Oraft- Hopefully to, be finalized their summer.

STRATEGIC PLAN AND POLICIES FOR THE UNIVERSITY OF IDAHO WILDERNESS RESEARCH CENTER AND TAYLOR RANCH WILDERNESS FIELD STATION

The Wilderness Research Center was first conceived with the university's purchase of the 65 acre Taylor Ranch in 1969, a unique facility entirely surrounded by the Frank Church River of No Return Wilderness. In 1972, the University of Idaho established the Wilderness Research Center to coordinate and focus interdisciplinary wilderness-related research by UI and cooperating organizations, including efforts at the Taylor Ranch facility. There is opportunity and need for such wilderness research in Idaho, a resource dependent state which has more wilderness and potential wilderness collectively than any state outside Alaska.

In addition to its Taylor Ranch Field Station, the Wilderness Research Center is supported by access to the Clark Fork and McCall Field Campuses, which are near existing or proposed wilderness in north and central Idaho, respectively, and three designated Research Natural Areas on the University Experimental Forest. These, along with the many outstanding faculty interested in wilderness, give the university a potential for excellence in research and related education on wilderness, natural ecosystems, and nature conservation.

July 1, 1994, President Elisabeth Zinser designated the Wilderness Research Center as the sixth campus-wide research center, joining biotechnology (IMAGE), Water Resources (IWRRI) Aquaculture, Materials Science (IMAP), and International Programs (IPO). The center director position was restored to full-time and John Hendee appointed as director, with an administrative secretary, modest operating budget, and a suite of three new offices was constructed adjacent to the Department of Resource, Recreation and Tourism in the College of Forestry, Wildlife and Range Sciences. Offices are nearby for Dr. Ed Krumpe, WRC principal scientist for wilderness management and Dr. Jeff Yeo, Taylor Ranch scientist/manager. Additional support is provided from CFWR in the form of budget and administrative services.

Under the reorganization and expansion of the center, the director will report to the Vice Provost for Research (Jean'ne Shreeve), and will be a tenured full professor in the Department of Resource, Recreation and Tourism. Thus, the historical relationship with CFWR is maintained although a new degree of autonomy and campus-wide focus is established.

In coordinating university-wide wilderness research, the center cooperates with university and college research offices. The center benefits from the counsel of a university campus-wide advisory committee of diverse faculty and administrative leaders.

Organization of the Plan

The plan provides policy direction for the research and education programs of the Wilderness Research Center (WRC) including its Taylor Ranch Wilderness Field Station (TR). The plan defines the major functions of the WRC and the Taylor Ranch Wilderness Field Station. The plan identifies the current status and sets forth policy and direction for:

- I. Purpose of the Wilderness Research Center
- II. Research Program
- III. Education Program
- IV. Service Program
- V. Taylor Ranch Wilderness Field Station Program
- VI. Organization and Management of the Wilderness Research Center

The format for presenting the center's four programs (Research, Education, Service and Taylor Ranch) includes a discussion of the following:

- a. Statement of Objectives
- b. Assessment of the Current Situation
- c. Assumptions About the Future
- d. Policy Guidelines (providing direction to meet objectives)

Specific activity for the center's operations are developed as needed in action and project plans. Progress is periodically assessed by program reviews and through advice from the Campus Advisory Committee. Each year an annual report describes the center's activities and accomplishments.

OVERVIEW -- PURPOSES OF THE WILDERNESS RESEARCH CENTER (WRC)

The center was established to coordinate and focus interdisciplinary wilderness research by the University of Idaho and with cooperating organizations. The purpose of the WRC has been to encourage research, education and service programs leading to a better understanding of the structure and function of natural ecosystems, humankind's relationships to them, and their perpetual protection as wilderness.

The Wilderness Research Center has conducted research throughout the Northwest and Alaska; however, the majority of the research has been conducted in the Frank Church River of No Return Wilderness (RNRW) because of the existence of the Taylor Ranch Wilderness Field Station in the remote lower Big Creek drainage.

The university has not provided funding to the center for this research, though some research has benefited from logistical support by the field station. Most of the center's research has been funded through outside grants and contracts. Research projects associated with the center have attracted nearly one million dollars since its inception (see Appendix A). To date, research funding has been sporadic and opportunistic making it extremely difficult to implement a planned and focused long-term research program. Thus, a major challenge for the WRC is to develop programmatic, funded research efforts rather than the project by project approach of the past.

The Wilderness Research Center and its Taylor Ranch Wilderness Field Station are also a repository for pertinent data about wilderness, including a library collection of research publications; written and recorded information from agencies, local businesses and individuals; maps and aerial photographs; and plant and animal specimen collections. In addition, in cooperation with the University of Idaho Library, a special collection of wilderness written material have been initiated on the main campus.

RESET

During its 25 year history an impressive record of research has been compiled by the WRC, much of it at the TR Wilderness Field Station. The studies at Taylor Ranch are summarized in an illustrated monograph (Hendee et al 1992) and a more complete list of the research associated with the WRC is indicated in Appendix A "Funding of Current and Past Research Associated with the UI Wilderness Research Center" and Appendix E, Publications associated with the Wilderness Research Center.

Wildlife studies have traditionally led the WRC agenda, but during the past decade studies of human relationships to wilderness have emerged in importance. There has been important work by Krumpe and students in limits of acceptable change (LAC), human use and impacts on wilderness, and work by Hendee and students on the use of wilderness for personal growth.

This strategic plan defines a dual focus for future research on: (1) Wilderness Ecosystem Research and Monitoring -- including all kinds of flora, fauna and physical resource studies that describe and measure wilderness conditions, processes and interactions. That is, Wilderness as a Land Laboratory in the words of Aldo Leopold (1941); and (2) Wilderness Use for Recreation, Personal Growth, Therapy and Education. These two areas of focus for research pursue the following broad objectives.

