| TAB | DESCRIPTION | ACTION |
|---|---|---|
| 1 | DEGREES OUTSIDE TRADITIONAL INSTITUTIONAL OFFERINGS | Action Item |
| 2 | UNIVERSITY OF IDAHO – ASSOCIATE OF SCIENCE IN FOREST NURSERY MANAGEMENT AND TECHNOLOGY | Action Item |
| 3 | UNIVERSITY OF IDAHO- ASSOCIATE OF SCIENCE IN FOREST OPERATIONS AND TECHNOLOGY | Action Item |
| 4 | UNIVERSITY OF IDAHO – ASSOCIATE OF SCIENCE IN WILDLAND FUEL AND FIRE TECHNOLOGY | Action Item |
| 5 | PROGRAM PROGRESS REPORTS | Information Item |

**SUBJECT**

Degrees Outside Traditional Institutional Offerings

**REFERENCE**

| | |
|---|---|
| June 2016 | Board approved a legislative idea proposing amendments to Sections 33-2107A and 33-2107B, Idaho Code, to update the language in these sections to current terms and conditions as well as provide additional provisions that would allow for the teaching of third and fourth year curriculum with State Board of Education approval when there is an identified need within the community college service area that cannot be met either by the four year university or through an agreement or memorandum of understanding with the four year university. |
| September 23, 2016 | Board approved legislation amending Sections 33- 33-2107C, Idaho Code, clarifying the district used for determining market value and population for operating third and fourth year college curriculum is the taxing district rather than the county in which the community college is located. Original legislative idea did not move forward. |
| June 2018 | The Board approved a first reading of revisions to Board Policy III.Z. adding community colleges to their respective academic service regions, with designated responsibilities for applied baccalaureate degrees. |
| August 2018 | The Board approved a second reading of revisions to Board Policy III.Z. |
| December 2020 | The Board approved Lewis-Clark State College's proposal to offer a graduate certificate in Nursing Leadership and Management. |
| February 2021 | The Board approved a first reading of proposed amendments to Board Policy III.Z. moving the statewide program responsibilities from the policy to the three-year plans, adding provisions for high need areas, removing provisions regarding the designated institution first right to offer a program and amending the requirements for entering an MOU to provide programs in shared service regions. |

| | |
|---|---|
| April 2021 | The Board approved a second reading of proposed amendments to Board Policy III.Z. |

## APPLICABLE STATUTE, RULE, OR POLICY

Idaho State Board of Education Governing Policies & Procedures, Section III.G., Postsecondary Program Approval and Discontinuance and Section III.Z., Planning and Delivery of Postsecondary Programs and Courses
Section 33-107(8), 33-2107A, 33-2107B, and 33-2107C, 33-3101 Idaho Code

## BACKGROUND/DISCUSSION

In recent months and years, various public postsecondary institutions have proposed or indicated plans to offer degree programs that fall outside the types of degrees traditionally offered by these institutions. Examples include the College of Southern Idaho (CSI) and College of Western Idaho (CWI) proposing or planning to offer four-year Baccalaureate degrees, Lewis-Clark State College (LCSC) proposing to offer a graduate Master's degree, and the University of Idaho (UI) proposing to offer two-year Associate degrees.

Section 33-2107A, Idaho Code provides that community colleges may file with the State Board of Education "a notice of intent to … to organize and operate an upper division consisting of the third and fourth years of college curriculum with powers to grant baccalaureate degrees in liberal arts and sciences, business and education. Upper division courses and programs are subject to approval pursuant to section 33-107(8)" if they meet the population and market value requirements established in Section 33-2017C. Pursuant to Section 33-107(8), Idaho Code, the Board is responsible for approving all academic courses and programs of study offered at community colleges when such courses or programs of study are academic in nature. Community colleges have been authorized by the legislature to operate third and fourth year college curriculum since 1965, subject to the provisions established in Section 33-2107C. Board policy was revised in 2018 to include the community colleges as designated institutions serving applied baccalaureate degree needs. Shortly thereafter, CSI submitted proposals for two different baccalaureate degrees, including a Bachelor of Applied Science (BAS) in Advanced Food Technology (which was later renamed Operational Management) and a Bachelor of Arts (BA) in Teacher Education. Despite the 1965 law allowing community colleges to offer four-year degrees with the limitations described above, these were the first four-year programs proposed by any community college in Idaho of which there is a record. After lengthy discussion, the Board approved the BAS program, but did not approve the BA program. During this discussion, Board Member Dave Hill laid out a framework for making a decision about proposed degree programs that are outside of traditional program offerings which he used to determine his individual vote on the matter.

Dr. Hill's framework called for "demonstrated local need." Under this framework, proposed programs that fall outside traditional degree offerings should be designed to fill an urgent, local need, and should be non-competitive with offerings

from the institution(s) designated to offer programs in that service region per Board Policy III.Z.

This framework was not formally adopted by the Board through policy or any other mechanism.

In 2020, Section 33-3101, Idaho Code was amended to remove the limit on type and level of degree Lewis-Clark State College could offer, opening them up to the opportunity to offer graduate degrees, with individual programs requiring approval by the Board. Shortly thereafter, LCSC submitted a proposal to offer a Graduate Certificate in Nursing Leadership and Management. The Board approved this proposal with very little discussion.

In 2021, the University of Idaho included three associate degree programs on its three-year plan in the areas of forestry, nursery, and wildfire technology. The Board approved this plan, with some discussion about these programs in particular, at the August 2021 regular Board meeting. In February 2022, UI submitted proposals for these three Associate of Science programs: Forest Operations and Technology, Forest Nursery Management and Technology, and Wildland Fuel and Fire Technology. These programs are on the agenda for the April 2022 Board meeting for review and approval by the Board.

Board Policy III.Z., Planning and Delivery of Postsecondary Programs and Courses authorizes University of Idaho to serve "undergraduate needs" in Regions I and II. However, the policy does not explicitly allow or prohibit UI from offering Associate-level degrees as part of meeting these undergraduate needs.

For context, Board Policy III.Z. assigns responsibility for the delivery of programs necessary to meet the educational and workforce needs with assigned service regions. Board policy requires institutions to develop a rolling three-year academic plan comprised of proposed new programs that are consistent with the institution's assigned service region and statewide program responsibilities. Service regions are based on the six geographic areas identified in Section 33-2101, Idaho Code. Board Policy III.Z.2.b.iii. designates the specific academic service regions assigned to the four-year institutions and career technical service regions assigned to the six institutions that maintain technical education programs as part of their mission. The purpose of Board Policy III.Z. is "to ensure Idaho's public postsecondary institutions meet the educational and workforce needs of the state through academic planning, alignment of programs and courses, and collaboration and coordination."

All academic program proposals, including proposals for program changes, modifications, or discontinuation approved by institutions are submitted to the Board office for review and action. Board Policy III.G. outlines which programs require approval by the full Board and which programs may be reviewed and approved by the Executive Director or a designee. However, the Executive Director

may refer any proposal to the Board or germane subcommittee for review and action.

All proposals for new academic programs require institutions to report how the program would meet workforce, student, economic, and societal needs. Proposals also require institutions to identify enrollment and graduation projections, as well as to provide information on physical, library, and personnel resources needed for implementation, including any additional revenue sources such as reallocations, new appropriations, non-ongoing sources, and student fees.

Because Board policy is largely silent on the matter, the Board currently does not have an agreed-upon framework for evaluating proposed degree programs that fall outside traditional offerings, as illustrated in the examples above.

## IMPACT

The adoption of a formal framework for evaluating proposed degree programs that fall outside traditional offerings would provide more consistency and uniformity in the Board's decision-making regarding such programs. Such a framework would also provide more transparent direction to the institutions as they work to respond to demonstrated local needs.

## ATTACHMENTS

Attachment 1 – Dr. David Hill's Proposed Framework

## STAFF COMMENTS AND RECOMMENDATIONS

Board staff recommends the Board develop a framework for evaluating degree programs that fall outside traditional program offerings. In developing this framework, staff recommends the Board consider the criteria included in Dr. Hill's proposed framework from 2018, as well as the following potential criteria:

1. Uniqueness – Requires specialized expertise and is unlikely to be offered by institutions that would normally offer that type of degree.
2. Support – Buy in and full support from those institutions that would normally offer the proposed degree type(s) in the state or region.
3. Collaboration – Full exploration of alternatives have been considered, including potential collaboration(s) with other institutions that typically offer the degree type(s) being proposed.

As part of this framework, the Board may also want to consider how industry/workforce needs are identified and prioritized in a service region or at the statewide level. If an industry/workforce need is identified, but the institution in that service region cannot or does not wish to meet the need, who is authorized to step in and meet that need? Specifically, the Board may want to direct staff to revise the process used to develop three-year program plans to include an overall review of the institutions' service regions and workforce needs.

**BOARD ACTION**

I move to direct staff to develop policy language that incorporates a framework which is useful for evaluating degree programs that fall outside traditional program offerings.

Moved by _____ Seconded by _____ Carried Yes _____ No _____

**ATTACHMENT 1**

## Framework for Evaluating Degree Programs Outside Traditional Offerings

as described by Dr. David Hill in 2018 in response to the College of Southern Idaho proposing to offer baccalaureate programs

I have given this some thought and have decided that I can support this proposal under some fairly strict conditions.

I believe that any Board policy on Baccalaureate degrees at Community Colleges should allow for the unique degrees that they can offer. As such, the CSI proposal on Food Processing Tech passed IRSA unanimously. However, I suggest that Board policy should allow for exceptional cases of demonstrated **local need.** A **local need** proposal would have the following properties:

**It should be designed to fill a local need.** The metric should be not where the students come from but, rather, where they work after completing their course. To have confidence that this is indeed the case local employers will have to make commitments to employ and the graduates make commitments to stay. It does us no good to create a program to train people who then promptly leave the area.

**The need should be urgent.** Local employers should be willing to write letters stating that indeed the need is urgent and back that up with internships etc.

**It should be non-competitive with offerings from the service area owner.** We should get a written commitment from the 4-year institution that they support this program conceptually and, if necessary, with practical assistance. The letter should come from the President of the institution.

## UNIVERSITY OF IDAHO

### SUBJECT

Associate of Science in Forest Nursery Management and Technology

### APPLICABLE STATUTE, RULE, OR POLICY

Idaho State Board of Education Governing Policies & Procedures, Sections III.E., III.G., and III.Z.

### BACKGROUND/DISCUSSION

University of Idaho (UI) proposes to create an Associate of Science (A.S.) in Forest Nursery Management and Technology. The proposed program is not related to any existing degree program at the UI or any other state two-year or four-year institution. The proposed program follows stakeholder input, and an assessment of workforce needs across the state and region. Currently, UI offers a Bachelor of Science (B.S.) in Forestry; however, there is no specific emphasis area in this degree focused on nursery management and technology. This is in part because the B.S. Forestry degree requires extensive training in forest science, whereas the workforce needs for the forest nursery sector requires emphasis on plant propagation and management, as well as entrepreneurial skills related to marketing and sales.

The UI is uniquely positioned in the state to help meet the demand for a skilled forest nursery workforce. UI is one of the only two universities in the nation operating a commercial forest nursery. The Pitkin Forest Nursery currently produces approximately 500,000 seedlings per year for both public and private stakeholders. We have the faculty and staff expertise, as well as the opportunity to develop a skilled workforce for forest nurseries that are critical to the success of the forest industry in Idaho and many other western states. Our proposed program will provide students with a hands-on, in-depth education focused on developing the technical, managerial, and entrepreneurial skills needed to manage a sustainable forest nursery. We anticipate that students from Idaho's rural communities will be interested in this program, and our efforts will help foster increased economic activity and opportunity for students within these rural communities. We believe this A.S. degree is a critical component for the UI in meeting its land-grant mission.

This new A.S. degree builds upon existing course offerings in forestry, plant sciences, and business, and we do not anticipate additional significant resources will be needed to deliver the program. We do anticipate that this A.S. degree will attract more students currently not enrolled at UI or being served by other institutions in the state. While we believe most graduates of the program will enter the forest nursery workforce, students interested in transferring into a four-year degree will be well positioned to do so since many of the disciplinary-based courses that are part of the A.S. degree would meet some of the basic

requirements. This includes disciplinary-based electives, as part of the UI's B.S. Forestry, General Forestry Emphasis and B.S. Horticulture and Urban Agriculture.

The UI/College of Natural Resources intends to seek professional accreditation of the A.S., Forest Nursery Management and Technology degree through the Society of American Foresters (SAF). As specified by SAF, to meet the *Forest Technology* accreditation standard, programs must have:

1) clear program purpose and learning outcomes;
2) adequate resources, including advising;
3) adequate levels of faculty and staff to support program (minimum of two faculty with disciplinary expertise with at least one degree in forestry);
4) support the learning environment with computers, specialized software, spatial information technologies, specialized equipment, access to appropriate outdoor sites for experiential learning and development of field skills; and
5) have a curriculum focused on four major areas - ecology and biology, measurement of forest resources, forest resource policy, economics, and administration, silviculture and forest measurement.

The fifth component of the *Forest Technology* accreditation standard requires that this degree consist of more than 60 credits. Therefore, the request includes that the Board provide an exception to Board Policy III.E., which limits A.S. degrees to 60 credits.

