

**DIVISION OF FORESTRY AND
NATURAL RESOURCES
STRATEGIC PLAN
2015 - 2019**

**MISSION, VALUES and PRINCIPLES,
GOALS and ACTIONS**

**WEST VIRGINIA UNIVERSITY
DAVIS COLLEGE OF AGRICULTURE, NATURAL
RESOURCES, AND DESIGN**

Contents

WHO WE ARE	1
OUR MISSION	2
VALUES AND GUIDING PRINCIPLES	3
GOALS	5
ADMINISTRATIVE GOALS	5
RESEARCH GOALS	9
TEACHING GOALS.....	12
EXTENSION/SERVICE GOAL	14
COLLABORATIVE GOALS	15
PROGRAM AREA GOALS	18
FOREST RESOURCES MANAGEMENT (FRM)	18
RECREATION, PARKS, AND TOURISM RESOURCES (RPTR).....	21
WILDLIFE AND FISHERIES RESOURCES (WFR)	24
WOOD SCIENCE AND TECHNOLOGY (WST).....	26

WHO WE ARE

West Virginia University (WVU) is the flagship land-grant university of West Virginia. It is both a comprehensive university offering 512 degree programs from the bachelor through the doctoral level and a decentralized group of 14 colleges and schools across three campuses in Morgantown, West Virginia, an arrangement which helps maintain the friendly, informal atmosphere of smaller institutions. WVU is one of only 24 state universities in the nation that serve as both the comprehensive and land grant institutions in the state. With over 28,000 students in the 2018 fall semester, and nearly 6,000 full-time faculty and staff, the University is academically and socially diverse. WVU students come from all 55 West Virginia counties, almost all 50 states, and 85 foreign countries. Since its founding in 1867, the University has developed into a center of graduate and professional education, research, and service in the state of West Virginia.

The **Davis College of Agriculture, Natural Resources, and Design** is divided into three separate schools of study: School of Agriculture and Food, School of Natural Resources, and the School of Design and Community Development. Within each school is multiple divisions including the Division of Forestry and Natural Resources and the Division of Resource Economics and Management within the School of Natural Resources. The College is also the site of the state Agricultural and Forestry Experiment Station. The College's faculty and staff are located in four major buildings on the two Morgantown campuses, on four farms and one woodlot owned by the College in the Morgantown area, and on the nearby University Research Forest. In the 2018 fall semester, 1,994 undergraduate and 203 graduate students were enrolled in the College.

The **Division of Forestry and Natural Resources** has five programs of study: Energy Land Management (ELM), Forest Resources Management (FRM), Recreation, Parks, and Tourism Resources (RPTR), Wildlife and Fisheries Resources (WFR), and Wood Science and Technology (WST). Four of these programs (ELM, FRM, WST, and RPTR) are accredited by the American Association of Professional Landmen, Society of American Foresters, and the Society of Wood Science and Technology, respectively. There is no accrediting organization for the Wildlife and Fisheries Resources program. During the 2018 fall semester, 563 undergraduate and 73 graduate students were enrolled in these programs. The Division is located in Percival Hall on the Evansdale campus, manages the 107-acre farm woodlot in Morgantown, the 7,800-acre University Research Forest at Coopers Rock, and several other forest properties located throughout West Virginia.

OUR MISSION

The mission of the Division of Forestry and Natural Resources is to further the understanding, stewardship, and sustainable use of renewable natural resources by educating students to become knowledgeable professionals and citizens, advancing and communicating research knowledge, and providing technical information and professional service to society.

VALUES AND GUIDING PRINCIPLES

The values and guiding principles identified by the faculty and staff of the Division of Forestry and Natural Resources address five fundamental questions:

- What natural resource management issues do we care about most?
- What kind of natural resource professionals do we want to be ourselves?
- What kind of natural resource professionals do we want to send out into the world?
- What kind of work place and learning environment do we want to create?
- What is our relationship with our constituencies?

The following value statements and guiding principles represent what the Division of Forestry and Natural Resources is striving toward, but has not yet fully achieved. Therefore, the faculty and staff pledge to periodically revisit these value statements to assess and reassess our progress at creating a climate conducive to fulfilling the mission of the Division.