- Wilderness Ecosystem Research and Monitoring: Conduct and facilitate long-term research on wilderness ecosystem dynamics, including baseline inventory and descriptive studies as well as studies of resource interactions, and the comparison of wilderness baseline conditions with intensively managed lands.
- Wilderness Use for Recreation, Personal Growth, Therapy and Education: Conduct and facilitate studies and programs aimed at identifying the effects of wilderness experiences on users including effects described as personal growth, therapy, education, leadership development and their socio-economic and ecological impacts, and their management to optimize benefits while minimizing impacts.

EDUCATION

Since its inception, the WRC and TR have provided for education in concert with research including field courses and internships at Taylor Ranch and studies involving graduate students. The WRC has also facilitated, and its staff have taught, courses in wilderness management and wilderness impacts. The Distinguished Wilderness Lecture Series has provided periodic opportunities for university community to hear current perspectives by national and international figures.

The educational objectives of the WRC are stated as follows.

Provide and facilitate educational programs to disseminate research findings and promote a broader understanding of wilderness resources, wilderness stewardship, wilderness values and uses, among the general public, governmental agencies, user groups, and scientists.

SERVICE

As the knowledge base about wilderness and its stewardship has increased in the WRC and the university, this expertise and the use of the university as a forum for discussion and debate of wilderness policy issues provided service to the broader community of citizens and natural resource professionals.

For example, in 1983, the WRC sponsored the first National Wilderness Management Conference, facilitating the first National Wilderness Management Five-Year Plan by all four federal wilderness agencies -- a plan reviewed and revised in 1994 at the 6th National Wilderness Conference in Santa Fe, with a process directed by Ed Krumpe of the WRC, who also supervised the 1983 conference. Ed Krumpe also chaired the Wilderness Management Task Force of the SAF (Society of American Foresters) in 1989 and led the public

involvement process for wilderness management plans in the Selway Bitterroot Wilderness 1983; in Hells Canyon 1992 and Frank Church River of No Return Wilderness 1994. John Hendee chaired the Wilderness Research Needs Task Force of SAF 1994, was Vice Chair of Science for the 4th World Wilderness Congress in Colorado 1987 and led a six session scientific symposium at the 5th World Wilderness Congress 1993, and tri-chaired a major symposium on management of the Frank Church River of No Return Wilderness 1993. In 1992, the WRC held a forum for Idaho congressional delegation on "ideas from the university" for an Idaho Wilderness Bill. The WRC also sponsored a "Wilderness Quest" program in 1987, taking high-potential, but low-achieving students on a wilderness experience to help re-direct their academic efforts.

The Service Program objectives of the WRC are: to provide public forums, conferences and workshops, professional leadership to make the knowledge and expertise of the WRC available to public and private groups and contribute to wilderness stewardship.

These research, education and service objectives take advantage of the unique opportunities afforded by Idaho's wilderness resources and the WRC. Benefits to Idaho will accrue as the Center's efforts continue to (1) explain the dynamic processes of natural ecosystems to help protect them and contribute to management of developed ecosystems and (2) explain human responses to wilderness experiences and their impacts and management, which will help determine the acceptable levels of human uses of wilderness that will maintain sufficient naturalness and solitude.

TAYLOR RANCH

The Taylor Ranch Wilderness Field Station is located in the middle of the Frank Church River of No Return Wilderness, about seven miles up Big Creek from the Middle Fork of the Salmon River. TR is remote with access limited to a 37 mile trail or by bush plane.

Several major studies have been conducted from Taylor Ranch and others are in progress to study various wildlife species in undisturbed environments, especially those species associated with wilderness settings. These studies include ecology of the species, animal and bird community relationships, predator-prey relationships, and wildlife habitat relationships. Species studies include cougar, marten, owls, bighorn sheep, bobcat, and most recently amphibians, and long-term stream community research by Minshall et. al., long-term vegetation monitoring by Peek and Yeo.

A new laboratory at the Taylor Ranch Wilderness Field Station includes basic labware, microscopes, reference collections, some conventional wet lab facilities and laptop computer with solar power source.

The Taylor Ranch Program objectives are to provide a location, staging area and facilities to support wilderness development research and education programs of the UI Wilderness Research Center and cooperators.

PLANNING DIRECTION

Following for each of the four program areas (research, education, service and Taylor Ranch) are statements of the current situation, assumptions about the future and policy guidelines.

RESEARCH PROGRAM

Objectives: (1) Establish a long-term program of research that builds a reliable wilderness research and monitoring data base. (2) Secure, broaden, and diversify short-term and long-term funding to support the research program. (3) Disseminate research findings through journals, monographs, experiment station publication, conference presentation and proceedings. (4) Provide up-to-date research equipment, facilities and logistical support. (5) Promote research by cross-section of university faculty and cooperators. (6) Promote graduate and undergraduate research opportunities.

Current Situation (1994)

Taylor Ranch Wilderness Field Station provides an excellent staging area for research. It includes a landing field, a resident scientist/manager capable of assisting in research project planning and execution, pack stock for packing support, ten buildings including four with space for scientist and field personnel. Total overnight single bed capacity at the Taylor Ranch Wilderness Field Station is 17 persons.

External Funding: Currently one research scientist (Randall Pitstick) is employed under Department of Labor and Forest Service Funding: one MS student (Pittman) is supported by the Forest Service -- Aldo Leopold Wilderness Research Institute, two MS students (Friese and Gager) and part of another MS student (Russell) are supported by McIntire-Stennis funds through CFWR Experiment Station. With external funding, studies are underway at Taylor Ranch on Stream Recovery from Fire (Minshall of ISU), Amphibians as Indicators of Global Change (Peterson, ISU), Vegetation Change (Peek and Yeo), Bighorn Low Survival (Peek), and Natural Population Regulation in Grouse (Reese).