**IMPACT**

The Bureau of Labor Statistics (BLS) estimates that employment needs in the farmworkers and laborers, crop, nursery, and greenhouse sector will increase by 5.3% in the U.S. from 2020-2023, with approximately 87,000 job openings annually through growth and replacement needs. Similar growth projections are expected for Idaho, with a 5.2% increase in positions from 2020-2030, with 1,104 new and replacement positions open annually.

Across the western U.S., increased wildfires and other forest health issues, as well as emerging efforts to use forests to meet carbon sequestration goals to help mitigate climate change, are leading to increased demand for seedlings as part of reforestation and restoration efforts. For example, the recent Trillion Trees Initiative established by the United Nations Environment Programme and followed by the Trillion Trees Act passed by the 116th U.S. Congress, has the goal of planting one trillion new trees globally to support efforts to reduce global atmospheric carbon, support the forestry and wood products industry, and incentivize the use of sustainable wood-based building products that sequester carbon.

Numerous forest nurseries have closed in rural Idaho and beyond, leading many to wonder where the supply of tree seedlings will be produced that will be needed to meet new reforestation, restoration, and climate migration activities. There is

clearly an opportunity for the private sector to help meet these demands assuming there is a qualified workforce to support these efforts.

The proposed A.S. degree will help train this next generation of forest nursery owners and workers by providing them with a specific skillset that integrates plant production, sustainable nursery management, and sales and marketing. We anticipate that once trained, these individuals will remain in Idaho and the region and serve the forest nursery industry and rural communities.

The proposed program does not anticipate significant resources to deliver the program and will utilize existing CNR facilities and equipment. Specifically, the Pitkin Forest Nursery to deliver new courses, which will provide students with operational greenhouses and outdoor planting beds, headhouses, and classroom space for hands-on learning. The Program will require additional faculty to deliver proposed curriculum beyond current tenure-track faculty. Program anticipates meeting those instructional needs through the Pitkin Forest Nursery professional staff, in particular, part-time staff that have expertise in artificial, growth media, insects and disease, and sustainable nursery design and management. Financial impact is $13,892 - $14,142 over a four-year period.

## ATTACHMENTS

Attachment 1 – A.S., Forest Nursery Management and Technology Proposal and Letters of Support

## BOARD STAFF COMMENTS AND RECOMMENDATIONS

Consistent with Board Policy III.G, each full proposal is reviewed by the Council on Academic Affairs and Programs (CAAP) within a 30-day review period and makes recommendations to the Board's Instruction, Research and Student Affairs Committee. This review process provides institutions opportunities to provide feedback based on thoughtful review for quality, demand, centrality to mission, cost effectiveness/resources, and duplication that will inform the Board in its decision-making with regard to new program offerings. The remaining CAAP representatives abstained.

On February 3, 2022, the Board office received three proposals from UI for proposed associate degrees, one of which was the Forest Nursery Management and Technology degree. This proposal went through the 30-day review with CAAP, concluding on March 5, 2022. As a result of this review, the Board office received comments and/or concerns from four institutions regarding the offering of associate degree level programs by UI. Specifically, College of Southern Idaho believes that the proposed degrees delve into a community college mission as defined in Idaho statute and in Board Policy. North Idaho College would prefer to collaborate on the offering of the proposed associate programs. Idaho State University and Boise State University recommend that UI work collaboratively to build these programs with a community college such as North Idaho College.

The program anticipates five initial enrollments and 10-20 enrollments in subsequent years. Estimates were determined by consulting with stakeholders about potential for the proposed degree program. The university contracted with Gray Associates, who has developed a dynamic database for the institution that allows for the calculation of the contribution margin (net revenue less costs) for each academic program. UI indicates that the program will need to have at least 15 students to result in a positive contribution margin. If this number is not reached for three consecutive years, the program will be discontinued.

UI's proposed A.S. in Forest Nursery Management and Technology (formerly listed as Nursery Technology and Operations in the Three-Year Plan) is included in their current institution plan for Delivery of Academic Programs in Region II. As provided in the Three-Year Plan, no institution has the statewide program responsibility specifically for Forest Nursery Management and Technology at the associate degree level. UI has statewide program responsibility for Bachelor of Science in Forestry and Master of Science, Master of Natural Resources, and Ph.D in Natural Resource concentration, Forestry.

The proposed program will require completion of 72 credits (36 of which are general education), which surpasses the maximum number identified in Board Policy III.E for an associate degree. Specifically, Board Policy III.E provides that an associate degree shall not require more than 60 credits unless necessary for matriculation to a specific baccalaureate degree or for unique accreditation, certification, or professional licensure or by exception approved by the Board. Based on the information provided by UI, the program intends to seek professional accreditation of the A.S., Forest Nursery Management and Technology degree through the Society of American Foresters (SAF), which already provides accreditation of the B.S. Forestry degree. Therefore, staff has concluded that an exception to policy III.E is not necessary for this degree program given that the program will be seeking specialized accreditation.

Letters of support are provided from:

- Idaho Evergreens, LLC, Gabe French
- PRT Growing Services Ltd, Herb Markgraf
- Idaho Forest Products Commission, Director Jennifer Okerlund
- Associated Logging Contractors, Inc., Executive Director, Shawn Keough
- IFA Nurseries, Inc., David Colgrove and Thomas E. Jackman
- Riley Stegner and Associates, Jim Riley and Peter Stegner

The proposal completed the program review process and was discussed by the Council on Academic Affairs and Programs on March 31, 2022. The community college representatives of CAAP voted in opposition to a motion to recommend this program for approval. The University of Idaho voted in support. The proposal was discussed by the Instruction, Research, and Student Affairs Committee on April 7, 2022. Given that this proposed program is part of three associate degrees,

and the first associate degrees proposed by UI in its history, the Board's Executive Director determined to defer consideration of the proposals to the full Board.

Board Policy does not explicitly prohibit any public postsecondary institution in Idaho from proposing or offering Associate of Arts or Associate of Science degrees. Board Policy III.Z. does prohibit UI and Boise State University (BSU) from offering Associate of Applied Science (AAS) degrees, because such degrees are for Career Technical Education (CTE) programs which are not offered by UI and BSU. Thus, the question of whether UI should offer the proposed AS degrees is not a policy decision, because Board policy is silent on the matter.

BSU does currently offer an AA/AS, which is a legacy holdover from when BSU had an embedded community college mission prior to the creation of the College of Western Idaho. BSU only offers an AA/AS in General Studies to students who have completed 60 credits or more and then stop out, so the student doesn't leave empty-handed. BSU does not offer, and does not intend to offer, AS or AA degrees in any specific subjects or disciplines. They also do not recruit students into the AS/AA General Studies degree program, or encourage students to be part of the program as a normal course of their study.

Board staff finds that UI clearly has the academic capacity and capital resources to deliver the program, and has demonstrated a strong industry demand for the program. The Board will need to weigh concerns voiced by sister institutions, and whether an associate degree is the appropriate credential for the program.

**BOARD ACTION**

I move to approve the request by University of Idaho to offer an Associate of Science in Forest Nursery Management and Technology as provided in Attachment 1.

Moved by _____ Seconded by _____ Carried Yes _____ No _____

Institutional Tracking No. _____

# Idaho State Board of Education

Proposal for Academic Degree and Certificate Program

| | |
|---|---|
| Date of Proposal Submission: | 9/15/2021 |
| Institution Submitting Proposal: | University of Idaho |
| Name of College, School, or Division: | College of Natural Resources |
| Name of Department(s) or Area(s): | Department of Forest, Rangeland and Fire Sciences |

| | | | | | | |
|---|---|---|---|---|---|---|
| Official Name of the Program: | Forest Nursery Management and Technology | | | | | |
| Implementation Date: | 7/1/2022 | | | | | |
| Degree Information: | Degree Level: Associate | | Degree Type: Associate of Science | | | |
| CIP code (consult IR /Registrar): | 01.0606 | | | | | |
| Method of Delivery: Indicate percentage of face-to-face, hybrid, distance delivery, etc. | 100% Face-to-Face | | | | | |
| Geographical Delivery: | Location(s) | Moscow | Region(s) | | | |
| Indicate (X) if the program is/has: (Consistent with Board Policy V.R.) | | Self-Support fee | | Professional Fee | | Online Program Fee |
| Indicate (X) if the program is: (Consistent with Board Policy III.Z.) | X | Regional Responsibility | | Statewide Responsibility | | |

**Indicate whether this request is either of the following:**

- [X] New Degree Program
- [ ] Undergraduate/Graduate Certificates (30 credits or more)
- [ ] Expansion of Existing Program
- [ ] Consolidation of Existing Program
- [ ] New Off-Campus Instructional Program
- [ ] Other (i.e., Contract Program/Collaborative

| | | | |
|---|---|---|---|
| College Dean (Institution) | 1/24/22 Date | Vice President for Research (Institution; as applicable) | Date |
| Graduate Dean or other official (Institution; as applicable) | Date | Academic Affairs Program Manager, OSBE | Date |
| EVP/Chief Fiscal Officer (Institution) | 1-25-22 Date | Chief Financial Officer, OSBE | Date |
| Provost/VP for Instruction (Institution) | 1-25-22 Date | Chief Academic Officer, OSBE | Date |
| President | 1.25.22 Date | SBOE/Executive Director Approval | Date |

**Before completing this form, refer to Board Policy Section III.G., Postsecondary Program Approval and Discontinuance**. This proposal form must be completed for the creation of each new program. All questions must be answered.

## Rationale for Creation or Modification of the Program

1. **Describe the request and give an overview of the changes that will result.** What type of substantive change are you requesting? Will this program be related or tied to other programs on campus? Identify any existing program that this program will replace. If this is an Associate degree, please describe transferability.

   *This proposed program (Associate of Science in Forest Nursery Management and Technology) is a new program for the Department and College and is not related to any existing degree program at the University of Idaho or any other state two-year or four-year institution. The proposed program follows stakeholder input, and an assessment of workforce needs across the state and region. Currently, we offer a B.S. in Forestry, however, there is no specific emphasis area focused on nursery management and technology. This is in part because the B.S. Forestry degree requires extensive training in forest science, whereas the workforce needs for the forest nursery sector requires emphasis on plant propagation and management, as well as entrepreneurial skills related to marketing and sales.*

   *The University of Idaho (UI) is uniquely positioned in the state to help meet this demand for a skilled forest nursery workforce. UI is one of the only universities in the U.S. with a large commercial nursery. The Pitkin Forest Nursery produces approximately 500,000 seedlings per year for both public and private stakeholders. We have the faculty and staff expertise, as well as the opportunity to develop a skilled workforce for forest nurseries that are critical to the success of the forest industry in Idaho and many other western states. Our proposed program will provide students with a hands-on and in-depth education focused on developing the technical, managerial and entrepreneurial skills needed to manage a sustainable forest nursery. We anticipate that students from Idaho's rural communities will be interested in this program, and our efforts will help foster increased economic activity and opportunity for students in these rural communities. We believe this is a critical part of the UI's land-grant mission.*

   *As this new Associate of Science builds upon existing course offerings in forestry, plant sciences, and business, we do not anticipate significant resources are needed to develop and deliver the program. We do anticipate that an Associate of Science degree will attract more students currently not enrolled at UI or being served by other institutions in the state. While we believe most graduates of the program will enter the forest nursery workforce, students interested in transferring into a four-year degree (e.g., B.S. Forestry) will be well positioned to do so as many of the disciplinary-based courses that are part of the Associate of Science degree would meet some of the basic requirements, including disciplinary based electives, as part of the General Forestry Emphasis Area.*

2. **Need for the Program**. Describe evidence of the student, regional, and statewide needs that will be addressed by this proposal to include student clientele to be served and address the ways in which the proposed program will meet those needs.

   a. **Workforce and economic need:** Provide verification of state workforce needs that will be met by this program. Include job titles and cite the data source. Describe how the proposed program will stimulate the state economy by advancing the field, providing research results, etc.

*The Bureau of Labor Statistics (BLS) estimates that employment needs in the* ***farmworkers and laborers, crop, nursery, and greenhouse sector*** *will increase by 5.3% in the U.S. from 2020-2023, with approximately 87,000 job openings annually through growth and replacement needs (1). Similar growth projections are expected for Idaho, with a 5.2% increase in positions from 2020-2030, with 1,104 new and replacement positions open annually (2).*

*Although these data do not discriminate among the type of nursery or greenhouse worker, all indications are that the demand for these individuals will be high. For instance, an analysis of economic and workforce need within the tree nursery industry has been clearly identified by recent research funded by* The Pew Charitable Trust *(3). The increase in acreage of U.S. land affected by wildlife in combination with the U.S. government's commitment to the World Economic Forum's One Trillion Trees Initiative has led to a massive increase in demand for tree seedlings that currently cannot be met by existing forest nursery capacity (i.e., supply-demand imbalance). Supply has become so limited in many states that private forest landowners are having a very difficult time replanting their land post-harvest, which is required by most states' post-harvest regulations (e.g., Idaho Department of Lands). In a recent study published in* Frontiers in Forests and Global Change *concerning forest nursery supply, it was estimated that to meet current demand to reforest 128 million acres in the U.S. there would need to be a 230% increase in nursery production (4). It follows that employment demand in the forest nursery sector will only increase based upon these seedling production needs.*

*Corresponding to this demand, numerous Idaho and regional nursey owners have reviewed the proposed curriculum and program; all are highly supportive. Excerpts from these letters of support include:*

*PRT Growing Services, Ltd., North America's largest containerized forest seedling producer:*

> "We rely on forestry programs and Canadian and American universities to produce qualified individuals to work in, and manage, our nurseries and work with our customers. From my perspective, this program provides the background and training needed for those endeavors."