These values and principles include concepts that are very broad. Words like stewardship, sustainability, professionalism, quality educational experience, and excellence are not easily defined. The Division must foster an on-going dialogue about core values so that we can create a common understanding and vision. One value was reiterated repeatedly by members of the faculty and staff - the need for *mutual respect* among faculty, students, and staff, and in our university and external relations. The Division of Forestry and Natural Resources must establish mutual respect as its cornerstone value.

TEAMWORK AND A SPIRIT OF COOPERATION

The Division of Forestry and Natural Resources recognizes that there is much to be gained by fostering an *esprit de corps* among faculty, students, and staff. A spirit of cooperation and camaraderie leads to increased job satisfaction, creativity, and productivity. Collaborative management and decision-making approaches strengthen both internal and external relations. With mutual respect as its cornerstone, the Division can build on its strengths through teamwork, a commitment to excellence in teaching, research and service, and dynamic interaction and communication among its programs and people.

PROVIDING A QUALITY EDUCATIONAL EXPERIENCE

The Division of Forestry and Natural Resources is committed to providing students with a quality educational experience both in and out of the classroom. The Division recognizes that students are future alumni, supporters, professional colleagues, and citizens. Our students reflect our best efforts to the outside world. Faculty will conscientiously advise students and make every effort to integrate teaching and research in the classroom. To equip students to meet the challenges of natural resource management in the future, the faculty will provide opportunities for students to develop skills in the following areas: critical thinking, oral and written communication, creative problem solving, and the use of technology. In addition, faculty will strive to spark a passion for their subject matter in their students.

STEWARDSHIP AND SUSTAINABILITY OF NATURAL RESOURCES

The Division of Forestry and Natural Resources is committed to the principle of resource stewardship and the sustainability of natural resources and the communities that depend on them, with an emphasis on Appalachian ecosystems and central hardwood forests. The Division is committed to promoting a stewardship ethic in our classrooms and work environments. In teaching, research, and service, the Division will lead by example, so that the citizens of the state, professional colleagues, and the public at large will understand and embrace these principles.

PROFESSIONALISM

The faculty and staff of the Division are committed to professionalism. Professionalism, incorporates a respect for co-workers, colleagues, students, and constituents, including an understanding of and respect for each other's differences, a code of personal and professional ethics, a loyalty to the Division; a willingness to recognize the achievements of others, an eye for details, and a spirit of responsibility. Patience, passion, trust, and a sense of humor impart vitality and inspiration to professionalism.

SERVING OUR CONSTITUENCIES

The Division of Forestry and Natural Resources is dedicated to serving its primary constituency -- the people of the State of West Virginia. To better serve all our constituencies, the Division seeks to integrate its diverse program areas, pursues knowledge that broadens and deepens our understanding of natural resources, and adheres to a strong tradition of academic freedom. The strategic direction and the allocation of resources in the Division will be based on the needs of our constituencies and a principle of equity among program areas.

GOALS

The Division of Forestry and Natural Resources (DFNR) goals are separated into five categories; Administrative Goals, Research Goals, Teaching Goals, Extension/Service Goals, and Collaborative Goals. In each category, specific goals were identified as critical by the faculty through facilitated group consensus. In addition, subsequent facilitated brainstorming sessions produced a number of possible action steps designed to achieve these goals. The goals and their related action steps will be used over the next several years to guide Division efforts. Faculty will be polled at intervals over the next five years to help verify goal attainment and to identify new critical goals within the Division. Attainment of Division-based goals is the primary responsibility of the Division Administrative Team, comprised of the Director, Associate Directors, the Program Coordinators, and the administrative staff.

ADMINISTRATIVE GOALS

Four administrative goals were identified through group consensus. The goals focus on adequate space to meet our growing teaching and research needs, revised reward systems for faculty and staff, and implementing recommendations listed in the recent USDA National Institute of Food and Agriculture review of the Division.

Administrative Goal 1: Develop a long-term and a short-term policy and plan for adequate and appropriately configured space for the Division.

Action Steps/Task 1 (Long-term)

1. Identify additional space needs for each individual program, identify options to meet additional space needs, conduct economic analysis for each option, and then develop steps to acquire additional space based on the most promising option(s). Focus attention in the following areas:

- Space in the new Agricultural Sciences building
- Space in the Ag Annex
- Space in Allen Hall
- Other locations
- New Building (10 year-time frame)

Resource Allocation:

1. Current space allocation assessment.
2. Space committee consisting of one faculty from each program; appoint a committee lead,
representation from Physical Plant and Dean's office.

