		Center Budgets	\$35,025	1.1%	\$108,476	3.1%	\$247,161	7.3%	not available	
		Total	\$3,155,968	100.0%	\$3,452,192	100.0%	\$3,380,610	100.0%		
B..	CFR State and Local Sources of Funds - Permanent (centrally supported benefits not reflected in these numbers)									
BUDGETED	TA/RA Salaries		2005-06	% of Total	2006-07	% of Total	2007-08	% of Total	2008-09	% of Total
		Administrative Budgets	\$19,099	12.7%	\$19,595	12.7%	\$20,225	7.7%	\$20,729	7.8%
		Instructional Budgets	\$70,236	46.6%	\$72,063	46.6%	\$74,368	28.4%	\$76,231	28.6%
		Center Budgets	\$61,296	40.7%	\$62,880	40.7%	\$166,908	63.8%	\$169,528	63.6%
		Total	\$150,631	100.0%	\$154,538	100.0%	\$261,501	100.0%	\$266,488	100.0%
ACTUAL	TA/RA Salaries		2005-06	% of Total	2006-07	% of Total	2007-08	% of Total	2008-09	% of Total
		Administrative Budgets	\$18,956	5.2%	\$5,244	1.5%	\$42,650	11.4%	not available	
		Instructional Budgets	\$232,052	63.9%	\$183,153	52.8%	\$210,430	56.1%	not available	
		Center Budgets	\$111,978	30.8%	\$158,782	45.7%	\$122,007	32.5%	not available	
		Total	\$362,986	100.0%	\$347,179	100.0%	\$375,087	100.0%		
Table 5 continued - BUDGETED compared with ACTUAL STATE/LOCAL FUNDS - Detail by Object Code and by Function										
C.	CFR State and Local Sources of Funds - Permanent (centrally supported benefits not reflected in these numbers)									
BUDGETED	Staff Salaries		2005-06	% of Total	2006-07	% of Total	2007-08	% of Total	2008-09	% of Total
		Administrative Budgets	\$601,942	33.3%	\$620,072	33.5%	\$640,094	32.8%	\$670,072	33.1%
		Instructional Budgets	\$252,918	14.0%	\$258,569	14.0%	\$277,597	14.2%	\$291,893	14.4%
		Center Budgets	\$950,613	52.7%	\$972,340	52.5%	\$1,032,264	52.9%	\$1,063,100	52.5%
		Total	\$1,805,473	100.0%	\$1,850,981	100.0%	\$1,949,955	100.0%	\$2,025,065	100.0%
ACTUAL	Staff Salaries		2005-06	% of Total	2006-07	% of Total	2007-08	% of Total	2008-09	% of Total
		Administrative Budgets	\$592,967	34.9%	\$647,233	34.6%	\$658,640	30.8%	not available	
		Instructional Budgets	\$258,292	15.2%	\$354,608	19.0%	\$428,507	20.0%	not available	
		Center Budgets	\$849,987	50.0%	\$868,545	46.4%	\$1,050,787	49.1%	not available	
		Total	\$1,701,246	100.0%	\$1,870,387	100.0%	\$2,137,934	100.0%		
D.	CFR State and Local Sources of Funds - Permanent (centrally supported benefits not reflected in these numbers)									
BUDGETED	Operations		2005-06	% of Total	2006-07	% of Total	2007-08	% of Total	2008-09	% of Total
		Administrative Budgets	\$42,724	18.7%	\$43,745	18.2%	\$43,756	18.7%	\$43,745	18.2%
		Instructional Budgets	\$32,104	14.1%	\$32,110	13.3%	\$32,104	13.7%	\$32,110	13.3%
		Center Budgets	\$153,549	67.2%	\$164,737	68.5%	\$158,282	67.6%	\$164,737	68.5%
		Total	\$228,377	100.0%	\$240,592	100.0%	\$234,142	100.0%	\$240,592	100.0%
ACTUAL	Operations		2005-06	% of Total	2006-07	% of Total	2007-08	% of Total	2008-09	% of Total
		Administrative Budgets	\$107,242	29.1%	\$151,223	25.4%	\$196,209	56.2%	not available	
		Instructional Budgets	\$60,532	16.4%	\$126,363	21.2%	\$58,244	16.7%	not available	
		Center Budgets	\$201,057	54.5%	\$317,673	53.4%	\$94,794	27.1%	not available	
		Total	\$368,830	100.0%	\$595,258	100.0%	\$349,247	100.0%		
		Grand Total - Budgeted	\$5,601,735		\$5,810,318		\$6,168,534		\$6,421,919	
		Grand Total - Actual	\$5,589,030		\$6,265,016		\$6,242,877		not available	