The Ralph M. Bleak endowment, established in 1992, now stands at more than \$100,000 and yields close to \$6000 per year for student wilderness research and education. The De Vlieg endowment for wilderness fish and wildlife research is administered by the Department of Fish and Wildlife Resources.

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Assumptions About the Future

- A decline in the number of acres of land unaltered by human activity will increase the value of wilderness and natural environments for research and, thus, the importance of the Wilderness Research Center and its Taylor Ranch Wilderness Field Station. The emerging emphasis on ecosystem management of public lands and concerns over forest and ecosystem health will further increase demand for research on natural ecosystem processes.
- Federal agencies will decrease emphasis on classification of additional areas and focus on stewardship of existing classified wilderness. This will increase information needs and further increase the demand for wilderness research. As scientific knowledge related to wilderness growth, and as the center establishes its basis of support and expertise, more focused research direction will be needed.
- The TR Wilderness Field Station and surrounding wilderness will
 continue to be an important location for ecological studies in natural
 environments and will grow in value as additional information is collected.
- 4. Enhancement of existing baseline and monitoring data will increase outside interest in doing research near Taylor Ranch Wilderness Field Station. Due to limited capacity of the facilities at Taylor Ranch, requests to conduct research there will exceed capacity. Therefore, research projects requiring use of the field station will need to be evaluated and prioritized.
- Widespread use of wilderness for personal growth and education, and completion of WRC studies, literature search and surveys on this topic, should draw favorable attention, attract students and hopefully funding for research and education.
- As the Wilderness Special Collection at the University of Idaho Library continues to grow, the center will be able to draw upon these resources to attract scholars studying historical and policy aspects of wilderness in Idaho and the Northwest.

Policy Guidelines

1. The highest priority for research at the TR Wilderness Field Station will be for projects which: develop a greater understanding of the functioning of natural systems and that cannot be conducted adequately in altered environments; are of the highest scientific quality; are long-term; involve University of Idaho faculty and graduate students; are cooperative projects with other agencies or organizations; are interdisciplinary; are of state or regional significance; are interrelated with current or past projects; and, are expected to build the center's expertise and ability to attract subsequent research.

- 2. Findings from research at TR will be compiled to serve as a long-term ecological monitoring program that focuses on indicators of natural and human influenced conditions. Elements to be considered in the monitoring program include:
 - atmospheric and climatological conditions
 - water quality and hydrology
 - plant and animal species composition, diversity, abundance, distribution, and trend
 - patterns of perturbations from fire, insect and disease
 - visitors' perceptions of naturalness
 - soil erosion, deposition, stability, and compaction
 - exotic species
 - wilderness visitor social and ecological impacts
- Studies and programs pertaining to use of wilderness for personal growth will generally not be conducted near Taylor Ranch thereby reserving capacity of the field station for wilderness ecosystem research and monitoring.
- 4. Affiliation with the WRC or use of the Field Station, will require approval of the director and adherence to polices set forth in this plan. All research projects conducted under the auspices of the Wilderness Research Center, in cooperation with the center or utilizing the Taylor Ranch Wilderness Field Station, a copy of the research proposal will be submitted to the director for the WRC file, along with a statement of involvement or support of the WRC and/or Taylor Ranch Field Station. An evaluation report (e.g. dates, accomplishments, publications, and critique), must be filed after any project is completed and will be summarized in the annual report of the WRC.

Research standards of the FWR Experiment Station will be followed by the Wilderness Research Center because the WRC operates in affiliation with CFWR.

 Research and monitoring will respect limitations of wilderness and be carried out with the most sensitive and unobtrusive methods possible to acquire essential data.

- Upon completion, research projects sponsored and/or supported by the Wilderness Research Center will recognize the center's contribution in any publication(s). An FWR Experiment Station number will be assigned to the publication(s).
- 7. Upon completion of research projects sponsored and/or supported by the Wilderness Research Center, the principal investigator(s) will deposit with the center four copies of any reports and publications which result, as well as four copies of the data base generated from the research (computerized format with location reference whenever appropriate). These publications will be deposited in the WRC files with the University of Idaho Library Wilderness Special Collection, at Taylor Ranch and WRC office libraries.
- Graduate assistantships (MS and Ph.D.) and research staff position will be established with external funding as possible.

EDUCATION PROGRAM

Objectives: (1) Continue to sponsor the annual Wilderness Resources Distinguished Lectureship. (2) Conduct regional and/or national workshops or conferences concerning wilderness research and management. (3) Promote wilderness related scholarships for undergraduate and graduate students at the University of Idaho. (4) Continue a wilderness internship program at Taylor Ranch. (5) Continue the wilderness management, wilderness impacts, wilderness field ecology and wilderness research seminars taught by Krumpe, Hendee and Yeo.

Current Situation (1994)

- The Center has annually sponsored a Wilderness Resource Distinguished Lectureship, attracting national experts at the forefront of wilderness issues and management (see Appendix B). Each lecture has been printed in booklet form and widely distributed. The three most recent lectures have focused on a vision for wilderness (respectively) in the National Forest (Worf), national parks (Contor), Fish and Wildlife Refuges (Reffalt), with the remaining lectures completing the "Vision Series", to be focused on wilderness managed by the BLM (Dombeck 1995) and a vision for wilderness in the nation (Roush 1995).
- The center supports a summer student internship program at Taylor Ranch for 2-3 students to participate in research projects and assist with operations and maintenance. This program dates back to 1972.