*The Pitkin Forest Nursery Advisory Committee, a group that represents both private and public forest nursery operators write in their letter of support that they believe this proposed degree will:*

> "Increase the pool of skilled nursery workers and new business owners:
> - Educated students are in high demand for jobs at private, State, and Federal nurseries.
> - Students will have the knowledge to return to their hometowns and start new nursery businesses in Idaho."

*IFA Nurseries, Inc., located in Wilsonville, Oregon, also writes that they are:*

> "…extremely excited about this type of program being created to fill a long outstanding need in the seedling nursery business. …a dedicated program for nurseries would provide excellent background and training that is sorely needed throughout the seedling industry."

*Based upon this demand and support for our proposed program, we anticipate that this new degree will help develop the workforce needed to support the forest nursery industry. Additionally, our emphasis on plant production, sustainable greenhouse production, and entrepreneurial skills also has potential to create the next generation of forest nursery owners and workforce in Idaho that will support the extensive reforestation efforts needed across the western U.S.*

*References*

*(1) Bureau of Labor Statistics. Employment by major occupational group, 2020 and projected 2030. Retrieved from: https://www.bls.gov/emp/tables/emp-by-detailed-occupation.htm.*
*(2) Idaho Department of Labor. Occupational and industry projections, 2020-2030. Retrieved from: https://lmi.idaho.gov/projections*
*(3) Pew Charitable Trust. (Brown, Alex. 2021. States are Growing Fewer Trees. Forest Owners Say that's a Problem. Philadelphia, Pennsylvania. The Pew Charitable Trust.)*
*(4) Fargione, J. 2021. Challenges to the Reforestation Pipeline in the United States.* Frontiers in Forests and Global Change*. Volume 4, Article 629198. 18 p. [https://www.frontiersin.org/articles/10.3389/ffgc.2021.629198/full]*

**b. Student demand.** What is the most likely source of students who will be expected to enroll (full-time, part-time, outreach, etc.). Provide evidence of student demand/ interest from inside and outside of the institution.

*We anticipate that the majority of students will enroll as full-time students. As we have designed this curriculum specifically for workforce development, it is not intended to compete for students with the current B.S. Forestry degree offered by the University of Idaho. We anticipate both primary and secondary sources of demand:*

*Primary Source of Demand: The primary source of demand for this degree will be regional – mostly recent high school graduates residing in Idaho and other states in the Western U.S. There are currently no competing institutions offering this type of program, nor do they have the resources to deliver a similar program. It is anticipated that this new program will be the program of choice for individuals looking to enter the forest nursery workforce.*

*Secondary Source of Demand: It is expected that this degree program will also build off the College of Natural Resources' national reputation in forestry (Ranked 4th in the nation in 2021 by Study.com), thereby attracting students from other regions of the U.S.*

**c. Societal Need**: Describe additional societal benefits and cultural benefits of the program.

*Across the western U.S., increased wildfires and other forest health issues, as well as emerging efforts to use forests to meet carbon sequestration goals to help mitigate climate change, are leading to increased demand for seedlings as part of reforestation and restoration efforts. For example, the recent Trillion Trees Initiative established by the United Nations Environment Programme and followed by the Trillion Trees Act passed by the 116th U.S. Congress, has the goal of planting one trillion new trees globally to support efforts to reduce global atmospheric carbon, support the forestry and wood products industry, and incentivize the use of sustainable wood-based building products that sequester carbon.*

*Over the past 100 years, numerous federal, state, private nurseries have supported reforestation and restoration efforts on both public and private lands. Unfortunately, over the past two decades support for forest nurseries has declined in part to reductions in the federal timber program. This decline has adversely affected many of the state and federal nurseries, as well as many private forest nurseries that were supported through contracts with federal and state agencies. Numerous forest nurseries have closed in rural Idaho and beyond, leading many to wonder where the supply of tree seedlings will be produced that will be needed to meet new reforestation, restoration, and climate migration activities. There is clearly an opportunity for the private sector to help meet these demands assuming there is a qualified workforce to support these efforts.*

*The new Associate of Science will help train this next generation of forest nursery owners and workers by providing them with a specific skillset that integrates plant production, sustainable nursery management, and sales and marketing. We anticipate that once trained, these individuals will remain in Idaho and the region and serve the forest nursery industry and rural communities.*

**3. Program Prioritization**

Is the proposed new program a result of program prioritization?

Yes_____ No__*X*___

If yes, how does the proposed program fit within the recommended actions of the most recent program prioritization findings.

**4. Credit for Prior Learning**

Indicate from the various cross walks where credit for prior learning will be available. If no PLA has been identified for this program, enter 'Not Applicable'.

*Not Applicable*

**5. Affordability Opportunities**

Describe any program-specific steps taken to maximize affordability, such as: textbook options (e.g., Open Educational Resources), online delivery methods, reduced fees, compressed course scheduling, etc. This question applies to certificates, undergraduate, graduate programs alike.

*A variety of aspects of the new degree have been designed to help maximize affordability for students. First, by utilizing the Pitkin Forest Nursery as the foundation of the new program, we are building upon the existing resources of one of the only commercial forest nurseries affiliated with a university in the U.S. There is no need for us to replicate the commercial aspects of a forest nursery, or the infrastructure required to deliver the program. Second, by utilizing the extensive knowledge of the Pitkin Forest Nursery staff to help deliver course content in the greenhouse, as well as industry knowledge from our important industry stakeholders, we can provide a unique experiential learning environment and keep instructional costs down. Furthermore, the program is designed such that is builds upon existing coursework already being offered at the University of Idaho. As much of the specific coursework is hands-on, we do not anticipate excessive cost associated with course materials (e.g., textbooks, lab manuals, student fees). Third, by integrating courses to explore various careers in the forest nursery industry and work experience through internships, we have established a framework to help students develop skills and relationships with potential*

*employers following graduation. Finally, building off of our strong industry support, we will work with our industry stakeholders and CNR Advancement team to develop scholarship monies specifically for students enrolled in the new degree program.*

## Enrollments and Graduates

6. **Existing similar programs at Idaho Public Institutions.** Using the chart below, provide enrollments and numbers of graduates for similar existing programs at your institution and other Idaho public institutions for the most past four years.

   *No similar degree program exists among the public higher education institutions in Idaho.*

7. **Justification for Duplication** (if applicable). If the proposed program is similar to another program offered by an Idaho public higher education institution, provide a rationale as to why any resulting duplication is a net benefit to the state and its citizens. Describe why it is not feasible for existing programs at other institutions to fulfill the need for the proposed program.

   *No similar degree program exists among the public higher education institutions in Idaho.*

8. **Projections for proposed program:** Using the chart below, provide projected enrollments and number of graduates for the proposed program:

| **Proposed Program: Projected Enrollments and Graduates First Five Years** | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Program Name: A.S., Forest Nursery Management and Technology** | | | | | | | | | | | |
| **Projected Fall Term Headcount Enrollment in Program** | | | | | | **Projected Annual Number of Graduates From Program** | | | | | |
| FY22 (first year) | FY23 | FY24 | FY25 | FY26 | | FY22 (first year) | FY23 | FY24 | FY25 | FY26 | |
| 5 | 10 | 15 | 15 | 20 | | 0 | 5 | 10 | 15 | 15 | |

9. **Describe the methodology for determining enrollment and graduation projections.** Refer to information provided in Question #2 "Need for the Program" above. What is the capacity for the program? Describe your recruitment efforts? How did you determine the projected numbers above?

   *Two factors were used to estimate demand for this proposed degree program. The first involved canvassing stakeholders about the potential of such a degree program to place students within the forest nursery industry. While this process did not provide a specific estimate of demand, it did provide an estimate of student placement upon graduation, and student placement is a considerable driver of demand for associate degrees with a workforce development goal. The second factor used is past recruitment efforts in the College of Natural Resources and record of success recruiting students in our degree programs.*

   *To estimate the number of students that would be enrolled in the proposed degree program, we examined the enrollment at the few institutions that offer a somewhat similar degree; namely, Cabrillo College (Aptos, California), Fullerton College (Fullerton, California), The Ohio*

*State University (Wooster, Ohio), and Southeast Technical College (Sioux Falls, South Dakota). It should be noted that these comparable programs are focused more on horticultural plants rather than seedlings for reforestation and restoration. Consequently, we believe our estimates of enrollment are conservative, especially in light of our plans to market the new degree that builds upon the strong reputation of our Forestry degree, the College of Natural Resources, and University of Idaho.*

*From a student recruitment perspective, the College of Natural Resources recruits nationally – about one-half of the college's undergraduate students are nonresidents. The college employs a strategic enrollment plan that segments and targets defined populations for each of its degree programs. To recruit for this proposed degree program, the college will target rural communities located in Idaho, California, Oregon, and Washington, implementing high school visits and various print and digital communication campaigns to introduce the program to prospective students. Students expressing interest in the program will be directly contacted by a recruiter and faculty (i.e., one-on-one recruitment interaction). The college's national recruitment efforts will also very likely attract students from beyond Idaho and the West to this degree program.*

**10. Minimum Enrollments and Graduates.**

a. What are the minimums that the program will need to meet in order to be continued, and what is the logical basis for those minimums?

*The University of Idaho has contracted with Gray Associates, a company that has developed a dynamic database for the institution (Program Economics Platform), which allows for the calculation of the contribution margin (net revenue less costs) for each academic program. This proposed academic program will be discontinued if it experiences three consecutive years of negative contribution margin.*

*It is difficult to pinpoint an exact minimum enrollment that justifies continuance of the proposed academic program since delivery is contingent on cost structure, which can change year-to-year based on numerous variables. For example, the cost to deliver a course can differ substantially based on the faculty member teaching the course. A course taught by a full professor, with high salary and benefit costs, would be more costly to deliver relative to a newly hired assistant professor teaching the same course. Given the current cost structure in the department delivering the proposed academic program, it is believed that at least 15 students are necessary to result in a positive contribution margin.*

b. If those minimums are not met, what is the sunset clause by which the program will be considered for discontinuance?

*The sunset clause by which this degree will be considered for discontinuance is if the program fails to generate a positive contribution margin for three consecutive years.*

**11. Assurance of Quality.** Describe how the institution will ensure the quality of the program. Describe the institutional process of program review. Where appropriate, describe applicable specialized accreditation and explain why you do or do not plan to seek accreditation.

*Like all other academic programs at the University of Idaho, the proposed program will be required to perform an annual Academic Program Review (APR), which is a self-study quality assessment process required by the Idaho State Board of Education and the institution's accreditor, the Northwest Commission on Colleges and Universities (NWCCU). The APR process requires an examination of linked coursework to determine if student the stated learning outcomes for the*

*academic program are being achieved and how well they are being achieved. The APR process also requires that academic programs annually assess student achievement, program demand and productivity, financial health, and resource use.*

*As the focus of the degree is workforce development, we will share assessment findings with the Pitkin Forest Nursery Advisory Committee (NAC) at their fall meetings. The NAC ensures adequate stakeholder representation, provides external advice, and serves to guide the Pitkin Forest Nursery program to greater excellence, relevance, understanding and service while also providing mutual industry support. Feedback from the NAC will be collected on the program and graduates and shared with Department faculty to help improve of the program as needed.*

**12. In accordance with Board Policy III.G., an external peer review is required for any new doctoral program.** Attach the peer review report as **Appendix A**.

*Not applicable to this degree.*

**13. Teacher Education/Certification Programs** All Educator Preparation programs that lead to certification require review and recommendation from the Professional Standards Commission (PSC) prior to consideration and approval of the program by the State Board of Education.

Will this program lead to certification?

Yes_____ No__*X*___

If yes, on what date was the Program Approval for Certification Request submitted to the Professional Standards Commission?

**14. Three-Year Plan: If this is a new proposed program, is it on your institution's approved 3-year plan?**

Yes *X* No _____

If yes, proceed to question 15. If no:

**a. Which of the following statements address the reason for adding this program outside of the regular three-year planning process.**

Indicate (X) by each applicable statement:

| | |
|---|---|
| | Program is important for meeting your institution's regional or statewide program responsibilities. |
| | The program is in response to a specific industry need or workforce opportunity. |
| | The program is reliant on external funding (grants, donations) with a deadline for acceptance of funding. |
| | There is a contractual obligation or partnership opportunity related to this program. |
| | The program is in response to accreditation requirements or recommendations. |
| | The program is in response to recent changes to teacher certification/endorsement requirements. |

**b. Provide an explanation for all statements you selected.**

**Educational Offerings: Curriculum, Intended Learning Outcomes, and Assessment Plan**

**15. Curriculum. Provide descriptive information of the educational offering.**

**a. Summary of requirements.** Provide a summary of program requirements using the following table.

| | |
|---|---|
| Credit hours in required courses offered by the department (s) offering the program. | 14 |
| Credit hours in required courses offered by other departments: | 22 |
| Credit hours in institutional general education curriculum | 36 |
| Credit hours in free electives | 1 |
| Total credit hours required for degree program: | 72 |

**b. Curriculum.** Provide the curriculum for the program, including credits to completion, courses by title and assigned academic credit granted.