Appendix B: Table 6 - BUDGETED compared with ACTUAL STATE/LOCAL FUNDS - Detail by Function and by Object Code										
A.	CFR State and Local Sources of Funds - Permanent (centrally supported benefits not reflected in these numbers)									
BUDGETED	Administrative Budgets		2005-06	% of Total	2006-07	% of Total	2007-08	% of Total	2008-09	% of Total
		Faculty Salaries	\$568,669	46.1%	\$505,590	42.5%	\$764,950	52.1%	\$857,725	53.9%
		TA/RA Salaries	\$19,099	1.5%	\$19,595	1.6%	\$20,225	1.4%	\$20,729	1.3%
		Staff Salaries	\$601,942	48.8%	\$620,072	52.2%	\$640,094	43.6%	\$670,072	42.1%
		Operations	\$42,724	3.5%	\$43,745	3.7%	\$43,756	3.0%	\$43,745	2.7%
		Total	\$1,232,434	100.0%	\$1,189,002	100.0%	\$1,469,025	100.0%	\$1,592,271	100.0%
ACTUAL	Administrative Budgets		2005-06	% of Total	2006-07	% of Total	2007-08	% of Total	2008-09	% of Total
		Faculty Salaries	\$336,556	31.9%	\$363,381	31.1%	\$347,901	27.9%	not available	
		TA/RA Salaries	\$18,956	1.8%	\$5,244	0.4%	\$42,650	3.4%	not available	
		Staff Salaries	\$592,967	56.2%	\$647,233	55.5%	\$658,640	52.9%	not available	
		Operations	\$107,242	10.2%	\$151,223	13.0%	\$196,209	15.8%	not available	
		Total	\$1,055,721	100.0%	\$1,167,081	100.0%	\$1,245,399	100.0%		
B.	CFR State and Local Sources of Funds - Permanent (centrally supported benefits not reflected in these numbers)									
BUDGETED	Instructional Budgets		2005-06	% of Total	2006-07	% of Total	2007-08	% of Total	2008-09	% of Total
		Faculty Salaries	\$2,848,585	88.9%	\$3,005,121	89.2%	\$2,848,212	88.1%	\$2,915,337	87.9%
		TA/RA Salaries	\$70,236	2.2%	\$72,063	2.1%	\$74,368	2.3%	\$76,231	2.3%
		Staff Salaries	\$252,918	7.9%	\$258,569	7.7%	\$277,597	8.6%	\$291,893	8.8%
		Operations	\$32,104	1.0%	\$32,110	1.0%	\$32,104	1.0%	\$32,110	1.0%
		Total	\$3,203,843	100.0%	\$3,367,863	100.0%	\$3,232,281	100.0%	\$3,315,571	100.0%
ACTUAL	Instructional Budgets		2005-06	% of Total	2006-07	% of Total	2007-08	% of Total	2008-09	% of Total
		Faculty Salaries	\$2,784,387	83.5%	\$2,980,335	81.8%	\$2,785,548	80.0%	not available	
		TA/RA Salaries	\$232,052	7.0%	\$183,153	5.0%	\$210,430	6.0%	not available	
		Staff Salaries	\$258,292	7.7%	\$354,608	9.7%	\$428,507	12.3%	not available	
		Operations	\$60,532	1.8%	\$126,363	3.5%	\$58,244	1.7%	not available	
		Total	\$3,335,262	100.0%	\$3,644,459	100.0%	\$3,482,728	100.0%		
Table 6 continued - BUDGETED compared with ACTUAL STATE/LOCAL FUNDS - Detail by Function and by Object Code										
C.	CFR State and Local Sources of Funds - Permanent (centrally supported benefits not reflected in these numbers)									
BUDGETED	Center Budgets		2005-06	% of Total	2006-07	% of Total	2007-08	% of Total	2008-09	% of Total
		Faculty Salaries	\$0	0.0%	\$53,496	4.3%	\$109,774	7.5%	\$116,712	7.7%
		TA/RA Salaries	\$61,296	5.3%	\$62,880	5.0%	\$166,908	11.4%	\$169,528	11.2%
		Staff Salaries	\$950,613	81.6%	\$972,340	77.6%	\$1,032,264	70.4%	\$1,063,100	70.2%
		Operations	\$153,549	13.2%	\$164,737	13.1%	\$158,282	10.8%	\$164,737	10.9%
		Total	\$1,165,458	100.0%	\$1,253,453	100.0%	\$1,467,228	100.0%	\$1,514,077	100.0%
ACTUAL	Center Budgets		2005-06	% of Total	2006-07	% of Total	2007-08	% of Total	2008-09	% of Total
		Faculty Salaries	\$35,025	2.9%	\$108,477	7.5%	\$247,161	16.3%	not available	
		TA/RA Salaries	\$111,978	9.3%	\$158,781	10.9%	\$122,007	8.1%	not available	
		Staff Salaries	\$849,987	70.9%	\$868,545	59.8%	\$1,050,787	69.4%	not available	
		Operations	\$201,057	16.8%	\$317,673	21.9%	\$94,794	6.3%	not available	
		Total	\$1,198,047	100.0%	\$1,453,476	100.0%	\$1,514,750	100.0%		
		Grand Total - Budgeted	\$5,601,735		\$5,810,318		\$6,168,534		\$6,421,919	
		Grand Total - Actual	\$5,589,030		\$6,265,016		\$6,242,877		not available	