Timeline:

1. Report that includes the economic analysis and recommendations for the most likely options delivered to Director by November 1, 2019.
2. Director determines what recommendations can be accomplished based on College-level limitations and financial limitations by December 1, 2019.
3. Alterations/modifications are completed by June 30, 2020.

Action Steps/Task 2 (Short-term):

1. Space committee is formed.
2. Prioritize existing DFNR space based on current space limitations of the DFNR.
3. Identify short-term (3 years) space needs of each program based on estimated research, education, and service needs. This would include estimated space needed for lab research and graduate students.
4. Establish a logical and equitable protocol to deal with variations of space needs among programs.
5. Discuss and reach a consensus of faculty, key staff, and Director.

Resource Allocation:

1. Committee members include a committee leader and one faculty member from each program. Faculty weeks – 13; committee leader – 5 weeks, 4 faculty members.
2. Current space allocation assessment.
- 3, 4. Space committee members.
5. Faculty, key staff, and Director.

Timeline:

1. Committee is formed by June 1, 2016.
- 2, 3. Complete by August 1, 2016.
4. Draft “space protocol” is presented to the Director by September 1, 2016 for approval/modification.
5. Committee presents a draft “space protocol” to entire faculty and Director for discussion and approval/modification by November 1, 2016.
6. Consensus on adequate short-term space allocation is obtained by December 1 2016.

Administrative Goal 2: Develop functional reward system for faculty and staff.

Action Steps/Task 1:

1. Revise DFNR guidelines for annual evaluations/P&T.
 - Ensure that more than one award type is available. Specific (monetary) awards for teaching, research, and service/extension need to be developed
 - Improve public recognition of awards to faculty and staff

Resource Allocation:

1. Existing guidelines.
2. Establish short-term committee consisting of representation from Director’s office and

each program area to review existing guidelines, explore other Division, College, Agency reward systems, and develop revised guidelines.

Timeline:

1. "Draft" revised guidelines are completed by July , 2015 and presented to the Director for review and approval.
2. New reward system is implemented during the Fall semester 2015.

Action Steps/Task 2:

1. Develop an environment to encourage and reward collaborative research.
 - Develop list of faculty research interests (e-list, web page)
 - Identify incentives for allocating internal funds with priority toward collaborative projects that result in externally-funded projects
 - Conduct resource seminar to familiarize faculty with each other's research interests
 - Set up faculty commons area for lunches, sharing information
 - Shared funding for staff-level grants manager
 - Staff-level position to assist in proposal writing
 - Improve public recognition of awards to faculty and staff

Resource Allocation:

1. Existing guidelines.
2. Guidelines used at other institutions of higher learning.
3. Faculty and staff.
4. DFNR funds for awards.

Timeline:

1. Faculty and staff team is formed by May 15, 2019.
2. Revised guidelines submitted to Director by September 15, 2019.
3. Final guidelines approved by November 15, 2019.
4. New guidelines are implemented beginning the Spring semester 2020.

Administrative Goal 3: Implement recommendations of the recently completed USDA National Institute of Food and Agriculture (NIFA) Review Report.

Action Steps/Tasks:

1. Hold faculty meeting to review and evaluate CSREES report on the DFNR.
2. Identify key recommendations that the DFNR will complete.
3. Determine what faculty and staff are best suited to accomplish each recommendation.

4. Complete appropriate actions to meet the requirements of the recommendation.

Resource Allocation:

1-4. Faculty and staff.

Timeline:

1. April 2019 faculty meeting.
- 2,3. Complete by the May 2019 faculty meeting.
4. Complete by June 30, 2020.

RESEARCH GOALS

Research-based goals for the DFNR focus on capacity increase and expansion. Emphasis is placed on increased obtaining competitive grants, improving the “WVU experience” for graduate students, and enhanced collaborations and relationships with potential funding agencies, research collaborators, and industry partners.

Research Goal 1: Place priority on obtaining “large” research grants that pay overhead.

Action Steps/Task 1:

1. Research “incubator” concept involving DFNR resources to permit faculty “summer” salary or “release” time during the academic year to generate large profile overhead generating grants; example -- National Science Foundation, National Research Institute, Education Challenge Grants.
2. Faculty and staff identify potential grant opportunities.
3. The Division provides assistance to faculty in large grants writing and submission.
4. Multi-discipline program teams are developed on an “as-needed” basis to generate pre-proposals for submission.
5. If a pre-proposal is selected, a team develops full-blown proposal.
6. If proposals are funded, conduct research in a timely and professional manner.