*Required course work includes:*

| | | |
|---|---|---|
| *ASM 112* | *Introduction to Agricultural Systems Management* | *3* |
| *CHEM 101/101L* | *Introduction to Chemistry and Lab* | *4* |
| *COMM 101* | *Fundamentals of Oral Communication* | *2* |
| *ECON 201 or* | *Principles of Macroeconomics or* | *3* |
| *ECON 202* | *Principles of Microeconomics* | |
| *ENGL 101* | *Writing and Rhetoric I* | *3* |
| *ENGL 102* | *Writing and Rhetoric II* | *3* |
| *FOR 152* | *Careers in Forest Nursery Management & Technology* | *1* |
| *FOR 153* | *Forest Nurseries Tour* | *1* |
| *FOR 206* | *Properties of Artificial Growth Media* | *1* |
| *FOR 220* | *Forest Biology and Dendrology* | *3* |
| *FOR 251* | *Nursery Insects and Disease* | *2* |
| *FOR 255* | *Nursery Irrigation and Fertilization* | *2* |
| *FOR 257* | *Sustainable Nursery Design and Management* | *3* |
| *FOR 298* | *Forest Technology Internship* | *1* |
| *LARC 288* | *Plant Materials and Design 1* | *3* |
| *MATH 123 or* | *Math in Modern Society or* | *3* |
| *MATH 143* | *College Algebra* | |

| | | |
|---|---|---|
| *MKTG 321* | *Marketing* | *3* |
| *PLSC 102* | *Science of Plants in Agriculture* | *3* |
| *PLSC 201* | *Principles of Horticulture* | *3* |
| *PLSC 300* | *Plant Propagation* | *3* |
| *SOIL 205* | *The Soil Ecosystem* | *3* |
| *SOIL 206* | *The Soil Ecosystem Lab* | *1* |

*Select one of the following:*

| | | |
|---|---|---|
| *AGEC 333* | *Introduction to Sales* | *3* |
| *MKTG 422* | *Sales Management* | *3* |

*Select 12 additional General Education electives to meet SBOE minimum requirements for Associate Degrees* *12*

*Total credits for degree: 72*

**c. Additional requirements.** Describe additional requirements such as comprehensive examination, senior thesis or other capstone experience, practicum, or internship, some of which may carry credit hours included in the list above.

*The proposed degree program requires the completion of an internship (FOR 298 – Forest Technology Internship).*

**16. Learning Outcomes: Expected Student Learning Outcomes and Connection to Curriculum.**

**a. Intended Learning Outcomes.** List the Intended Learning Outcomes for the proposed program, using learner-centered statements that indicate what students will know, understand, and be able to do, and value or appreciate as a result of completing the program.

*After completing the* Associate of Science in Forest Nursery Management and Technology*, students will:*

1) *Be able to identify forest and rangeland plants and understand how they grow in relation to abiotic components such as light, moisture, and soil nutrients.*
2) *Be able to identify and manage important insects and diseases that impact forest nurseries.*
3) *Understand and apply basic horticultural concepts and technology to manage real-world problems and solutions related to sustainable forest nursery management.*
4) *Understand and apply basic business principles and marketing practices to sustainably manage forest nurseries.*

**17. Assessment plans.**

**a. Assessment Process.** Describe the assessment plan for student learning outcomes that will be used to evaluate student achievement and how the results will be used to improve the program.

*Assessment will be measured directly through student performance on specific projects and exams associated with required coursework, including a new capstone course called FOR 257 Sustainable Forest Nursery Design and Management. In addition to these direct assessment metrics, we will conduct an exit survey with all graduates of the A.S. degree as part of FOR 257 Sustainable Forest Nursery Design and Management. The survey will provide an opportunity for students enrolled in the program to assess how well they believe the program has prepared them for a career in the forest nursery industry and related fields.*

*Direct assessment measures include:*

1) ***Identify forest and rangeland plants*** *– final lab exams associated with FOR 220 and REM 252 that focus on identification of forest and rangelands, respectively.*

2) ***Understand how forest and rangeland plants grow in relation to abiotic components such as light, moisture, and soil nutrients*** *– final project associated with FOR 255 Nursery Irrigation and Fertilization.*

3) ***Identify and manage important insects and diseases*** *– projects associated with FOR 252 Nursery Insect and Disease Management.*

4) ***Apply basic horticultural concepts and technology in sustainable forest nursery management*** *– final project in capstone course FOR 257 Sustainable Forest Nursery Design and Management.*

5) ***Apply basic business principles and marketing practices to sustainable forest nursery management*** *- final project in capstone course FOR 257 Sustainable Forest Nursery Design and Management.*

*Indirect measures include:*

6) *Exit survey of graduates as part of capstone course FOR 257 Sustainable Forest Nursery Design and Management.*

Assessment activities will occur annually, associated with each class will occur when scheduled in either the fall or spring semesters. The graduating student surveys will be completed each spring at the end of FOR 257 Sustainable Forest Nursery Design and Management.

**Resources Required for Implementation – fiscal impact and budget.**

Organizational arrangements required within the institution to accommodate the change including administrative, staff, and faculty hires, facilities, student services, library; etc.

**18. Physical Facilities and Equipment:** Describe the provision for physical facilities and equipment.

a. **Existing resources**. Describe equipment, space, laboratory instruments, computer(s), or other physical equipment presently available to support the successful implementation of the program.

*We will utilize existing College of Natural Resources physical facilities and equipment to deliver the program. Specifically, we will utilize the Pitkin Forest Nursery to deliver new courses, including the new capstone course FOR 257. The Pitkin Forest Nursery includes operational greenhouses and outdoor planting beds, headhouses, and classroom space that will allow students to focus on hands-on learning.*

b. **Impact of new program**. What will be the impact on existing programs of increased use of physical resources by the proposed program? How will the increased use be accommodated?

*We anticipate minimal impact of the new program on the College of Natural Resources' physical facilities. There will be increased student activity at the Pitkin Forest Nursery associated with the new courses utilizing the facility, however, the capacity of the classroom space is more than sufficient to meet projected student demands. Additionally, the planned expansion of the Pitkin Forest Nursery that has been approved by the University and State is underway and will provide additional space to deliver new courses utilizing the facility. Finally, we will utilize the College of Natural Resources Motorpool and fleet of vans for the new course FOR 153 Forest Nurseries Tour.*

c. **Needed resources.** List equipment, space, laboratory instruments, etc., that must be obtained to support the proposed program. Enter the costs of those physical resources into the budget sheet.

*No specific new equipment or renovations to existing space is needed to deliver the program.*

19. **Library and Information Resources:** Describe adequacy and availability of library and information resources.

a. **Existing resources and impact of new program**. Evaluate library resources, including personnel and space. Are they adequate for the operation of the present program? Will there be an impact on existing programs of increased library usage caused by the proposed program? For off-campus programs, clearly indicate how the library resources are to be provided.

*We do not anticipate the program placing and significant demands on the UI Library and other informational resources.*

b. **Needed resources**. What new library resources will be required to ensure successful implementation of the program? Enter the costs of those library resources into the budget sheet.

*No new library resources are needed for the successful implementation of the program.*

20. **Faculty/Personnel resources**

**a. Needed resources.** Give an overview of the personnel resources that will be needed to implement the program. How many additional sections of existing courses will be needed? Referring to the list of new courses to be created, what instructional capacity will be needed to offer the necessary number of sections?

*We anticipate that the program will require additional instructional capacity beyond current tenure-track faculty to deliver the proposed curriculum. While existing Department faculty have the capacity to deliver FOR 152 Careers in Forest Nursery Management & Technology (1 CH), FOR 153 Forest Nurseries Tour (1 CH), FOR 255 Nursery Irrigation and Fertilization (1 CH), and FOR 298 Forest Technology Internship (1 CH), additional instructors will be required to deliver the following new courses: FOR 206 Properties of Artificial Growth Media (1 CH); FOR 251 Nursery Insects and Disease (2 CH); and FOR 257 Sustainable Nursery Design and Management (3 CH). We anticipate using Pitkin Forest Nursery professional staff to meet these instructional needs, specifically part-time staff that have the expertise in all three areas (artificial growth media, insects and disease, and sustainable nursery design and management). In terms of existing courses, our anticipated enrollments will increase enrollment in these courses, however, our review of past course offerings suggest there is capacity to meet any increased demand for seats in these courses from students enrolled in the new program.*

**b. Existing resources**. Describe the existing instructional, support, and administrative resources that can be brought to bear to support the successful implementation of the program.

*Existing Department faculty have the instructional capacity to deliver four of the new courses associated with the program, including: FOR 152 Careers in Forest Nursery Management & Technology (1 CH); FOR 153 Forest Nurseries Tour (1 CH); FOR 255 Nursery Irrigation and Fertilization (1 CH); and FOR 298 Forest Technology Internship (1 CH). In addition to the existing instructional support, the Department has the administrative and support capacity to effectively manage the program, including program assessment.*

*In addition to Departmental support, the College will also support the program primarily in terms of student recruitment and marketing through the College's Director of Student Recruitment and Stakeholder Engagement. Student academic advising will be provided through the professional advisors in the College, while career advising will occur across the new curriculum by Department faculty.*

**c. Impact on existing programs**. What will be the impact on existing programs of increased use of existing personnel resources by the proposed program? How will quality and productivity of existing programs be maintained?

*We anticipate little impact on existing programs in the Department and College and view the potential impact on the Pitkin Forest Nursery as a positive development. The new degree program will highlight the Pitkin Forest Nursery and add a significant educational and workforce development component to its mission.*

**d. Needed resources.** List the new personnel that must be hired to support the proposed program. Enter the costs of those personnel resources into the budget sheet.

*We anticipate needing part-time instructors to teach the following courses:*

*1) FOR 206 Properties of Artificial Growth Media (1 CH)*

2) *FOR 251 Nursery Insects and Disease (2 CH)*

3) *FOR 257 Sustainable Nursery Design and Management (3 CH*

*We anticipate utilizing Pitkin Forest Nursery professional staff to meet these instructional needs, specifically part-time staff that have the expertise in all three areas (artificial growth media, insects and disease, and sustainable nursery design and management). Following standard College of Natural Resources guidelines for temporary instructors ($2,000 per CH), we estimate the costs of delivering these three new courses (6 total credits) will be $6,000 annually.*

**21. Revenue Sources**

a) **Reallocation of funds:** If funding is to come from the reallocation of existing state appropriated funds, please indicate the sources of the reallocation. What impact will the reallocation of funds in support of the program have on other programs?

*We do not anticipate a significant reallocation of funds to support the program. Funding for the increased instructional costs associated with hiring part-time instructors will come from existing non-state appropriated funds to the Department from the College of Natural Resources.*

b) **New appropriation**. If an above Maintenance of Current Operations (MCO) appropriation is required to fund the program, indicate when the institution plans to include the program in the legislative budget request.

*No new appropriation of funds is requested to support the program.*

c) **Non-ongoing sources**:

i. If the funding is to come from one-time sources such as a donation, indicate the sources of other funding. What are the institution's plans for sustaining the program when that funding ends?

*No one-time funding sources are anticipated.*

ii. Describe the federal grant, other grant(s), special fee arrangements, or contract(s) that will be valid to fund the program. What does the institution propose to do with the program upon termination of those funds?

*No grants, special fees, or contracts are being proposed to fund the program.*

d) **Student Fees**:

i. If the proposed program is intended to levy any institutional local fees, explain how doing so meets the requirements of Board Policy V.R., 3.b.

*No institutional local fees are requested.*

ii. Provide estimated cost to students and total revenue for self-support programs and for professional fees and other fees anticipated to be requested under Board Policy V.R., if applicable.

*No institutional local fees are requested.*

**22.** Using the excel budget template provided by the Office of the State Board of Education, provide the following information:

- Indicate all resources needed including the planned FTE enrollment, projected revenues, and estimated expenditures for the first **four** fiscal years of the program.
- Include reallocation of existing personnel and resources and anticipated or requested new resources.
- Second and third year estimates should be in constant dollars.
- Amounts should reconcile subsequent pages where budget explanations are provided.
- If the program is contract related, explain the fiscal sources and the year-to-year commitment from the contracting agency(ies) or party(ies).
- Provide an explanation of the fiscal impact of any proposed discontinuance to include impacts to faculty (i.e., salary savings, re-assignments).

**Program Resource Requirements.**

- Indicate all resources needed including the planned FTE enrollment, projected revenues, and estimated expenditures for the first **four** fiscal years of
- Include reallocation of existing personnel and resources and anticipated or requested new resources.
- Second and third year estimates should be in constant dollars.
- Amounts should reconcile subsequent pages where budget explanations are provided.
- If the program is contract related, explain the fiscal sources and the year-to-year commitment from the contracting agency(ies) or party(ies).
- Provide an explanation of the fiscal impact of any proposed discontinuance to include impacts to faculty (i.e., salary savings, re-assignments).