- 3. The center initiated the Michael Frome Scholarship for Excellence in Conservation Writing and continues to aid the College of FWR Department of RRT in soliciting funding for the Selway Bitterroot Wilderness Memorial Scholarship established in 1980. These scholarships are solely supported through private contributions.
- 4. Since 1991, a summer course has been offered at Taylor Ranch on "Field Research in Wilderness Ecology". This course is limited to twelve students and was offered cooperatively 1991-94 by UI and San Francisco State University Wildland Studies Program. In 1995, the UI will sponsor the course alone.
- The WRC has developed a proposal for a National Science Foundation research experience for undergraduates, a program that would take place from Taylor Ranch.

Assumptions About the Future

- Increasing awareness of wilderness and protected areas worldwide will create more interest in education about wilderness and protected area use, protection and management.
- There will be increasing demand for use of the Taylor Ranch Wilderness Field Station as a wilderness education laboratory and location for professional continuing education. Educational program expenses of the center including the Taylor Ranch Wilderness Field Station will continue to grow and require increased financial support.

Policy Guidelines

- Educational activities associated with the WRC will give priority to courses conducted by UI faculty or staff, offer university credit, and which are self-supporting.
- 2. Educational programs co-sponsored by the center and/or using Taylor Ranch Wilderness Field Station, (conferences, short courses, etc.) will require a proposal (including objectives, justification, agenda, and budget) approved by the center director. An evaluation report (e.g., dates, attendance, accomplishments, and critique) will be filed after each program and to be included in the WRC annual report and publicity.
- All educational programs sponsored by the Wilderness Research Center and conducted in wilderness will respect limitations of wilderness and employ the most unobtrusive and low impact techniques.

- 4. When educational opportunities are made available through employment of field courses, highest priority will be given to full-time University of Idaho students over equally qualified outside students.
- The WRC student intern program will continue to support a few motivated students to learn wilderness skills and participate in wilderness research.

SERVICE PROGRAM

The Service Program objectives of the WRC are: to provide public forums, conferences and workshops, professional leadership to make the knowledge and expertise of the WRC available to public and private groups and contribute to wilderness stewardship.

Current Situation (1994)

The WRC has sponsored and or provided leadership for several national and international conferences, symposia and task forces described more fully in the Overview section of this plan.

Assumptions About the Future

As the WRC increases its research and education activity, its available expertise will expand and so will its potential for service activities. In addition to providing expertise on wilderness management, wilderness planning processes and wilderness ecosystem research and monitoring, the WRC will soon be able to offer training in the use of wilderness for personal growth and leave no trace wilderness travel and camping practices.

Policy Guidelines

- Develop and offer wilderness management short course(s) for professionals, educators, and the lay public. (2) Provide expertise to external organizations relative to wilderness research, management, and policy.
- The Wilderness Research Center will continue to sponsor workshops, conferences, and lectures which draw together scholars, researchers, and managers spanning many disciplines to address wilderness management issues.
- 3. The center will increase its role in publication, including journal articles, research reports, monographs on the local history and natural history, brochures, species lists, and other appropriate educational materials.

The center will continue to be called upon to provide expertise and educational programs to external organizations.

 Provide workshops and training in use of wilderness for personal growth, therapy, education and leadership development as WRC expertise grows with the research on this topic.

TAYLOR RANCH WILDERNESS FIELD STATION PROGRAM

Objectives: (1) Provide a location, staging area and facilities at Taylor Ranch Wilderness Field Station in the Frank Church River of No Return Wilderness, to support wilderness-dependent research and education programs of the UI Wilderness Research Center and cooperators.

Current Situation (1994)

- 1. Taylor Ranch is remote and must be accessed by bush plane or a 37 mile trail that is only open seasonally. Most supplies and people arrive by plane from Cascade, McCall, Moscow, or Challis. Regular flights bring mail and supplies weekly from June to November and bi-monthly during December to May. A radio cooperative located in Cascade, Idaho, provides radio phone communication on an intermittent schedule. Access, transportation, and communication are major expenses which are steadily increasing.
- 2. A full-time scientist/manager, Dr. Jeff Yeo, spends five months or more at Taylor Ranch Wilderness Field Station and the remainder of the year on the UI campus in Moscow working on WRC business. Jeff is assisted at Taylor Ranch in the summer by Jette Morache, who is on continuing volunteer status and intermittently employed as needed. When Jeff Yeo is not at Taylor Ranch, a caretaker is in full-time residence.
- Wilderness interns (2-3) are competitively selected each year to spend the summer at Taylor Ranch working under direction of the scientist/manager to help with maintenance and operation of the Field Station and assist with research.
- 4. Six buildings are designated for housing, with temporary housing possible in other buildings or tents. Current sleeping capacity is 17. Some cabins have running water eight months of the year (April November). No electricity or engines (other than an emergency generator) are available on the site. Lighting is provided by propane lights or Coleman lanterns. Limited propane refrigeration is available. Kitchens are outfitted with propane stoves, dishes and cooking utensils. Bunk bed frames and