Resource Allocation:

- 1 - 6. Faculty and staff.
- 2 - 6. Over time, proposal development teams need to generate 2-3 grant proposals per faculty per year to achieve the success rate of 20% or higher.
- 4-5 Need salary support or instructor release time to write and generate grant pre-proposals and proposals.
- 3 - 6. Small amount of time by program coordinators to review and recommend pre-proposals and proposals for funding.

Timeline:

- 1, 2. Identify potential grant opportunities and potential to submit competitive proposals (continuous).
3. Develop appropriate teams to coordinate, develop, review, and submit pre-proposals and proposals incrementally.
4. First team developed and in-place by July 2015.
- 3 - 5. One to two initial pre-proposals and/or proposals are developed by January 1, 2016.
6. Complete funded projects within the timeline provided by the funding agency.

Action Steps/Task 2:

1. Provide pre-award assistance and training or networking opportunities for faculty and staff to improve their skills in collaboration, techniques, and processes for obtaining large research grants.

Resource Allocation:

1. Travel funds.
2. Faculty and staff time to attend training or networking.

Timeline:

1. As available – depending on training opportunities and types of request for proposals identified.

Research Goal 2: Increase graduate student stipends and improve the quality of their experience at WVU.**Action Steps/Task 1:**

1. Raise stipends by 11 to 12 percent. Formalize one-half to two-third time options.
2. Host annual Fall faculty-graduate student social.
3. Host annual “Speaker of Interest” or seminar series sponsored by DFNR Graduate Student Association.
4. Sponsor seminar series on writing for peer-reviewed journals, grant proposals and job applications – require for Division (one credit hour).
5. Obtain faculty consensus to require graduate student submission of refereed journal articles.
6. Require all graduate students to submit 1 to 2 papers for M.S. students and 2 to 4 papers for Ph.D. students to peer-reviewed journals as part of graduation requirements.

Resource Allocation:

1. Stipend increase - funds from MS/Hatch/Research funds, faculty time.
2. Faculty-graduate student social - DFNR covers costs, Director’s office staff time.
3. Annual “Speaker of Interest” – DFNR Director’s staff time.
4. Journal and grants writing seminar series - faculty time to develop and teach seminars.
- 5 - 7. Peer-reviewed journal article requirement - time commitment from faculty supervisor.

Timeline:

1. Stipend increases are available for graduate students for the Fall semester 2015.
2. Host annual Fall faculty-graduate student social.
3. From July 2015 thru December 2019 – organize and host “Speakers of Interest” for graduate students.
4. Fall semester 2019 – conduct journal writing seminar series.
5. Ratify change in graduation requirements during the September 2015 faculty meeting.
- 6,7. Peer-reviewed journal paper submissions by graduate students are required during their last year at WVU.

Research Goal 3: Establish a DFNR-based Visiting Committee.

Action Steps/Tasks:

1. Define goals and guidelines for Visiting Committee.
2. Select Visiting Committee members and contact them.
3. Conduct the first Visiting Committee meeting.
4. Conduct annual Visiting Committee meeting.

Resource Allocation:

- 1,2. DFNR Director, Associate Directors, program coordinators, faculty, staff, and alumni.
- 3,4. External volunteers serving on committee; faculty, staff, and Director's time; travel funds.

Timeline:

1. May 2015 faculty meeting – program coordinators and staff select potential members.
2. Potential members are contacted by July 30, 2015.
3. First meeting completed by October 30, 2015.
4. Annual meeting held every October.

Research Goal 4: Establish Advisory Committees by Program.

Action Steps/Tasks:

1. Define goals of and guidelines for all program Advisory Committees.
2. Select Advisory Committee members by program.
3. Conduct the first program Advisory Committee meetings.
4. Conduct annual program Advisory Committee meetings.

Resource Allocation:

- 1,2. DFNR Director, program coordinators, staff, and alumni.
- 3,4. External volunteers serving on committee; faculty, staff, and Director's time; travel funds.