**I. PLANNED STUDENT ENROLLMENT**

| | FY 22 | | FY 23 | | FY 24 | | FY 25 | |
|---|---|---|---|---|---|---|---|---|
| | FTE | Headcount | FTE | Headcount | FTE | Headcount | FTE | Headcount |
| A. New enrollments | 5 | 5 | 10 | 10 | 15 | 15 | 15 | 15 |
| B. Shifting enrollments | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ***Total Enrollment*** | 5 | 5 | 10 | 10 | 15 | 15 | 15 | 15 |

**II. REVENUE**

| | FY 22 | | FY 23 | | FY 24 | | FY 25 | |
|---|---|---|---|---|---|---|---|---|
| | On-going | One-time | On-going | One-time | On-going | One-time | On-going | One-time |
| 1. New Appropriated Funding Request | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 2. Institution Funds | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 3. Federal | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 4. New Tuition Revenues from Increased Enrollments | $30,909.00 | $0.00 | $92,727.00 | $0.00 | $154,545.00 | $0.00 | $185,454.00 | $0.00 |
| 5. Student Fees | $10,611.00 | $0.00 | $31,833.00 | $0.00 | $53,055.00 | $0.00 | $63,666.00 | $0.00 |
| 6. Other (i.e., Gifts) | $5,000.00 | $0.00 | $10,000.00 | $0.00 | $15,000.00 | $0.00 | $15,000.00 | $0.00 |
| ***Total Revenue*** | $46,520 | $0 | $134,560 | $0 | $222,600 | $0 | $264,120 | $0 |

***Ongoing is defined as ongoing operating budget for the program which will become part of the base.***
***One-time is defined as one-time funding in a fiscal year and not part of the base.***

Draft-November 6, 2015
Page 1

**III. EXPENDITURES**

| | FY 22 | | FY 23 | | FY 24 | | FY 25 | |
|---|---|---|---|---|---|---|---|---|
| | On-going | One-time | On-going | One-time | On-going | One-time | On-going | One-time |
| ***A. Personnel Costs*** | | | | | | | | |
| 1. FTE | 0.5 | 0.00 | 0.5 | 0.00 | 0.5 | 0.00 | 0.5 | 0.00 |
| 2. Faculty | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 3. Adjunct Faculty | ########## | $0.00 | $12,000.00 | $0.00 | $ 12,000.00 | $0.00 | $ 12,000.00 | $0.00 |
| 4. Graduate/Undergrad Assistants | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 5. Research Personnel | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 6. Directors/Administrators | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 7. Administrative Support Personnel | $ 900.00 | $0.00 | $ 900.00 | $0.00 | $ 900.00 | $0.00 | $ 900.00 | $0.00 |
| 8. Fringe Benefits | 367.2 | $0.00 | 367.2 | $0.00 | 367.2 | $0.00 | 367.2 | $0.00 |
| 9. Other: _____ | | | | | | | | |
| ***Total Personnel and Costs*** | $13,267 | $0 | $13,267 | $0 | $13,267 | $0 | $13,267 | $0 |

| | FY 22 | | FY 23 | | FY 24 | | FY 25 | |
|---|---|---|---|---|---|---|---|---|
| | On-going | One-time | On-going | One-time | On-going | One-time | On-going | One-time |
| ***B. Operating Expenditures*** | | | | | | | | |
| 1. Travel | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 2. Professional Services | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 3. Other Services | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 4. Communications | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 5. Materials and Supplies | $125.00 | $0.00 | $250.00 | $0.00 | $375.00 | $0.00 | $375.00 | $0.00 |
| 6. Rentals | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 7. Materials & Goods for Manufacture & Resale | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 8. Miscellaneous | $500.00 | $0.00 | $500.00 | $0.00 | $500.00 | $0.00 | $500.00 | $0.00 |
| ***Total Operating Expenditures*** | $625 | $0 | $750 | $0 | $875 | $0 | $875 | $0 |

| | FY 22 | | FY 23 | | FY 24 | | FY 25 | |
|---|---|---|---|---|---|---|---|---|
| | On-going | One-time | On-going | One-time | On-going | One-time | On-going | One-time |
| ***C. Capital Outlay*** | | | | | | | | |
| 1. Library Resources | $0.00 | $0.00 | 0 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 2. Equipment | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| ***Total Capital Outlay*** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |

| | FY 22 | | FY 23 | | FY 24 | | FY 25 | |
|---|---|---|---|---|---|---|---|---|
| ***D. Capital Facilities Construction or Major Renovation*** | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |

***E. Other Costs***

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Utilites | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| Maintenance & Repairs | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| Other _____ | | | | | | | | |
| ***Total Other Costs*** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| ***TOTAL EXPENDITURES:*** | $13,892 | $0 | $14,017 | $0 | $14,142 | $0 | $14,142 | $0 |
| ***Net Income (Deficit)*** | $32,628 | $0 | $120,543 | $0 | $208,458 | $0 | $249,978 | $0 |

Budget Notes (specify row and add explanation where needed; e.g., "I.A.,B. FTE is calculated using…"):

| | |
|---|---|
| I.A. | Conservative estimate of new studnets enrolling in program |
| II.4 | Conservative tuition estimate $6181.80 per student based upon all resident enrollment; CNR has high non-resident enrollment |
| II.5 | Fee estimates inlcude $2122.20 for University fees per student; no additional course fees |
| II.6 | Estimate of new scholarships via CNR Advancement office |
| III.A.1 | Conservative estimate of instructional needs; 6 CH total (Full-time FTE 24 CH) plus time for preparation and student advising |
| III.A.3 | Adjunct faculty salary based upon CNR standard of $2,000 per CH for temporary instructors |
| III.A.7 | Administrative suppoprt estimated at $180 per enrolled student |
| III.A.9 | Administrative support fringe rate of 40.8% |
| III.B.5 | Marterials and supplies for student recruitment; estimated $25 per student, includes travel and based on CNR recruitment analysis |
| III.B.8 | Miscellaneous administrative costs supporting program |
| | |
| | |
| | |

**Addendum to #460 Forest Nursery Management and Technology Proposal**

3. **Program Prioritization**

   *Is the proposed new program a result of program prioritization?*

   Yes_____ No__X___

   *If yes, how does the proposed program fit within the recommended actions of the most recent program prioritization findings.*

4. **Credit for Prior Learning – *if not applicable, provide a sentence to explain why not applicable.**

   *Indicate from the various cross walks where credit for prior learning will be available. If no PLA has been identified for this program, enter 'Not Applicable'.*

   While it is true that our proposed courses as part of this Associate Degree rely heavily on experiential learning, they also include content that goes beyond just experience, or knowledge that is acquired through professional work experience or training.

   The University of Idaho does have a policy and mechanism for students to challenge courses by examination (UI Catalog I-2-a). We have used this policy in the past successfully with students that wish to receive credit for work experience. It allows the student to obtain credit based upon experience or prior training while at the same time ensuring that student learning outcomes of the course and our professional accreditation standards are maintained.

5. **Affordability Opportunities**

   *Describe any program-specific steps taken to maximize affordability, such as: textbook options (e.g., Open Educational Resources), online delivery methods, reduced fees, compressed course scheduling, etc. This question applies to certificates, undergraduate, graduate programs alike.*

   A variety of approaches will be taken to help maximize affordability. First, many of the new courses to be developed are based upon existing expertise and course materials. This ensures the efficient use of resources to develop the new courses to support the degree program. Second, since most of the required courses for the degree are field-based and experiential in nature, there are not textbooks available to be used to support student learning. As such, we will rely largely on self-produced material that will be shared via the University of Idaho's learning Management System – Canvas. We are already doing this for many courses in the Department where faculty have designed supplemental learning

materials that are freely available online and built course content that precludes the need for expensive textbooks. Third, the Department and College are actively working with stakeholders and industry partners to develop funds to support the acquisition and maintenance of field equipment to support the new degree program. Finally, the CNR Development Office is working to secure endowments for scholarships to support students, and one such endowment is currently being established to support students in the Forest Nursery Management and Technology program.

**Response to Idaho State Board of Education Inquiry**

Below are responses to questions that the University of Idaho received from T.J. Bliss and Patty Sanchez concerning the University of Idaho's three proposed A.S. degrees.

### A.S., Forest Nursery Management and Technology

For the **AS, Forest Nursery Management and Technology**, same as above. The proposed program requires 72 credits and is not in alignment with III.E. Policy provides that *an associate's degree will not require more than 60 credits unless necessary for matriculation to a specific baccalaureate degree or for unique accreditation, certification, or professional licensure or by exception approved by the Board*. There doesn't appear to be a need for matriculation into a specific baccalaureate degree or for unique accreditation purposes, etc. Please let us know if we missed something. Otherwise, UI needs to include some rationale for the exception to policy that can be included as part of the request for Board approval.

The proposed A.S., Forest Nursery Management and Technology degree requires the completion of 72 credits, 12 credits in excess of the Board Policy III.E.1.c. The UI requests that the Board provide an exception to Board Policy III.E.1.c. for the A.S., Forest Nursery Management and Technology degree for two reasons. First, The College of Natural Resources intends to seek professional accreditation of the A.S., Forest Nursery Management and Technology degree through the Society of American Foresters (SAF), which already provides accreditation of the College's B.S. Forestry degree. As specified by SAF, to meet the *Forest Technology* accreditation standard, programs must have [1] clear program purpose and learning outcomes, [2] adequate resources, including advising, [3] adequate levels of faculty and staff to support program (minimum of two faculty with disciplinary expertise with at least one degree in forestry), [4] support the learning environment with computers, specialized software, spatial information technologies, specialized equipment, access to appropriate outdoor sites for experiential learning and development of field skills, and [5] have a curriculum focused on four major areas - ecology and biology, measurement of forest resources, forest resource policy, economics, and administration, silviculture and forest measurement. The fifth component of the *Forest Technology* accreditation standard requires that this degree consist of more than 60 credits.

Second, this degree was closely developed with industry stakeholder input. In the development of A.S., Forest Nursery Management and Technology degree, the College of Natural Resources was aware of the maximum credits standard set forth Board Policy III.E. and approached industry stakeholders in an effort to reduce the number of credits to 60 through the removal of select courses. Industry stakeholders, however, responded that all courses in the degree program should remain since they meet specific industry needs.

Note that the A.S., Forest Nursey Management and Technology degree matriculates into UI's B.S., Forestry, General Emphasis and B.S., Horticulture and Urban Architecture degrees.

University of Idaho

**Franklin H. Pitkin**
**Nursery Advisory Committee**
College of Natural Resources
875 Perimeter Dr. MS 1137
Moscow, ID 83844-1137

**August 10, 2021**

RE: Letter of support for the Applied Associate of Science, Forest Nursery Management and Technology degree from Franklin H. Pitkin Forest Nursery Advisory Committee

The Franklin H. Pitkin Forest Nursery Advisory Committee (NAC) is excited to support the proposed Associate of Applied Science (A.A.S.) in Forest Nursery Management and Technology degree within the College of Natural Resources, University of Idaho. The NAC is comprised of nursery owners, nursery managers, and landowners across the Inland Northwest who strongly value the graduates of programs from UI that prepare students to further the seedling nursery industry. This proposed degree has great potential to substantially increase the number of skilled employees entering the forest nursery workforce, and with the emphasis on accounting, marketing and sales, has the potential to increase the number of new private nurseries in Idaho to help address growing demands for seedlings.

There are many benefits to Idahoans to move forward with this degree. These include:

- Increase the pool of skilled nursery workers and new business owners:
  - Educated students are in high demand for jobs at private, State, and Federal nurseries
  - Students will have the knowledge to return to their hometowns and start new nursery businesses in Idaho
- Enhance integration of the Pitkin Nursery into UI curriculum
  - The new degree will increase student training at the Pitkin Nursery including the new greenhouses approved through the Permanent Building Fund as part of Governor Little's Building Idaho's Future initiative
  - Training students with state-of-the-art equipment and facilities will aid them in landing quality jobs

NAC looks forward to our continued good relationship with UI Pitkin Forest Nursery and the College of Natural Resources, providing guidance on this new degree program, and continued quality graduates produced at this facility.

On Behalf of the Pitkin NAC,

Gabe French, Chair, Pitkin NAC & Owner, Idaho Evergreens, LLC

MOSCOW BOISE COEUR D'ALENE IDAHO FALLS STATEWIDE RESEARCH AND EXTENSION

To enrich education through diversity, the University of Idaho is an equal opportunity/affirmative action employer.

**PRT Growing Services Ltd.**
101 – 1006 Fort Street
Victoria, BC
Canada V8V 3K4

August 11, 2021

**To Whom it May Concern:**

This letter is to express our support for the AAS degree program in Forest Nursery Management and Technology degree program at the University of Idaho.

PRT is North America's largest producer of containerized forest seedlings with 19 nurseries in located in Canada and the US. We are proud seedling suppliers to many valued customers in WA, OR, CA, ID, MT and AK. We rely on forestry programs and Canadian and American universities to produce qualified individuals to work in, and manage, our nurseries and work with our customers. From my perspective, this program provides the background and training needed for those endeavors. I loved the two 3 credit sales courses. Good idea.

Best of luck.

Please let me know how I can be of further assistance.

Sincerely,

Herb Markgraf

Vice President, Marketing

IDAHO FOREST PRODUCTS COMMISSION

Post office Box 855
Boise, Idaho 83701
Tel: (208) 334-3292
Toll Free: 800-ID-WOODS
Edu. (208) 334-4061
Fax (208) 334-3449
email: ifpc@idahoforests.org
plt@idahoforests.org
www.idahoforests.org

August 5, 2021

David Gabrielsen
District 1 - (208) 660-3701

Jack A. Buell
District 2 - (208) 245-2501

Jesse D. Short
District 3 - (208) 848-2301

Mark Mahon
District 4 - (208) 741-9067

Trevor Stone
At-Large - (208) 748-2038

Jennifer Okerlund
Director

Michelle Youngquist
Education Coordinator

Charles Goebel
Department Head & Professor
Department of Forest, Rangeland and Fire Sciences
College of Natural Resources
University of Idaho
875 Perimeter Drive MS1133
Moscow, ID 83844-1133

Re: Support for A.A.S., Forest Harvesting and Technology and A.A.S, Forest Nursery Management and Technology

The Idaho Forest Products Commission (IFPC) would like to offer its compliments and complete support of the University of Idaho's introduction of A.A.S., Forest Harvesting and Technology and A.A.S, Forest Nursery Management and Technology. The addition of these degree offerings further expand and diversify the College of Natural Resources educational opportunities, while also being responsive to current timber industry needs within the state of Idaho.