- mattresses are available. Buildings are heated with wood stoves, but the Arlow cabin has propane heat.
- 5. A field laboratory includes basic labware and wet lab facilities, portable computers, microscopes, species lists, reference animal collections and herbarium, map and aerial photo collection, and a library collection of research publications pertinent to the area, as well as agency publications and reference books.
- 6. Four head of pack stock are available for transporting equipment and personnel to wilderness locations away from Taylor Ranch Wilderness Field Station. Some camp gear is available at the station. Arrangements can be made for special services, including: long-term data collection, packing services, and organizing for groups, and other services to facilitate research. (See Fee Schedule in Appendix C). The Taylor Ranch has provided facility support for employees of the Idaho Fish and Game and Forest Service working in the area.
- 7. WRC and Taylor Ranch Wilderness Field Station personnel have achieved, through hard work and cooperation, a good working relationship with agencies, organizations, and private individuals operating in the surrounding area.
- 8. Several research projects are currently being conducted from the Taylor Ranch Field Station. During the past decade public relations efforts have included two award-winning video tapes about Taylor Ranch Field Station which were shown nationwide by approximately 154 public and commercial broadcasting stations. The Mister Wizard Science Show aired a Taylor Ranch video tape over approximately 132 stations. ABC Good Morning America showed a five-minute video tape on the mountain lion research at Taylor Ranch Wilderness Field Station. A feature length (28 min.) television program entitled, "Taylor Ranch -- America's Wildest Classroom" has been prepared by the University of Idaho News Bureau for broadcast over Idaho's Public Television Broadcasting network. "Idaho the University" magazine produced feature article on Taylor Ranch in the Winter of 1986 issue and the UI Alumni News featured an article in spring 1994. The Taylor Ranch Wilderness Field Station has also been featured in several newspaper and magazine articles. The center director and the Taylor Ranch scientist/manager made several public presentations, including slide shows at national and regional scientific and professional meetings.

Assumptions About the Future

- The demand to use Taylor Ranch Wilderness Field Station for research and education purposes will steadily increase.
- Operating expenses for maintenance, flights, horse feed, equipment and supplies, building repairs and materials, and labor costs will continue to increase both from inflation and as a result of increased use and aging of the facilities, e.g., stream bank stabilization; repair of roofs, water lines and septic systems; replacement of inefficient wood stoves and fire prevention, solar system, irrigation fire prevention and limited solar irrigation development.
- As demand for use of the field station increases, more detailed guidelines will be needed to prioritize research and educational projects to be conducted from Taylor Ranch Wilderness Field Station.
- Income from fees assessed for use of Taylor Ranch Wilderness Field Station facilities must increase to support more of the cost of operations and maintenance and begin to provide seed money to help support worthy studies.
- 5. The center will need to work with the U.S. Forest Service and Idaho Fish and Game guidelines to ensure that research and monitoring methods will respect limitations of wilderness and be carried out with the most sensitive and unobtrusive methods possible to acquire essential data.

Policy Guidelines

- The Taylor Ranch Wilderness Field Station shall only be used for research and educational activities within the general objectives of the University of Idaho Wilderness Research Center or seeking to further those objectives. Taylor Ranch will only be used for educational activities that utilize a wilderness-dependent field setting, emphasize hands-on learning, and normally offer university credit. Research and educational activities not dependent upon natural, undisturbed ecosystems or related to their use will be conducted elsewhere. Use of the facilities for non-WRC, non-wilderness related activities, commercial activities, recreation, personal or non-official business is specifically prohibited.
- 2. Management and operation of the field station will be sensitive to its unique location surrounded by classified wilderness. Activities at Taylor Ranch, along with associated research and travel to and from the Ranch, will respect the spirit of wilderness and will be conducted in such a manner as to have minimal impact on the wilderness. An unobtrusive

solar collector on the new laboratory roof will be used to recharge batteries used for running computers and bench lights used only for wilderness research.

- 3. All use of the Taylor Ranch Wilderness Field Station facilities will be approved by the director of the Wilderness Research Center or the Taylor Ranch Wilderness Field Station scientist/manager. The airstrip will remain private and may only be used for purposes related to and programs of the Wilderness Research Center. (Taylor Ranch Visitor Policies are outline in Appendix D.)
- 4. Fees will be charged for all use of Taylor Ranch. The Wilderness Research Center will seek to accommodate scientists in appropriate use of Taylor Ranch subject to WRC research policies and commitments and Taylor Ranch policies and use fees. All use will be accounted for within the fee structure by either collection or waiver of fees. Waiver of fees may be approved by the director of the Wilderness Research Center or the Taylor Ranch scientist/manager in support of WRC objectives. A fee schedule is included in Appendix C. Fees will be re-evaluated periodically and adjusted as necessary.
- Research activities will be given first priority at Taylor Ranch, followed by educational programs.

ORGANIZATION AND STRUCTURE OF THE WRC

The Wilderness Research Center, after 25 years as an administrative unite of the University of Idaho housed in the College of Forestry, Wildlife and Range Sciences, was re-emphasized and expanded July 1, 1994 to make it the sixth, campus-wide center along with biotechnology, water resources, aquaculture, materials science and international programs. The WRC director (Hendee) is a tenured professor of Resource, Recreation and Tourism reports to the Vice Provost for Research (Shreeve) and is housed in the CFWR building in offices adjacent to the Resource, Recreation and Tourism Department. CFWR provides administrative services and support, and provides a college link for plans, proposals, budget, personnel, policy and other matters of importance. Thus, the director maintains close liaison with CFWR administration, while reporting directly to the Vice Provost for Research.

The director seeks advice and guidance concerning policy and programs from a Wilderness Research Center--Campus Advisory Committee made up of UI faculty and administrative leaders. The scientist/manager of the Taylor Ranch Wilderness Field Station (Yeo) reports to the director but is also adjunct assistant professor of wildlife. Dr. Ed Krumpe, Professor of Resource,

Recreation and Tourism is principal scientist for wilderness management in the WRC, with two-thirds of his salary paid by the WRC. Programs requiring additional staff (e.g., project technicians, research associates, interns, irregular help) are supervised by either the director, scientist/manager or principal scientist depending upon assigned tasks. An administrative secretary (Maureen Smith) provides clerical and administrative support.

Responsibilities of the Director

The director is the WRC chief executive with responsibility for administration and management of the Center and implementation of its policies, programs, budgets, and facilities. Policies for the Center are contained in the Center's Strategic Plan which is prepared by the director with counsel from the Campus Advisory Committee.