Timeline:

1. April 2015 faculty meeting – define goals and guidelines for Advisory Committee.
2. July 30, 2015 – selection of program Advisory Committee members.
3. Initial program Advisory Committee meetings are completed by November 1, 2015.
4. Annual program Advisory Committee meetings held each May.

TEACHING GOALS

Two teaching goals were identified by group consensus. The first pertains to the development of new and/or modified major for natural resource management and courses that will meet the needs of an ever-changing student population. The latter goal focuses on improving information for graduate students.

Teaching Goal 1: Develop an interdisciplinary major centered around Natural Resources Management and develop interdisciplinary courses for the major.

Action Steps/Task:

1. Establish a formal committee to develop and establish an interdisciplinary program, both majors and minors.
 - Identify/determine the purpose and justification for the major and minors
 - Identify core requirements including the incorporation of existing classes, the modification of existing classes, and the development of new classes
 - Determine what existing and new courses need to be added, such as:
 - Natural Resources Policy
 - Introductory courses such as Natural Resources Management, Renewable Natural Resources
 - Human Dimensions of Natural Resources.
 - Inventory of Natural Resources
 - Prepare curriculum proposals and submit to College
 - Establish feedback mechanism from stakeholders
 - Determine administrative home for the major/minors
 - Implement new major/minors and new curriculum

Resource Allocation:

1. Committee will require one person as well as appropriate staff members from each DFNR program area, one person from Natural Resources Management, one person from Plant and Soil Science, and representation from the Director's office.
1. Administrative support.

Timeline:

1. Committee is formed by April 30, 2018.
1. Committee has draft "major" including curriculum completed by July 15, 2018.
1. Secure College/University approval by November 30, 2019.
1. Implement new major/minors and new curriculums by Spring semester 2020.

Teaching Goal 2: Update Graduate Student Handbook for Division of Forestry and Natural Resources.

Action Steps/Tasks:

1. Form committee including representation from all the programs, Graduate Student Association, etc.
2. Determine information that already exists (past programs).
3. Identify key subject areas.
4. Develop Graduate Student Handbook.
5. Distribute copies and place pdf copy on DFNR web site.

Resource Allocation:

- 1- 4. Committee members will include representation from all program areas and the Graduate Student Association.
- 5,6. Printing and distribution costs are estimated at \$6,000.

Timeline:

1. Committee formed by August 1, 2019.
- 2 - 4. Draft copy of handbook completed by July 1, 2020.
5. Copies printed and distributed by December 1, 2020.

EXTENSION/SERVICE GOAL

One extension/service goal was identified. This goal emphasizes the need to enhance the DFNR “presence” on a regional basis.

Extension/Service Goal: Establish a DFNR presence in regional professional societies/state government/policy forums.

Action Steps/Task 1:

1. Faculty and staff focused on developing a greater “professional” presence.
 - Faculty and staff seek to serve as officers of societies and take leadership roles
 - Host society meetings at West Virginia University
 - Emphasize greater importance on publishing research in professional journals as well as leading trade journals

Resource Allocation:

1. Faculty and staff time.
2. Travel and registration costs.

Timeline:

1. Continuous throughout the year.

Action Steps/Task 2:

1. Publish an annual DOF Accomplishment Report (academic year of July 1st to June 30th).
2. Aggressively distribute and “market” the report to external stakeholders.
3. Place annual report and other high-profile documents on DFNR web site.

Resource Allocation:

- 1 - 3. Director’s office takes the lead, faculty and staff time.
- 1,2. Publication and distribution costs (\$4,000).

Timeline:

1. Draft copy completed by October 1st of each year.
- 2,3. Printed copies available for distribution by January 15th of each year.

COLLABORATIVE GOALS

Collaborative goals were incorporated into this strategic plan as a way to further integrate cooperative efforts among all the program areas. These collaborative goals will allow the DFNR to improve its effectiveness in maintaining its mission and reaching its vision.

Collaborative Goal 1: Promoting the Division's research and teaching mission through collaboration and outreach.

Action Steps/Task 1:

1. Marketing the DFNR via social media presence and distribution of promotional items.
 - Distribute promotional items including postcards, flyers, and other items for student recruitment including to high school and community college teachers, and guidance counselors
 - Promote the Division via the DFNR website and social media presence on Facebook and Twitter
2. Periodic review and update of promotional materials.

Resource Allocation:

- 1 - 2. Faculty and staff time.
1. Promotional item costs (\$5,000).