Idaho's Forests Sector offers reliable employment for over 30,000 hardworking Idahoans with competitive wages. The provision of educational opportunities is essential in maintaining a sustainable workforce. IFPC has always valued its partnership with the UI in providing those opportunities – together creating a healthier Idaho through education, managed forests and strong rural and state economies.

IFPC applauds the University of Idaho (UI) and is proud to offer a letter of support for the offering of proactive educational solutions to a specific audience that's so essential to the health and success of the timber industry in Idaho.

IFPC's supporters include milling, logging, wood-related transportation and forest land owners who will directly benefit from new educational opportunities focused on timber harvesting and nursery management.

If you need any additional information, please contact me directly.

Sincerely,

Jennifer Okerlund
Director

*"Abundant forests forever through proper management and an informed public."*

**Charles Goebel, Ph.D.** August 11, 2021
Department Head & Professor
Department of Forest, Rangeland and Fire Sciences
College of Natural Resources - University of Idaho
875 Perimeter Drive MS1133
Moscow, Idaho 83844-1133

Dear Dr. Goebel,

I write in support of the proposal for two new Applied Associate Degrees at the University of Idaho College of Natural Resources.

The Associated Logging Contractors of Idaho (ALC-Idaho) is a statewide trade association of logging and wood products and equipment hauling contractor businesses. Established in 1966 we currently represent 500 members. The ALC-Idaho also represents 100 associate members who are consumers, suppliers, and vendors in our forest products sector.

The ALC-Idaho supports both proposed programs. The Applied Associate of Science in Forest Nursery Management and Technology is an important addition as the need for professionals who assist in nurturing, growing, and improving tree species is critical as we continue our collective commitment to reforestation in the United States. The Applied Associate of Science in Forest Harvesting and Technology is also critical to our forest products sector as there is a growing need for training of the next generation of foresters and of forest harvesting professionals.

Like many business sectors today, the business members of the ALC-Idaho struggle to find skilled and knowledgeable employees and the proposed Forest Harvesting and Technology degree can be a key to recruiting and training in the areas outlined within the program. This two-year program provides critical components of knowledge allowing students to start their careers sooner than a four-year program provides and fills a void of focused programing in this area in Idaho.

Thank you and the CNR for this effort to launch these two important programs.

Sincerely,

Shawn Keough

Shawn Keough
Executive Director

IFA NURSERIES, INC.

August 10, 2021

Mr. Andrew Nelson
Director, Center for Forest Nursery & Seedling Research
University of Idaho
875 Perimeter Dr. MS 1133
Moscow, ID 83444

Dear Mr. Nelson:

This letter is being provided to you in support of the proposed Applied Associate of Science in Forest Nursery Management and Technology program at the University of Idaho.

IFA Nurseries, Inc. ("IFA") is extremely excited about this type of program being created to fill a long outstanding need in the seedling nursery business. Although we have hired many outstanding University of Idaho graduates at IFA, a dedicated program for nurseries would provide excellent background and training that is sorely needed throughout the seedling industry.

The curriculum that is proposed is perfect. Especially important are the courses in Financial Accounting and Microeconomics. These should provide basic business acumen that is often missing from forestry graduates. The courses in Nursery Management will also be invaluable to graduates as they enter the nursery business.

IFA will provide any needed support to the program such as guest speakers, internship positions at IFA locations or any other assistance that IFA is capable of providing. Please do not hesitate to contact me with any assistance that may be needed to begin and implement the new program. As I said above, we are VERY excited about this new curriculum at the University of Idaho.

Sincerely,
IFA NURSERIES, INC.

Thomas E. Jackman
*President and CEO*
(503) 984-8486
tjackman@ifanurseries.com

9450 SW Commerce Circle, Suite 460 • Wilsonville, Oregon 97070 • (503) 855-3358 • FAX (503) 855-4593

IFA NURSERIES, INC.

August 10, 2021

Mr. Andrew Nelson
Director, Center for Forest Nursery & Seedling Research
875 Perimeter Dr. MS 1133
Moscow, ID 93444

Dear Mr. Nelson:

IFA Nurseries, Inc. is pleased to learn of the newly proposed Forest Nursery Management and Technology curriculum. Many of our long-term employees, myself included, are graduates from the University of Idaho. We at IFA Nurseries, Inc. have developed a long-standing relationship with the University of Idaho College of Natural resources staff and feel that this program will only enhance that relationship.

The proposed curriculum will provide students with a skill set that is in high demand amongst growers of industrial forest seedlings in the northwest. The focus within the curriculum on understanding and applying basic business principles and practices to sustainably manage forest nurseries is of critical importance for these students entering the workforce.

We are looking forward to the approval of this degree program and can be available at your convenience to help in the approval process in any way you see fit.

Very truly yours,
IFA NURSERIES, INC.

David Colgrove
*CFO*
(971) 645-3236
dcolgrove@ifanurseries.com

9450 SW Commerce Circle, Suite 460 • Wilsonville, Oregon 97070 • (503) 855-3358 • FAX (503) 855-4593

R|S

RILEY STEGNER AND ASSOCIATES

March 30, 2022

Idaho State Board of Education
P.O. Box 83720
Boise, Idaho 83720-0037
*Delivered via electronic mail*

RE: Industry support for University of Idaho College of Natural Resources' request to offer proposed Associate of Science (A.S.) degrees

Dear Idaho State Board of Education Members:

We write in support of the University of Idaho's College of Natural Resources' request to offer the following Associate of Science (A.S.) degrees:

- A.S., Forest Operations & Technology
- A.S., Forest Nursery Management & Technology
- A.S., Wildland Fuels & Fire Technology (> 90% online)

The forest products industry in Idaho has long depended on the University of Idaho (UI) and the College of Natural Resources (CNR) to provide the next generation workforce of natural resource professionals for our companies. UI is uniquely, and perhaps solely, positioned to offer the educational resources to future employees that are in short supply for our sector. The mission of land-grant universities to focus on the research and educational advancement in the agriculture and forestry sectors is a critical piece of the rural, resource rich infrastructure that allows these sectors to thrive and survive.

Idaho's higher educational institutions have a proud history of responding to the educational needs of its business sectors to support their advancement such as in the areas of nuclear energy, law, computer science, agriculture, forestry and more. Creation of the three A.S. degrees will continue in this tradition, and as Idaho's land-grant university, the UI is the right home for the new programs. The proposed degrees will undoubtedly benefit from the CNR's resources and experienced staff, one-of-kind experimental forest, world class nursery, well known and respected programs, and deep connections to other research universities with like missions. It would be hard to identify an educational institution where these degree programs could thrive without the resources and staff at CNR.

The forest products industry is a significant part of Idaho's economic vitality, contributing $4 billion to the economy and employing–directly and indirectly–over 30,000 Idahoans.

On this matter we represent Bennett Lumber Products Inc., Clearwater Paper, Idaho Forest Group, Manulife Investment Management Timberland and Agriculture, Molpus Woodlands Group, PotlatchDeltic Corporation, and Stimson Lumber Company.

101 S Capitol Blvd #930 • Boise, ID 83702 • 208.310.5949

Thank you for your consideration of this request.

Sincerely,

Peter Stegner
Principal
Riley Stegner and Associates

Jim Riley
Principal
Riley Stegner and Associates

**University of Idaho**
**Proposed Associate of Science Degrees**

## Lewis-Clark State College

*Supports. No comments.*

## Idaho State University

*ISU recommends that U of I and NIC work collaboratively to build these programs rather than the programs being housed at any one institution. We realize that this requires a great deal of work and alignment, but in this situation, we believe it is the best course of action.*

The University of Idaho (UI) fully supports and participates in numerous mutually beneficial collaborative partnerships with community colleges throughout the state. Some current collaborations include the development and execution of transfer articulations, the management and delivery of many 2+2 programs, and co-instruction. For example, the UI's College of Natural Resources currently partners with the College of Southern Idaho to collaboratively teach range management courses virtually and in-person at the UI's Rinker Rock Creek Ranch. We are also working with CSI to deliver a 2+2 in Rangeland Ecology and Management from Twin Falls.

SBOE policy III.Z. formally defines collaboration between two or more institutions to deliver an academic degree program as a joint program. Unlike our other collaborations, the UI believes that a joint program in this specific case would not be student-centered. Rather, we expect that a joint program would result in the creation of additional layers of administrative services to deliver the degree programs. Moreover, prospective students would be required to navigate through bureaucratic and duplicative administrative processes (e.g., recruitment, admissions, financial aid, student support functions) to earn their degree, which would likely negatively impact enrollments in the degrees and, consequently, provide a suboptimal outcome to the citizens of Idaho and the industries that would benefit from the three proposed A.S. degrees.

The UI believes the any "best course of action" should focus squarely on what is best for students and citizens throughout the State of Idaho when offering any degree program. Generally, strong and vibrant programs possess well-qualified instructors, a breadth of relevant courses that are regularly available, and modern, well-maintained facilities and equipment that provide for the development of skills needed in the workforce. The combination of these three ingredients will increase the likelihood of producing graduates that add economic value to the State of Idaho.

SBOE policy allows all state institutions to offer A.S. degrees; the UI is barred from offering A.A.S. degrees per board policy, a policy that, after discussing with other institutions across the state and SBOE staff, we are in full agreement. As with all our B.S. degrees that have been designed in consultation with industry partners, all three proposed A.S. degrees have been specifically designed with direct industry input to [1] serve a clearly defined statewide need, [2] leverage very extensive capital resources managed by the College of Natural Resources, and [3] leverage faculty expertise and the multitude courses currently being taught by the College at the B.S. degree level.

With respect to meeting statewide need, the UI has submitted many support letters from statewide, regional, and national stakeholders that would be positively influenced by the proposed A.S. degrees. Each of these stakeholders already provide significant support to the College of Natural Resources'

existing B.S., M.S., and Ph.D. programs and have a clear understanding through their partnerships of how the College will leverage its current expertise and assets to better meet the specific workforce development needs in their respective industries. This type of interaction and dialogue with stakeholders is at the core of UI's tripartite land-grant mission and social contract of providing accessible educational opportunities that incorporate the best available science to improve the lives of the citizens of Idaho and the nation.

SBOE Governing Policies and Procedures III.Z.2.b.iii.1 and Idaho Code § 33-2101 (Education, Junior Colleges) define North Idaho College's (NIC) service region as embracing the counties of Benewah, Bonner, Boundary, Kootenai, and Shoshone. This delivery area is consistent with language contained in NIC's 2021-2022 Catalog: "Beyond Coeur d'Alene, NIC meets the diverse educational needs of residents in Idaho's five northern counties with the NIC Sandpoint center in Sandpoint, Idaho, online services and courses, and comprehensive outreach services." Allowing NIC to deliver the proposed A.S. degrees statewide would violate SBOE policy and state code, or, in the alternative, serve prospective students only within the five counties NIC's degrees are designated for delivery, which defeats the UI's purpose in providing a statewide benefit with the proposed degrees to the broadest student population.

Regarding capital resources for the delivery of the proposed A.S. degrees, the College of Natural Resources will rely on the use of its 10,000+ acre UI Experimental Forest located near Moscow and its more than $2 million in modern harvesting equipment in offering the A.S. Forest Operations and Technology degree. Students will be trained in hands-on forest harvest preparation, road layout, harvest, and post-harvest activities at the UI Experimental Forest using traditional and cutting-edge technology and equipment that will prepare them to enter the workforce with the skills needed to succeed.

The Pitkin Forest Nursery is a modern commercial-scale nursery consisting of millions of dollars in investments in buildings and specialized equipment. Students pursuing the A.S. Forest Nursery Management and Technology degree will be fully exposed to all facets of production and sales of nursery stock. The UI is one of only two universities in the United States operating a commercial forest nursery, which makes this proposed degree and student experience unique not only in the state, but also nationally.

Similarly, the A.S. Wildland Fuel and Fire Technology degree builds upon unique assets as the first and leading wildland fire program in the United States. While the proposed degree is intended to be delivered almost entirely online, we will leverage [1] our faculty and staff expertise, [2] one of the only fire combustion labs on a university campus in the country, and [3] our long-standing relationships with federal agencies responsible for wildland fuel and fire training (e.g., National Wildfire Coordinating Group) to develop and deliver a unique program that integrates fuel and vegetation management with wildland fire. Furthermore, as the proposed degree has been designed to be delivered almost entirely online, we would respectfully submit that this A.S. degree should be governed by SBOE Governing Policies and Procedures III.Z.6.a., "This policy [Planning and Delivery of Postsecondary Programs and Courses] is not applicable to programs for which 90% or more of all activity is required or completed online, or dual credit courses for secondary education." Thus, SBOE policy dictates that the UI is authorized to offer the A.S. Wildland Fuel and Fire Technology degree without any designated service areas constraints.