Appendix B: Table 7. GRANT ACTIVITY & RELATED FUNDING

	FY06	FY07	FY08	FY09
Active faculty headcount	42	47	43	43
Faculty retirements/resignations	4	4	6	1
New faculty hires	0	9	2	1
Total grant proposals submitted	153	158	187	not available
New grant proposals submitted	71	82	110	not available
Total grant awards (unspecified time periods)	\$8,309,503	\$5,619,586	not available	not available
Grants & Contract Expenditures:				
Direct costs	\$7,272,529	\$6,964,654	not available	not available
Indirect costs	\$751,674	\$813,991	\$ 872,447	not available
	\$8,024,203	\$7,778,645		
Research Cost Recovery	\$397,567	\$388,811	\$354,617	\$391,487

Appendix B: Table 8. CFR ENDOWMENTS

Type	Number	6-30-2008 Market Value
Student Support	52	\$12,488,391
Faculty Support	10	\$8,815,426
Center Support	13	\$6,306,116
Discretionary Support	5	\$3,368,188
TOTAL	80	\$30,978,121

**APPENDIX C: FACULTY**

<b>LAST NAME, FIRST NAME</b>	<b>TITLE</b>	<b>APPT DETAILS</b>	<b>NO. OF COURSES TAUGHT</b>	<b>NO. OF CREDITS TAUGHT</b>	<b># OF CMTES SERVED</b>	<b># OF CMTES CHAired</b>
ALLAN, G. GRAHAM	PROFESSOR	1.0 FTE	5	19	2	0
BAKKER, JONATHAN	ASSISTANT PROFESSOR	1.0 FTE	2	6	6	3
BARE, BRUCE	PROFESSOR	1.0 FTE	3	12	3	1
BOLTON, SUSAN	PROFESSOR	1.0 FTE	11	25	13	9
BRADLEY, GORDON	PROFESSOR	1.0 FTE	5	17	21	5
BRIGGS, DAVID	PROFESSOR	1.0 FTE	2	6	27	4
BROWN, SALLY	RESEARCH ASSOCIATE PROFESSOR	1.0 FTE	2	10	5	5
BURA, RENATA	ASSISTANT PROFESSOR	1.0 FTE	3	10	1	2
DOTY, SHARON	ASSISTANT PROFESSOR	1.0 FTE	9	24	5	4
EASTIN, IVAN	PROFESSOR WOT	1.0 FTE	2	8	16	10
EDMONDS, ROBERT	PROFESSOR	1.0 FTE	8	29	16	6
ETTL, GREGORY	ASSOCIATE PROFESSOR WOT	1.0 FTE	1	5	1	1
EWING, KERN	PROFESSOR	1.0 FTE	12	60	23	14
FORD, E. DAVID	PROFESSOR	1.0 FTE	3	13	5	4
FRANKLIN, JERRY	PROFESSOR	1.0 FTE	8	38	9	5
FRIDLEY, JAMES	PROFESSOR	1.0 FTE	5	20	7	6
GLAWE, DEAN	ASSOCIATE PROFESSOR WOT	1.0 FTE			3	1
GREULICH, FRANK	PROFESSOR	1.0 FTE	6	26	4	0
GUSTAFSON, RICHARD	PROFESSOR	1.0 FTE	12	35	7	3
HALPERN, CHARLES	RESEARCH PROFESSOR	1.0 FTE			10	3
HANLEY, DONALD	PROFESSOR WOT	1.0 FTE			9	6