Timeline:

- 1,2. Ongoing and continuous

Action Steps/Task 2:

1. Complete research profiles via posted electronically to the Division website faculty profiles for each program.

Topics should include:

- General research information about the DFNR
 - Specific research information by programs
 - Faculty and their research profile
2. Marketing the research profiles.
 - Distribute information to high school biology and science teachers, guidance counselors, etc.
 - Promote information via the DFNR web site

3. Periodic review and update of materials.

Resource Allocation:

1. Research profile team members that include faculty and staff.
2. Marketing and distribution (\$2,000).

Timeline:

1. Research profile teams formed by June 15, 2019.
1. Research profile content identified by teams by November 1, 2019.
1. Research profiles are completed by April 1, 2020.
2. Research profiles produced and distribution and marketing begins by June 1, 2020.
3. Once research profiles are completed, review and update every two years.

Collaborative Goal 3: Develop an environment to encourage and reward collaborative domestic and international research.

Action Steps/Task 1:

1. Develop a list of faculty research interests (e-list, web page).
2. Identify incentives for allocating internal funds with priority toward collaborative projects that result in externally funded projects.
3. Conduct resource seminars to familiarize faculty with each other's research interests.

Resource Allocation:

- 1,2. Faculty and staff, Director's staff take lead to coordinate.
3. Faculty and staff.

Timeline:

1. List of faculty interests completed by June 15, 2019.
2. Identification of incentives completed by September 30, 2019.
3. Seminars initiated by October 30, 2019.

Action Steps/Task 2:

1. Develop faculty commons area for lunches, information sharing, etc. The process will include:
 - Solicit ideas/suggestions from DFNR faculty and staff
 - Locate available space
 - Complete cost analysis for top three locations
 - Select best location based on costs and benefits

2. Develop construction plan with Physical Plant staff.
3. Complete modifications.

Resource Allocation:

- 1 - 3. Space, DFNR faculty and staff, Physical Plant staff.
- 1 - 3. Funds to renovate.

Timeline:

1. Fall semester 2019.
2. March 30, 2020.
3. March 30, 2021.

Action Steps/Task 3:

1. Shared funding for staff-level grants manager/proposal writer/editor.

Resource Allocation:

1. Grant funds or Division funds, about \$25,000 per year.

Timeline:

1. One – two years.

PROGRAM AREA GOALS

FOREST RESOURCES MANAGEMENT (FRM)

Gregory Dahle, Ph.D.
Program Coordinator

Teaching Goal 1: Curriculum review and modification.

Action Steps/Tasks:

1. Review current curriculum and revisit work on concentrations.
2. Review changes necessary for University GEF program
3. Decide on curriculum model.
4. Define courses in the preferred model.
5. Informally apply the “new” curriculum.
6. Formalize changes (College curriculum committee, faculty senate, etc.).
7. For capstone courses:
 - Revisit competencies
 - Review Society of American Foresters competencies for Certified Forester
 - Meet as a faculty to discuss

Resource Allocation:

1. FRM program coordinator, FRM faculty, and staff.

Timeline:

- 1 - 3, 6. Complete by Spring semester 2015.
3. Complete by Spring semester 2015/Fall semester 2015.
4. Complete by Spring semester 2015.
5. Complete by Fall semester 2016.

Teaching Goal 2: Performance evaluation for FRM graduates.

Action Steps/Task 1:

1. Conduct exit surveys of graduates:
 - Conduct survey at end of FMAN 434
 - FRM faculty sit-in on final presentations of students in capstone seminar
 - Use grade and performance in FMAN 434 as indication of competency

Resource Allocation:

1. One-person week, FRM faculty.

Timeline:

1. Survey conducted by the end of Spring semester 2018.

Action Steps/Task 2:

1. Conduct student (employee) survey one to two years after graduation. The purpose of the survey is to obtain firsthand knowledge of students' WVU education and if it prepared them for their current job. The survey will be distributed via e-mail list of students maintained by the Division.
2. Conduct employer survey – brief questionnaire regarding how well prepared graduates are in regards to: technical skills, communication skills, professionalism, etc.