The director is responsible for development and implementation of Center programs and management of WRC facilities. Major responsibilities of the director include: (1) preparing and implementing annual budgets and action plans for research, education and service programs; (2) pursuing cooperative research projects; (3) soliciting funding for center programs; (4) supervising and evaluating center personnel; (5) maintaining close working relationships with the WRC Campus Advisory Committee, pertinent external organizations and cooperators.

Wilderness Research Center Budgets

The WRC has four "hard money" budgets: the Wilderness Research Institute (Center) Budget (GDX 110) provides salary for the director, administrative secretary, Taylor Ranch scientist/manager and two-thirds salary for the principal scientist for wilderness management; a WRC Operating Budget (GDY 111) provides for administrative and operating expenses; and a Taylor Ranch Operations Budget (GDX 100) provides funds for the daily maintenance and operations of the Taylor Ranch Wilderness Field Station. The Taylor Ranch Capital Improvement Budget (number ?), administered through the Physical Plant, provides for major improvements and maintenance projects.

A WRC Income Account Budget (GDY 111) is used to receive income from Wilderness Research Center sponsored conferences, book sales, and service contracts. A Taylor Ranch Income Account Budget (GDY 077) receives income from fees for using Taylor Ranch. Other "soft money" budgets are established with external grants as needed.

Responsibilities of the Taylor Ranch Wilderness Field Station Scientist/Manager

The scientist/manager reports to the director and is delegated day-to-day responsibility for management of the field station facilities and coordination of research and education activities conducted there. The scientist/manager serves as the principle field station contact representing the Taylor Ranch and its programs to the public, Frank Church River of No Return Wilderness management personnel, Idaho Fish and Game personnel, WRC researchers and visitors, outfitters and guides, commercial and private pilots, media representatives, and local residents. He also has research and education responsibilities including planning and conducting field research, assisting researchers in collecting field data, and hosting potential researchers and representatives of potential funding institutions in coordination with the director. Overall, the scientist/manager's duties are: (1) manger Taylor Ranch facilities; (2) facilitate and coordinate the research and education activities of other faculty and cooperators working from the field station, and (3) conduct research and education. The scientist/manager submits an annual report of activities at the Taylor Ranch Field Station for the annual report of the Wilderness Research Center and Focus -- Report of the FWR Experiment Station, and writes periodic reports of research at TR for other publications and journal articles reporting study findings as appropriate.

Responsibilities of Other Staff

Responsibility of additional staff (e.g., principal scientist, project technicians, research associates, scientists, interns, irregular help) will be defined in job descriptions. These will be developed as needed by the director or scientist/manager. The WRC director, scientist/manager, and advisory committee work toward creating opportunities for other faculty, scientist, post doctoral fellows and research associates to affiliate and work with the center.

Wilderness Research Center Campus Advisory Committee

The purpose of the Wilderness Research Center Campus Advisory Committee is to provide advice to the WRC on the functions of the center and the operation of its Taylor Ranch Wilderness Field Station. Members will assist the center in attaining balance by helping develop policy, insuring that all aspects of the wilderness resource are considered in its programs and that there is campus-wide participation in WRC programs and activities. The committee also helps identify sources of funding and assists in the preparation, evaluation, and support of proposals. One valuable function of the committee is as a sounding board and source of advise and wisdom toward establishing and maintaining high standards of excellence to which the Wilderness Research Center aspires.

Committee Membership: The Wilderness Research Center Campus Advisory Committee will consist of campus executive leaders and scholars representing pertinent program areas of the university. Members are appointed by the Wilderness Research center director with concurrence of the Vice Provost for Research. Members are appointed for three-year staggered terms. Members serve without compensation. A list of current members of the Advisory Committee is contained in the appendix.

External Organizations

External organizations and private citizens with demonstrated leadership in wilderness matters will periodically be consulted on WRC programs and affairs as appropriate, e.g.:

Federal Land Management Agencies (e.g., USFS, BLM, NPS, USFWS)
Idaho natural Resource Agencies (e.g., Fish and Game,
Parks and Recreation)

Private Association of Wilderness Users (e.g., Idaho Outfitters and Guides Association)

Conservation Organizations (e.g., Wilderness Society, WILD Foundation, Wilderness Watch)

Committee Organization and Function

The Wilderness Research Center Director will chair meetings of the Campus Advisory Committee, provide an agenda in advance, generate and distribute minutes. Committee members may submit agenda items to the Director at any time. The committee will meet about four times each year. Occasionally the committee will meet at the Taylor Ranch Wilderness Field Station to review operations on site. The principal scientist for wilderness management and Taylor Ranch Wilderness Field Station scientist/manager will be ad hoc members of the Advisory Committee.

The Campus Advisory Committee will receive copies of publications, study reports, plans, proposals and correspondence pertinent to the Wilderness Research Center. Members are encouraged to communicate directly with the director at any time.

LITERATURE CITED

- Hendee, John C. and Jeff Yeo. *The Taylor Ranch Wilderness Station* (Monograph) 1992.
- Leopold, Aldo. "Wilderness As A Land Laboratory", *Living Wilderness*, 1941, p___.
- Yeo, Jeff, Ed Krumpe and John Hendee. "Wilderness Field Station in the Frank Church River of No Return Wilderness", Proceedings: Symposium on Future Visions For Management of the Frank Church River of No Return Wilderness, _____(year).