Finally, we have consciously designed the proposed programs to build upon the numerous pre-existing courses that are currently being taught on a regular basis by more than two dozen faculty in the College

of Natural Resources. The College faculty have redesigned many existing courses for the three proposed A.S. degrees. The courses have been redesigned to focus more heavily on applied components of their respective discipline areas and less on the theoretical, consistent with input from stakeholders about the skills and training the view as critical for their respective industries. In this way, we have already done much of groundwork to ensure that students will be immediately and directly employable into the workforce as we do for all of our degree programs regardless of level.

The UI respectfully questions whether NIC has the established relationships with industry stakeholders necessary to design and deliver the three proposed A.S. degrees statewide. The UI is also unaware of any existing capital resources either owned, leased, or managed by NIC that would contribute to the delivery of any of the three proposed A.S. degrees. Furthermore, examination of course offerings in NIC's 2021-2022 *Catalog* demonstrates that NIC offers no courses in either forest operations and technology or forest nursey management and technology. NIC offers a single apprentice-based course that addresses wildland fire (FST-100 Fire Service Technology). In sum, offering these degrees seems cost prohibitive for NIC, as well as for all other community colleges in the state.

If NIC were to either offer the three proposed A.S. degrees or form a joint program with the UI in offering the degrees, then it would almost certainly have to expend significant funds to help offset the costs associated with the College of Natural Resources' capital assets, instructors, and courses. Given both the SBOE's and the UI's budget/revenue models, the College of Natural Resources would be required to charge NIC for any resources they would find necessary to utilize to successfully deliver the proposed degree programs.

The UI is requesting no additional general education funding to offer any of the three proposed A.S. degrees; as such, we respectfully submit that these degrees can be delivered with current institutional resources only within the College of Natural Resources at UI. Thus, a joint program between NIC and UI in the delivery of the three proposed A.S. degrees, as suggested by Idaho State University, runs counter to the SBOE's efforts to reduce or eliminate duplication of effort as mandated by Idaho Code § 33-113 (Limits of Instruction), which states that "The state board, in the interests of efficiency, shall define the limits of all instruction in the educational institutions supported in whole or in part by the state, and, as far as practicable, prevent wasteful duplication of effort in said institutions." [emphasis added]

**North Idaho College**

*North Idaho College does not support these degree programs. Per Board Policy 3Z it is the responsibility of Community Colleges to meet workforce needs in our region. North Idaho College has reached out to the University of Idaho and offered to collaborate on these efforts. We will continue to engage in conversations to find a way to meet the needs of students and regional workforce demands.*

- *Wildland Fuel and Fire Technology (AS)*
- *Forest Nursery Management and Technology (AS)*
- *Forest Operations and Technology (AS)*

The UI believes that North Idaho College (NIC) has misinterpreted SBOE Policy contained in III.Z. [Planning and Delivery of Postsecondary Programs and Courses]. This policy bars the UI from offering A.A.S. degrees (III.Z.2.b.iii.2.). However, the policy allows all institutions, including the UI, to offer A.S. degrees.

NIC's response states that "it is the responsibility of Community Colleges to meet workforce needs in our region." The UI respectfully disagrees with NIC's perspective that degrees focused on workforce development are restricted to state's community colleges. All of the College of Natural Resources degrees, especially those in the Department of Forest, Rangeland and Fire Sciences in which the three proposed A.S. degrees will be housed, have been designed with the direct input of employers and industry stakeholders. In fact, the College frequently organizes "Industry Summits" for stakeholders to review curricula and meet with faculty to ensure that students are graduating with the necessary skills to enter the workforce. Additionally, the College of Natural Resources annually sponsors a field tour for the UI President, state and federal government officials and agency staff, and industry leaders to discuss pressing natural resource issues and how the College – through its education, research, and extension missions as a land-grant university – can contribute to finding solutions that benefit the citizens of Idaho, which includes workforce development and training. The proposed A.S. degrees evolved from just this type of engagement.

To assume that only community colleges are responsible for workforce development needs suggests a clear misunderstanding of mission of the UI and the land-grant university system as established by the Morrill Act (1862) and reaffirmed for Historical Black Colleges and Universities (1890) and Tribal Colleges (1994). These institutions were created specifically to educate the next generation workforce in agriculture and mechanical arts, which comprises the natural resources fields. From Section 4 of the original 1862 legislation, "…each State which may take and claim the benefit of this act, to the endowment, support, and maintenance of at least one college where the leading object shall be … to teach such branches of learning as are related to agriculture and the mechanic arts … in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life." [emphasis added]

Language in Idaho Code § 33-2814 (Education, University of Idaho, Courses) is consistent with Section 4 of the Morrill Act (1862) when it states that the UI "…shall embrace courses of instruction in mathematical, physical and natural sciences, with their application to the industrial arts, such as agriculture, mechanics, engineering, mining and metallurgy, manufactures [manufacturing], architecture and commerce, and such branches … as shall be necessary to a proper fitness of the pupils in the scientific and practical courses for their chosen pursuits."

Workforce development is essential to and implicit in the tripartite land-grant mission of the UI and our social contract with the citizens of the State of Idaho. Faculty and staff at the UI strive to educate and train a workforce that is supported by the best available science through basic and applied research and disseminated (or extended) to the general public to improve the lives of the citizens of Idaho and the nation.

Consistent with this mission, numerous land-grant institutions across the United States that UI considers peer institutions offer A.S. degrees that are designed to train a strong and vibrant workforce that is responsive to industry needs. Examples include Michigan State University, Montana State University, North Carolina State University, The Ohio State University, Oklahoma State University, Pennsylvania State University, Purdue University, State University of New York, Virginia Tech, University of Arkansas-Monticello, University of Hawaii, University of Maine, University of Massachusetts, University of Nebraska, University of New Hampshire, and West Virginia University. Similarly, 1890 and 1994 land-grant institutions such as Delaware State University (1890) and Salish-Kootenai College (1994) provide workforce development through A.S., B.S., and graduate degrees.

Furthermore, the UI's College of Agricultural and Life Science, College of Engineering, and College of Natural Resources specifically focus on workforce development in the form of their existing B.S. degrees. The UI is regularly awarded federal and state grants and contracts explicitly focused on workforce development needs at both the national at state levels. For instance, the Idaho Workforce Development Council awarded the UI a grant in 2019 in the amount of $419,622. In 2022, the USDA awarded a grant to the College of Natural Resources to develop educational programing to meet workforce development needs in forest operations – a grant that was awarded unconnected to the proposed A.S. degrees.[1]

Consequently, we believe the suggestion that Idaho's community colleges have exclusivity in providing programs that are focused workforce development represents a fundamental misunderstanding of the UI's mission as Idaho's land-grant university. While the UI is open to engaging with NIC in the delivery of the proposed A.S. degrees, the engagement must serve the best interests of the students and the industries that would benefit from the degrees. We respectfully disagree that such a partnership with NIC is necessary based upon our current understanding of NIC's regionally mandated focus and the resources needed to deliver the type of education and training industry desires.

[1] Advancing Technological and Fundamental Skillsets of Next Generation Forest Operations Workforces Through Enhanced Education and Extension, $225,000.

**Boise State University**

*Abstains. Boise State has some serious reservations about UI offering AS degrees. This concern is not about the quality of programs, nor about UI's expertise and ability to deliver the programs. Instead, our concern is about "mission creep." The AA/AS degrees should be generally delivered by the 2-year schools. Thus, we defer to the Community Colleges in their assessment of the proposed new degrees. However, we would like to note that mission creep negatively affects all higher education institutions, whether it be community colleges offering 4-year baccalaureate degrees or 4-year universities offering specialized AS/AA degrees.*

While the UI generally agrees with Boise State University's (BSU) philosophical assessment, it should be noted that all three proposed A.S. degree programs require very significant resource allocations to effectively deliver to meet industry and stakeholder needs. The UI currently has the capacity to offer the three degree programs with no additional general education funding and only minor internal reallocations (e.g., course staffing) within the College of Natural Resources. The UI suspects that community colleges attempting to offer any of the three proposed A.S. degrees would require significant additional general education funding and/or substantial reallocation of their current institutional resources to deliver in the same capacity as UI.

We respectfully submit that such additional general education funding or reallocation of institutional resources would be an inefficient and a wasteful use of resources considering the UI has nearly all of the resources now in place to deliver the three A.S. degrees in a fashion that is best for students and industry. Allowing each community college to develop and offer the proposed A.S. degrees to cover statewide needs would be inconsistent with Idaho Code § 33-113, which was enacted to "prevent wasteful duplication of effort" across higher education institutions.

The UI disagrees with BSU's perspective that the three proposed A.S. degrees would introduce mission creep. Mission creep is defined as the *gradual shift in strategic objectives frequently resulting in an unresolved conflict or open-ended commitment* (Oxford English Dictionary). The three proposed A.S. degrees fit exceptionally well by leveraging UI's obligation to deliver statewide B.S.-level degree programs that meet the workforce development needs in the natural resources industries (i.e., no shift in strategic objectives), which the UI has done for more than 100 years. Nor should the three proposed A.S. degrees be perceived as potentially resulting in unresolved conflict or open-ended commitment at the UI. The degrees were carefully planned and designed using direct input from industry stakeholders with all necessary resources in place for effective and efficient delivery. Students earning any of the three proposed A.S. degrees could, if they desired, enter rather seamlessly into corresponding B.S. degrees offered by UI.

Reflecting this commitment to being responsive to student and industry needs, all B.S. programs in the Department of Forest, Rangeland and Fire Sciences are accredited by professional societies (e.g., Association for Fire Ecology, Society of American Foresters, Society for Rangeland Management, Society of Wood Science and Technology). The College of Natural Resources intends to work with the Society of American Foresters (SAF) and professionally accredit each A.S. program under SAF's *Forest Technology* Standard. Such accreditation emphasizes quality and will help position each degree within their respective industries, helping students be more competitive in the job market. As specified by SAF, to meet the *Forest Technology* standard, programs must have [1] clear program purpose and learning outcomes, [2] adequate resources, including advising, [3] adequate levels of faculty and staff to support program (minimum of two faculty with disciplinary expertise with at least one degree in forestry), [4] support the learning environment with computers, specialized software, spatial information

technologies, specialized equipment, access to appropriate outdoor sites for experiential learning and development of field skills, and [5] have a curriculum focused on four major areas - ecology and biology, measurement of forest resources, forest resource policy, economics, and administration, silviculture and forest measurement. We contend that the UI is the only institution in the state that can effectively meet these professional accreditation standards using existing resources.

If the UI were to offer a generic A.S. or A.A. degree that is composed of general education requirements and coursework selected from elective courses in the student's area(s) of interest, then mission creep would certainly be an issue of concern as elective course are indeterminant with regard to resource needs. That is not what is being proposed by UI in this instance.

**College of Southern Idaho**

*The College of Southern Idaho opposes the approval of the three Associate of Science Degrees submitted on 2.5.2022 for comment: Wildland Fuel and Fire Technology, Forest Nursery Management and Technology, and Forest Operations and Technology. All three are obvious forays into the community college mission as defined by Idaho statute and further described in Idaho State Board of Education policy. They also represent (by virtue of their respective titles) what can reasonably be considered career technical education (CTE) programs. While they are indeed submitted as transfer programs, we question where they would transfer to. They appear to be terminal degrees as evidenced by the arguments around "industry supported." UI has no legal standing to offer CTE programs; these appear to be transfer degrees in name only. Even the proposals themselves include AAS language, and the curriculum seems to indicate that 20 credits of General Education were simply tacked on to the originally crafted AAS curriculum. [Torrey has advised me that this is not the case.]*

*As the sole authorized provider of associate degrees, CTE programs, workforce training, and (according to SBOE policy III.Z. and Idaho statute) lower division (including baccalaureate) postsecondary instruction in Region I, North Idaho College should at a minimum be provided a right of first refusal for all of these programs. Further, we would advocate for the most cost effective access to these programs as possible, something NIC can easily accomplish when compared to UI. Understanding that UI may have current facilities, operations, and other resources to support these programs provides an excellent opportunity for a collaboration, rather than a subordination or competition.*

*As Idaho's Land Grant Institution, UI has a particular, unique position and mission, and that is far from that of the community college. While Idaho community colleges have a clear, statutory endorsement to deliver bachelor's degrees, Idaho universities (with the specific exception of Idaho State University) clearly hold no such literal authority to offer associate degrees, and in particular, CTE programming. While the case can be made that these are programs addressing workforce needs, those needs are best met through the Idaho community and technical colleges.*

The College of Southern Idaho (CSI) presents that "Idaho universities (with the specific exception of Idaho State University) clearly hold no such literal authority to offer associate degrees." This statement inconsistent with SBOE policy III.Z. that specifically allows all state institutions to offer A.S. degrees. Boise State University, for example, offers both A.A. and A.S. degrees. The UI is currently the only state higher education institution that does not offer an A.S. degree.

We agree with the CSI that the UI is not allowed to offer A.A.S. degrees per SBOE policy III.Z.2.b.iii.2. The UI apologizes for any confusing language in the proposals that mention A.A.S. degrees as that was carelessly made in error.

CSI states that "They [proposed A.S. degrees] also represent (by virtue of their respective titles) what can reasonably be considered career technical education (CTE) programs." Here, CSI implies that any workforce-oriented degree offered by an institution is narrowly designated as a CTE program. The College of Natural Resources and other colleges at UI offer numerous B.S. degrees with titles that could reasonably be considered CTE programs if workforce-oriented degrees were narrowly defined as CTE programs (e.g., B.S. Fire Ecology and Management; B.S. Forest and Sustainable Products, B.S. Forestry, Forest Operations Emphasis; B.S. Wildlife; Conservation Law Emphasis).