Resource Allocation:

1. FRM staff time – two person days.

Timeline:

1. Complete student survey annually.
2. Complete employer survey annually.

Research Goal: *Expand research opportunities.***Action Steps/Tasks:**

1. Schedule meetings with potential research collaborators (USDA Forest Service, etc.).
2. Identify programs (universities) we can collaborate with (University of Kentucky, Virginia Tech, Ohio State University, Pennsylvania State University, University of Maine).
3. Seek support from DFNR level for faculty travel to meetings.
4. Host regional/national conference(s).
5. Continue to network with extension agents.
6. Utilize DFNR funds to stimulate research through seed money and assistance in proposal writing.
7. Explore opportunities for collaborative research among FRM faculty.

Resource Allocation:

1. FRM staff time.

Timeline:

1. Complete during Spring semester 2015.
2. Continuous.
3. On-going.
4. Complete by Spring semester 2015/Fall semester 2019.
5. On-going.
6. Complete by Fall semester 2019.
7. Continuous.

Extension/Service Goal: Offer additional short courses to professional foresters.

Action Steps/Tasks:

1. Increase the number of short courses offered to professional foresters in West Virginia and neighboring states.

Resource Allocation:

1. Dave McGill, FRM staff time.

Timeline:

1. Continuous.

RECREATION, PARKS, AND TOURISM RESOURCES (RPTR)

Jinyang Deng, Ph.D.
Program Coordinator

Teaching Goal 1: Review and revise the RPTR undergraduate program.

Teaching Goal 2: Review and revise the RPTR graduate program.

Action Steps/Tasks:

1. Identify prerequisites that are synchronized with other DFNR undergraduate degree programs.
2. Incorporate new GEF requirements into new major.
3. Design new interdisciplinary DFNR courses that are required.
4. Develop RPTR core classes and required option classes.
5. Design both free electives and restricted/suggested electives.
6. Package new major and catalog description.
7. Submit major to College and monitor progress.
8. Develop public relations plan for new major.
9. Implement new curriculum.
10. Re-design web site and DFNR link.
11. Explore cross listing interdisciplinary courses with DFNR and Natural Resources Management.

Resource Allocation:

1. RPTR faculty and staff.
2. RPTR faculty and staff participate in DFNR committee to design and implement new interdisciplinary courses.
3. RPTR faculty and staff design, implement new major and tech new courses.
4. RPTR faculty and staff time dedicated to pursue new SAF accreditation.

Timeline:

- 1,2. Complete by the end of Spring semester 2015.
- 3 - 8. Complete by end of Spring semester 2015.
- 9 - 1113. Implement during Fall semester 2019.

-24-

Research Goal 1: Build stronger research alliances with federal and state resource management agencies.

Research Goal 2: Lead and participate in interdisciplinary research projects with a regional, landscape-level focus.

Research Goal 3: Enhance information transfer to agency, industry, and civic groups.

Action Steps/Tasks:

1. Continue active participation in Great Lakes-Northern Forest Cooperative Ecosystem Science Unit.
2. Participate and lead interdisciplinary research efforts across the Division, College, and University.
3. Host two visits from agency research coordinators per semester.
4. Present research at regional/national agency conferences and forums.
5. Develop a web page on the RPTR program site with PDF versions of research papers and technical reports produced by faculty.

Resource Allocation:

1. Faculty.
2. Web design staff.
3. Coordinate with DFNR faculty and AHC staff.

Timeline:

1. On-going.
2. On-going.
3. May 2019.

Service/Extension Goal 1: Lead formation of a Center for Recreation, Parks, and Tourism Resources.

Service/Extension Goal 2: Continue participation in Community Design Team, Community Design and Development Center, and WVU Service Learning Programs.

Action Steps/Tasks:

1. Develop proposal for Center for Recreation, Parks, and Tourism Resources.
2. Build support and secure funding for RPTR Center.
3. Implementation of RPTR Center.

-25-

Resource Allocation:

1. Faculty.
2. Coordinate efforts with other WVU Departments and Colleges.
3. Other public sector and commercial sponsors.

Timeline:

1. April 2015 to December 2019 Build coalition of support for RPTR Center, seek funding.
2. April 2020 Secure funding for RPTR Center.
3. Sept. 2020 Begin implementation of RPTR Center.

WILDLIFE AND FISHERIES RESOURCES (WFR)

**John Edwards, Ph.D.
Program Coordinator**

Teaching Goal 1: Address undergraduate issues.