APPENDIX A FUNDING OF CURRENT AND PAST RESEARCH ASSOCIATED WITH THE WILDERNESS RESEARCH CENTER

Project/Principal Investigator	Funding Source	<u>Amount</u>	
Mountain Lion Ecology & Predator-Prey Study Dr. Maurice Hornocker	NY Zoological Society Smithsonian Institute National Geographic	\$150,000 50,000	
Prehistoric Settlement & Subsistence Patterns Dr. Frank Leonhardy	National Geographic Soc USDA Forest Service UI Research Council Idaho State Historical Society	\$ 20,000 2,000 3,200 2,000	
Ecology of the Bobcat in River of No Return Dr. Maurice Hornocker & Gary M. Koehler	USDA Fish and Wildlife National Wildlife Federation	\$225,000	
Bighorn Sheep Competition on Winter Range Ms. Holly Akenson	Wilderness Research Center	10,000	
Identification & Evaluation of Indicators to Monitor Wilderness Conditions Dr. Edwin Krumpe	McIntire-Stennis Wilderness Research Center	20,000	
Assessing Recreation Impacts in the Wilderness Dr. Edwin Krumpe	McIntire-Stennis Wilderness Research Center	10,000	
Habitat of Boreal Owl in Central; Idaho Dr. Oz Garton and Gregory D. Hayward	Idaho Fish & Game USFS, WRC National Bluebird Society	47,000	

Human-Bear Interaction at Pack Creek Preserve Admiralty Island, AK Dr. Edwin Krumpe		9,000
Communication with the Wilderness Visitor Dr. James Fazio	e Northwest Regional Commission	20,000
Laptop Computers to Measure Campsite Impacts Dr. Edwin Krumpe	McIntire-Stennis & WRC	4,000
Comparison of Wilderness Inventory Techniques of BLM & USFS Dr. Edwin Krumpe	McIntire-Stennis & WRC	5,000
Assessment of Scientific Studies at Glacier National Park Drs. Gerald Wright and Ed Krumpe	c National Park Service	20,000
Wilderness Evaluation Approaches of the BLM & USFS: A Survey Research Comparison Martin Sharp and Dr. Ed Krumpe	FWR Experiment Station Wilderness Research Center	2,000
Resource Partitioning Around Six Forest Owls in the River of No Return Wilderness Dr. Oz Garton and Gregory D. Hayward	Multiple Sources	

Ecology Study in the River of No Return Wilderness Dr. Winward Kessler and Susan L. Tank	A Winter Passerine
Wilderness Dr. Winward Kessler and	Ecology Study in the
Dr. Winward Kessler and	River of No Return
	Wilderness
Susan L. Tank	Dr. Winward Kessler and
	Susan L. Tank

Documentation of Historical Resources in the Idaho Primitive Area, Big Creek Drainage Dr. James Fazio and John W. Hartung National Geographic Society

Amphibian Survey of Big Creek Drainage

Dr. Charles Peterson, ISU

Payette National Forest

3,000

Wilderness Monitoring of Amphibian Populations in the Frank Church River of No Return Wilderness Dr. Charles Peterson, ISU Idaho State University Wilderness Research Center

Meta-populations
Analysis of Amphibian
Populations in Relation
to Fish Stocking in the
Bighorn Crag
Dr. Charles Peterson

Intermountain Research Station 6,000

Wilderness Stream Community Response to Wildlife Dr. Wayne Minshall, ISU **Payette National Forest**

20,000

Methodologies for Assessing Stream Integrity in Wilderness Dr. Wayne Minshall, ISU Aldo Leopold Wilderness Research Institute

40,000

Natural Regulation of Bighorn Sheep Population Dr. James Peek Idaho Department of Fish and Game McIntire-Stennis

20,000

Monitoring Vegetation Composition & Productivity in Big Creek Drainage

Dr. James Peek

McIntire-Stennis and various sources

Monitoring Terrestrial Community Response to Natural Disturbance Dr. Jeffrey Yeo Wilderness Research Center

Ecological Fitness of Naturally Regulated Forest Grouse Lineages Dr. Kerry Reese

Wilderness Research Center

Annual Monitoring of Juvenile Chinook Salmon Out-migration Timing and Survival

National Marine Fisheries Service National Marine Fisheries Service

Annual Monitoring of Anadromous Chinook Salmon and Steelhead Reproduction Idaho Dept. of Fish & Game Idaho Dept. Of Fish & Game

STUDIES ASSOCIATED WITH WILDERNESS USE

Year	Project/Principal Investigator	Funding Source	Amount
1988	Analysis and Abstract of 103 Wilderness Laws James Browning, John Hendee, and Joe Roggenbuck	McIntire-Stennis CFWR	\$15,000
1992-1994	Identify, annotate, and classify published studies of Use of Wilderness for Personal Growth John Hendee and Randy Pitstick	U.S. Forest Service SE Forest Experiment Station	\$15,000
1992-1993	Wilderness Discovery Feasibility of Seven Day Wilderness Experience Program for Poverty Youth in the Curlew Job Corps Center, Colville National Forest. John Hendee and Randy Pitstick	Colville National Forest in kind and employment of students	\$15,000
1993-1995	Wilderness Discovery Two Year Pilot Program and Study of Effects John Hendee and Randy Pitstick	U.S. Forest Service U.S. Department of Labor University of Idaho	\$105,000

\$14,000 1994-1995 Meaning of Forest Service Wilderness Aldo Leopold Experience to Wilderness Economically Research Institute Disadvantaged Youth \$125,000 McIntire-Stennis 1994-1999 Wilderness \$ Experience Programs for Personal Growth, Therapy, Education and Leadership Development: Their Extent, Social, Economic and Ecological Impact and **Ecosystem** Management **Policy Implications**