LAST NAME, FIRST NAME	TITLE	APPT DETAILS	NO. OF COURSES TAUGHT	NO. OF CREDITS TAUGHT	# OF CMTES SERVED	# OF CMTES CHAIED
HARRISON, ROBERT	PROFESSOR	1.0 FTE	9	49	16	6
HINCKLEY, THOMAS	PROFESSOR	1.0 FTE	9	34	24	9
HODGSON, KEVIN	PROFESSOR	1.0 FTE	7	21	6	3
JOHNSON, JAY	PROFESSOR	1.0 FTE	5	16	5	2
KIM, SOO-HYUNG	ASSISTANT PROFESSOR	1.0 FTE	1	5	5	0
LAWLER, JOSH	ASSISTANT PROFESSOR	1.0 FTE	2	10	7	2
LIPPKE, BRUCE	PROFESSOR WOT	1.0 FTE			14	2
MARZLUFF, JOHN	PROFESSOR	1.0 FTE	8	30	10	8
MOSKAL, MONIKA	ASSISTANT PROFESSOR	1.0 FTE	4	15	3	0
PAUN, DOROTHY	ASSOCIATE PROFESSOR	1.0 FTE	5	28	7	4
PEREZ-GARCIA, JOHN	PROFESSOR WOT	1.0 FTE	2	17	16	9
PETERSON, DAVID	PROFESSOR WOT	1.0 FTE	1	3	11	3
RABOTYAGOV, SERGEY	ASSISTANT PROFESSOR	1.0 FTE			2	2
REICHARD, SARAH	ASSOCIATE PROFESSOR	1.0 FTE	14	42	23	17
RYAN, CLARE	ASSOCIATE PROFESSOR	1.0 FTE	5	16	16	7
SCHIESS, PETER	PROFESSOR	1.0 FTE	7	32	6	1
SPRUGEL, DOUGLAS	PROFESSOR WOT	1.0 FTE			9	0
STRAND, STUART	RESEARCH PROFESSOR	1.0 FTE			7	5
TORGENSEN, CHRISTIAN	ASSISTANT PROFESSOR WOT	1.0 FTE	1	3	9	4
TOTH, SANDOR	ASSISTANT PROFESSOR	1.0 FTE	1	5	2	1
TURNBLOM, ERIC	ASSOCIATE PROFESSOR	1.0 FTE	12	42	11	3
VOGT, DAN	ASSOCIATE PROFESSOR	1.0 FTE	3	15	14	5
VOGT, KRISTIINA	PROFESSOR	1.0 FTE	6	44	13	10



<b>LAST NAME, FIRST NAME</b>	<b>TITLE</b>	<b>APPT DETAILS</b>	<b>NO. OF COURSES TAUGHT</b>	<b>NO. OF CREDITS TAUGHT</b>	<b># OF CMTES SERVED</b>	<b># OF CMTES CHAIED</b>
WEST, STEPHEN	PROFESSOR	1.0 FTE	2	13	11	4
WIRSING, AARON*	ASSISTANT PROFESSOR	1.0 FTE	*	*	*	*
ZABOWSKI, DARLENE	PROFESSOR	1.0 FTE	3	12	9	3

\*Dr. Wirsing is a new faculty member as of 16 September 2008.