Action Steps/Tasks:

1. Compare with peers and develop a target ratio.
2. Hire graduate students to teach entry level courses and lab sessions.
3. Cut number of students allowed in the program.

Resource Allocation:

- 1-5. Program coordinator and WFR staff.

Timeline:

1. Complete by May 1, 2015.
2. Ongoing
3. Initial meeting with key program faculty complete by May 1, 2019.

Teaching Goal 2: Renovate WFR space on the second floor, Percival Hall (Rooms 307 and 309)

Action Steps/Tasks:

1. Develop plan for 307 and 309.
2. Obtain estimates from Physical Plant.
3. Forward proposed plan with cost estimate to Division Director and Dean to obtain decisions on approval and funding.
4. Contract with Physical Plant for work.

Resource Allocation:

- 1 - 4. WFR staff, Physical Plant staff.
2. Funds to complete renovations.

Timeline:

1. Complete by May 1, 2015.
2. Cost estimates complete by July 1, 2015
3. Meet with Division Director by August 1, 2015.
4. Construction begins by February 1, 2020.

Research Goals:

Extension/Service Goal: *Disseminate research knowledge to public.*

Action Steps/Tasks:

1. PC works to establish a staff person with duties to be a liaison between faculty research bulletins and local and regional media.

Resource Allocation:

1. WFR staff.

Timeline:

1. Begin discussion by July 1, 2019.

WOOD SCIENCE AND TECHNOLOGY (WST)

Gregory Dahle, Ph.D.
Program Coordinator

Teaching Goal 1: Curriculum review and modification.

Action Steps/Tasks:

1. Modify or enhance current curriculum to address changes in the program
2. Develop a new minor in bioenergy.
3. Evaluate lower math, physics, chemistry requirements to improve student recruitment.
4. Review and revise graduate courses and curriculum.
5. Explore collaborative teaching opportunities with Forest Resources Management faculty.

Resource Allocation:

- 1 - 4. WST faculty time.
5. WST and FRM staff time.

Timeline:

- 1, 3. Complete by June 1, 2015.
2. Complete by December 1, 2015.
- 4, 5. Complete by end Spring semester 2019.

Teaching Goal 2: Increase enrollment in WST undergraduate program.

Action Steps/Tasks:

1. Rebrand program to include Bioenergy and Renewable Materials.
2. Agitate Division and College Administrators to aggressively recruit WST students.
3. Keep our web site up-to-date and attractive.
4. Participate in recruiting opportunities such as Majors Information Day, WVU Days, etc.
5. Add new faculty member as a full-time tenure track, 50% teaching/50% research position.

Resource Allocation:

1. WST faculty and staff time.
2. WST faculty and staff time, Director and Faculty Recruiting Officer.
3. Division web-master, faculty.
4. WST faculty, and administration.
5. WST faculty and administration.

Timeline:

- 1 - 4. On-going.
5. Complete by August 2019.

Research Goal: Promote the state-of-the-art Renewable Biomaterials and Bioenergy Research Center by maximizing the impact of the forest and biomass utilization research opportunities.

Action Steps/Tasks:

1. New faculty position as a full-time, tenure track position; 50% teaching/50% research.
2. Enhance available research space for WST and AHC staffs.
3. Explore creative ways to attract external funds to support graduate research.
4. Successfully complete funded projects and publish.
5. Publish annual report as a “hard” document and electronic copy.
6. Include a high-impact technology transfer component with the Wood Utilization Research program.
7. Expand research through collaboration and external grants.
8. Participate in Division’s efforts to attract large, overhead paying grants.
9. Sponsor a regional conference/meeting.

Resource Allocation:

1. Funds for position, administrative buy-in.
2. WST faculty and staff time, Division Director.
- 3,4. WST faculty and staff time.
5. Related staff time.
- 6,8,9. WST faculty and staff time, AHC staff time.
7. WST faculty and staff time, administrative buy-in.

Timeline:

- 1,9. Complete within three years.
- 2,3,6 - 8. On-going.
4. Complete “as soon as possible”.
5. Complete annually.

Extension/Service Goal: Cooperate with the Appalachian Hardwood Center in sponsoring wood technology workshops to the forest products industry.

Action Steps/Tasks:

1. Provide at least one workshop in conjunction with the AHC on a wood technology subject to industry.

Resource Allocation:

1. Faculty time

Timeline:

1. Complete on an annual basis.