APPENDIX B WILDERNESS RESOURCES DISTINGUISHED LECTURESHIPS

Date	Distinguished Lecturer	Title
1977	Senator Frank Church	Wilderness in a Balanced Land Use Framework
1978	Roderick Nash	Wilderness Management: A Contradiction in Terms?
1979	Cecil D. Andrus	Reorganization and the Department of Natural Resources Implications for Wilderness
1980	Patrick F. Noonan	Preserving America's Natural Heritage: The Decade of the Eighties
1981	Russell E. Dickenson	Wilderness Values in the National Parks
1982	Michael Frome	Battle for the Wilderness: Our Forever Conflict?
1983	Agency Directors (USFS, BLM, NPS, USFWS)	Issues in Wilderness Management
1984	Brock Evans	In Celebration of Wilderness: The Progress and the Promise
1987	Jay D. Hair	Wilderness: Promises, Poems, and Pragmatism
1988	lan Player	Using Wilderness Experience to Enhance Human Potential
1989	Chief Oren Lyons	Wilderness in Native American Culture
1991	Bill Worf	A Vision for Wilderness in the National Forests

1992	Roger Contor	A Vision for Wilderness in the National Parks
1994	Bill Reffalt	A Vision for Wilderness in the U.S. Fish & Wildlife Refuges
1995	Mike Dombeck	A Vision for Wilderness on BLM Administered Lands
1995	Jon Roush	A Vision for Wilderness in the Nation

Policies for Use of Taylor Ranch Wilderness Field Station University of Idaho Wilderness Research Center

Taylor Ranch Wilderness Field Station is a facility of the University of Idaho Wilderness Research Center (WRC). The mission of Taylor Ranch Field Station is to conduct wilderness ecosystem research and monitoring studies and wilderness user studies in the CFRNRW's wilderness, to offer wilderness-dependent educational courses emphasizing hands-on learning experiences and to provide service to federal and state natural resource agencies in support of their data gathering efforts. The field station maintains a simple laboratory, research library, animal and herbarium reference collection, and research data base.

Taylor Ranch is located 37 miles inside the boundaries of the Frank Church River of No Return Wilderness (FCRNRW) and can be accessed by air or trail. Closest trail head is about 37 miles to the west at Big Creek, and from the east, either from Meyer's Cove (about 50 trail miles) or Bighorn Crags campground (about 40- trail miles). Air access is by small "bush" plan from Cascade, McCall, and Challis. The private field station airstrip is rugged, requiring experienced pilots. Use of the airstrip is limited to that supporting WRC programs and requires approval by the WRC Director or Taylor Ranch Field Station scientist/manager.

Policies

Use of the Taylor Ranch Wilderness Field Station requires approval by the Director of the University of Idaho Wilderness Research Center or Taylor Ranch Scientist/Manager at <u>least one month prior</u> to proposed use. Users conducting on-going research must provide a schedule of their planned field station use; once the schedule is approved, the director or scientist/manager must be given prior notice of any changes (e.g., dates and numbers of personnel using the facility).

- All users are subject to established Field Station user fees.
- Permission to use the field station airstrip must be obtained from the director or scientist/manager.
- Users are responsible for cleaning the facilities they used and flying or packing out their trash.
- A radio-phone is available for emergency or business purposes, but fees must be paid by the caller.
- Users may fish (catch and release) during their free time. They may not hunt from Taylor Ranch. No game may be flown from Taylor Ranch. All Idaho fish and game regulations must be obeyed.
- Users in residence must obtain permission from the director or scientist/manager to have personal guests.
- Users may not bring pets, riding, or pack stock except with prior permission of the scientist/manager.
- Users should exhibit "backcountry hospitality," including accommodating emergency requests, giving directions, and explaining on-going projects.

Fees

All fees are payable to the University of Idaho Taylor Ranch Field Station. Any adjustment in fees and payment schedules must be negotiated and agreed to in writing with the WRC director Taylor Ranch scientist/manager prior to initiation of projects. Arrangements may include exchange of services to the Field Station to offset fees, e.g. putting up firewood, mowing airstrip, special field station projects.

- Lodging: lodging fees are \$12.00 per day per person during May through
 September. From October through April lodging is \$14.00 per day per person to
 cover costs of firewood and additional propane use. Users must provide their own
 bedding. Bath soap, shampoo, dish soap, and laundry soap will be provided to limit
 impacts to the wilderness environment.
- Food: Taylor Ranch users must bring their own food and prepare their own meals.
 Kitchens are available with refrigerators, stoves, ovens, pots and pans, and utensils. Provisions for meals for large groups will be negotiated separately.
- Research Support: Field Station staff can provide horse-packing services to
 transport research equipment, camp supplies, and personnel to remote study sites.
 A daily fee of \$10.00 per horse per day and \$60.00 per Field Station staff per day to
 handle stock will be charged. Arrangements can be made for Field Station
 personnel to collect data in the absence of the researcher. A data collection fee
 will be negotiated based upon the frequency of data collection, and the amount of
 time and effort required. If studies require significant use of the Field Station
 laboratory, a laboratory fee may be negotiated.
- Clean-up: Users are responsible for keeping living quarters, kitchens, and laboratory clean and in good repair. All garbage not composed or burned must be flown or packed out. Cleaning supplies are available for use in each building. If additional clean-up or repairs by station personnel are necessary after the premises are evacuated, a \$25.00 per hour cleaning fee plus costs of supplies will be levied.

Dr. John C. Hendee, Director Wilderness Research Center FWR Room 18A University of Idaho Moscow, Idaho 83844-1144 (208) 885-2267

Telefax: (208) 885-2268

Dr. Jeffrey J. Yeo, Scientist/Manager Taylor Ranch Wilderness Field Station

May-Sept: HC 83

Cascade, Idaho 83611 208-382-4336 radio phone

Oct-April: FWR Room 17

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208-885-5779 FAX: 208-885-2268