As described in detail in the response to comments provided by NIC, workforce education and training is clearly mandated in the originating Morrill Act (1862) legislation creating the land-grant universities. In

this we would agree wholeheartedly with CSI's statement that "As Idaho's Land Grant Institution, UI has a particular, unique position and mission." That mission is clearly articulated in Section 4 of the Morrill Act (1862) that states the land-grant university is to "promote the liberal and practical education of the industrial classes in the several pursuits and professions in life." To suggest that the proposed A.S. degrees that prepare students for the workforce should not be developed, utilize the resources and expertise, and not be delivered by the UI suggests a fundamental misunderstanding of the mission of the land-grant university.

CSI expresses that "While they [the proposed A.S. degrees] are indeed submitted as transfer programs, we question where they would transfer to." All three proposed A.S. degrees directly transfer to B.S. degrees offered by the UI. The proposed A.S. Forest Operations and Technology degree transfers into UI's B.S. Forestry, Forest Operations Emphasis degree. The proposed A.S. Forest Nursery Management and Technology degree transfers into several programs including UI's B.S. Forestry, Forest Biology Emphasis degree and B.S. Horticulture and Urban Agriculture degree. The proposed A.S. Wildland Fuel and Fire Technology degree transfers into UI's B.S. Fire Ecology and Management degree, as well as the B.S. Forestry, General Forestry Emphasis degree. The B.S. degrees mentioned above are available for CSI's and SBOE members' inspection in the UI's *General Catalog*.[2]

CSI remarks that "They [the proposed A.S. degrees] appear to be terminal degrees as evidenced by the arguments around 'industry supported.'" For decades, the College of Natural Resources has partnered closely with the natural resources industries in the State of Idaho and the curricula of eight of the College's B.S. degree programs are designed, in part, with direct input from industry participants and stakeholders.

The Morrill Act (1862), which established the land-grant university system, was enacted to educate the next generation workforce in agriculture, which comprises the natural resources fields, and mechanical arts. Educating the next generation workforce should not be based on developing degree programs that disregard industry needs. As such, the UI would expect that members of the SBOE would strongly encourage industry participation in the development of undergraduate certificates and degrees that benefit natural resources industries statewide. Indeed, the opening sentence of SBOE policy III.Z. states "The purpose of this policy is to ensure Idaho's public institutions meet the education and workforce needs of the state through academic planning, alignment of programs and courses, and collaboration and coordination." [emphasis added]

Under "Rationale for Creation or Modification of the Program" on the SBOE's *Proposal for Academic Degree and Certificate* form, which is the form used to submit each of the three proposed A.S. degrees, section 2.b. requires that the institution detail the "Workforce and economic need" for the proposed program. The institution is required to "Provide verification of state workforce needs that will be met by this program" and to "Describe how the proposed program will stimulate the state economy…." Section 2.c. of this form requires the institution to articulate the "societal benefits" that would accrue from offering the proposed program. Hence, the SBOE's own new program submission form implies that workforce development should be a component of any new degree program.

CSI contends that the delivery of the proposed degree programs would be most cost effective through NIC. The UI emphatically disagrees with this position. The UI requires no additional general education funding to deliver the proposed degrees. Establishing a partnership with NIC would very likely require

[2] catalog.uidaho.edu

new general education funding for NIC and/or NIC's reallocation of their current general education funding to support the program. It also severely limits the delivery of the proposed degree programs to one region in the state when the degrees are clearly intended to meet statewide industry needs.

NIC currently does not own, lease, or manage any capital resources that would contribute to the delivery of any of the three proposed A.S. degrees. Examination of course offerings in NIC's 2021-2022 *Catalog*[3] demonstrates that NIC offers no courses in either forest operations and technology or forest nursey management and technology. NIC offers a single apprentice-based course that addresses wildland fire (FST-100 Fire Service Technology). In sum, offering these degrees seems cost prohibitive for NIC, as well as for all other community colleges in the state, and the development of any such program would be duplicative in terms of capital and skill-building experiential resources already in place at the UI.

In addition, the College of Natural Resources incurs substantial annual costs to maintain their capital assets (e.g., UI Experimental Forest, Pitkin Forest Nursery, forest harvesting equipment). These costs are covered by the College through a combination F&A on research grants, income-producing activities (e.g., timber sales, seedling sales), endowments, and annual giving from donors. A joint program with NIC in delivering the proposed degree programs would require that the UI to either [1] significantly subsidize NIC's costs of delivery of a joint program or [2] require the UI to be financially reimbursed by NIC proportional to their use to deliver their component of the joint program. Either option would likely be cost-prohibitive for both institutions and, again, would require duplication of resources which runs counter to the SBOE's efforts to reduce or eliminate duplication of effort as mandated by Idaho Code § 33-113 (Limits of Instruction), which states that "The state board, in the interests of efficiency, shall define the limits of all instruction in the educational institutions supported in whole or in part by the state, and, as far as practicable, prevent wasteful duplication of effort in said institutions." [emphasis added]

Finally, and perhaps most importantly, a joint program in this specific case would not be student-centered. A partnership would result in the needless creation of an additional layers of administrative services to deliver the degree programs. Prospective students would be required to navigate through bureaucratic and duplicative administrative processes (e.g., recruitment, admissions, articulations, financial aid, student support functions) to earn their degree, which would likely negatively impact enrollments in the degrees and, consequently, provide a suboptimal outcome to the citizens of Idaho and the industries that would benefit from the three proposed A.S. degrees.

It should be emphasized that executive leadership at CSI and UI share the same philosophical belief that the best course of action in higher education should focus squarely on what is best for students and citizens throughout the State of Idaho and not on the institutions. At the January 26, 2022, Idaho State Legislature's Joint Finance-Appropriations Committee meeting,[4] CSI President Dean Fisher responded to an enrollment growth question by Senator Crabtree stating that "I think I understand the question … it's just my general philosophical thoughts about how we [CSI] get enrollment successfully accomplished and retained. I think one of the most fundamental things we've done at the College of Southern Idaho is to step back and make sure that any impediment, any barrier, anything that is just part of the bureaucracy that serves us but not the students, is eliminated."[5]

[3] catalog.nic.edu

[4] https://insession.idaho.gov/IIS/2022/Joint%20Finance-Appropriations%20Committee/220126_jfac_0800AM-Meeting.mp4 [at 0:22:20]

[5] https://www.kmvt.com/2022/01/27/csi-emphasizes-growth-during-budget-hearing/

## UNIVERSITY OF IDAHO

### SUBJECT

Associate of Science in Forest Operations and Technology

### APPLICABLE STATUTE, RULE, OR POLICY

Idaho State Board of Education Governing Policies & Procedures, Sections III.E., III.G., and III.Z

### BACKGROUND/DISCUSSION

University of Idaho (UI) proposes to create an Associate of Science (A.S.) in Forest Operations and Technology. The proposed program is not related to any existing degree program at the UI or any other state two-year or four-year institution. The proposed program was developed based on stakeholder input, and an assessment of workforce needs across the state and region. Currently, UI offers a Bachelor of Science (B.S.) Forestry with an emphasis area focused on advanced forest operations. While the B.S. Forestry degree requires extensive training in forest science, the proposed A.S. degree is focused specifically on workforce development and the needs of the logging and forest operations sector by linking basic forest operations with important skills needed to operate and maintain forest harvesting equipment.

The UI is uniquely positioned in the state to help meet this demand for a skilled forest operations workforce. Our nationally ranked B.S. Forestry degree has been training foresters for more than 100 years and we possess considerable expertise in forest operations and the application of new technologies. Additionally, the 10,000+ acre University of Idaho Experimental Forest (UIEF) provides a natural laboratory for an A.S. program in Forest Operations and Technology. The UIEF is a working forest, with active harvesting and forest operations, that provides hands-on learning opportunities for our students. Furthermore, the UIEF has recently acquired new harvesting and operations equipment, including a Caterpillar 538 Log Processor with Waratah attachments ($480,000) and a John Deere 648L Grapple Skidder ($280,000). With these resources, we believe our program is uniquely positioned to support the type of hands-on workforce development program that many in Idaho's forest products sector are requesting. Furthermore, we anticipate that students from Idaho's rural communities, as well as other areas of the Pacific Northwest, will be interested in this program, and our efforts will help foster increased economic activity and opportunity for students in these rural communities. We believe this degree is a critical component for the UI in meeting its land-grant mission.

Since this new A.S. builds upon existing course offerings in forestry and other programs at UI (e.g., agricultural systems management), we do not anticipate additional significant resources will be needed to deliver the program. We do anticipate that an A.S. degree will attract more students currently not enrolled at UI or being served by other institutions in the state. While we believe most

graduates of the program will enter the forest operations workforce, those students interested in transferring into a four-year degree will be well positioned to do so as many of the disciplinary-based courses that are part of the A.S. degree would meet some of the basic requirements, including disciplinary based electives, as part of UI's B.S. Forestry, General Forestry emphasis or our more advanced B.S. Forestry, Forest Operations emphasis.

The UI/College of Natural Resources (CNR) intends to seek professional accreditation of the A.S., Forest Operations and Technology degree through the Society of American Foresters (SAF). As specified by SAF, to meet the *Forest Technology* accreditation standard, programs must have:

1) clear program purpose and learning outcomes
2) adequate resources, including advising
3) adequate levels of faculty and staff to support program (minimum of two faculty with disciplinary expertise with at least one degree in forestry)
4) support the learning environment with computers, specialized software, spatial information technologies, specialized equipment, access to appropriate outdoor sites for experiential learning and development of field skills, and
5) have a curriculum focused on four major areas - ecology and biology, measurement of forest resources, forest resource policy, economics, and administration, silviculture and forest measurement.

The fifth component of the *Forest Technology* accreditation standard requires that this degree consist of more than 60 credits and the UI requests that the Board provide an exception to Board Policy III.E., which limits A.S. degrees to 60 credits.

**IMPACT**

The Bureau of Labor Statistics (BLS) estimates that employment in positions identified as forest operations managers, heavy equipment operators, and loggers, positions we see the proposed Associate of Science supporting, will increase significantly over the next decade. Specifically, BLS data estimates nationally a total of 45,500 logging industry related jobs in 2020 and a positive employment outlook with seven percent growth between 2020 and 2030. According to the BLS, "7,400 openings for logging workers are projected each year, on average, over the decade. Many of those openings are expected to result from the need to replace workers who transfer to different occupations or exit the labor force, such as to retire." These are high wage positions, with an Idaho entry wage of $45,775.

We have provided support letters for this degree from the Idaho Forest Products Commission (IFPC) and the Associated Logging Contractors of Idaho (ALC), which represents about 500 members and 100 associate members. ALC's support letter reads, in part:

> "Like many business sectors today, the business members of the ALC-Idaho struggle to find skilled and knowledgeable employees and the

> proposed Forest Harvesting and Technology degree can be a key to recruiting and training in the areas outlined within the program. This two-year program provides critical components of knowledge allowing students to start their careers sooner than a four-year program provides and fills a void of focused programing in this area in Idaho."

IFPC's letter of support states, in part:

> "IFPC applauds the University of Idaho (UI) and is proud to offer a letter of support for the offering of proactive educational solutions to a specific audience that's so essential to the health and success of the timber industry in Idaho.
>
> IFPC's supporters include milling, logging, wood-related transportation and forest landowners who will directly benefit from new educational opportunities focused on timber harvesting and nursery management."

Based upon this demand and support for our proposed program, we anticipate that this new degree will help develop the workforce needed to support the forest industry in Idaho.

UI does not anticipate significant resources to implement the program and will utilize existing CNR facilities and equipment. Specifically, they will utilize the UIEF to deliver new courses including the new capstone course. However, the program anticipates a need for new equipment such as chainsaws and supporting safety and maintenance of equipment for student use. The cost is estimated at $17,500 followed by $10,000 annually to replace and repair equipment. Costs will be covered, in part, by student fees in several courses as well as by CNR. Program will require additional faculty to deliver proposed curriculum beyond current tenure-track faculty and part-time instructors to develop and deliver other new courses. Program anticipates meeting those instructional needs through UIEF professional staff with expertise in logging safety and emergency preparedness, and forest harvesting operations. Financial impact is $32,944 - $36,392 over a four-year period.

## ATTACHMENTS

Attachment 1 – A.S., Forest Operations and Technology Proposal and Letters of Support

## BOARD STAFF COMMENTS AND RECOMMENDATIONS

Consistent with Board Policy III.G, each full proposal is reviewed by the Council on Academic Affairs and Programs (CAAP) within a 30-day review period and makes recommendations to the Board's Instruction, Research and Student Affair Committee. This review process provides institutions opportunities to provide feedback based on thoughtful review for quality, demand, centrality to mission,

cost effectiveness/resources, and duplication that will inform the Board in its decision-making with regard to new program offerings.

On February 3, 2022, the Board office received three proposals from the UI for proposed associate degrees, one of which was the Forest Operations and Technology degree. This proposal went through the 30-day review with CAAP with the review concluding on March 5, 2022. As a result of this review, the Board office received comments and/or concerns from four institutions regarding the offering of associate degree level programs by the University of Idaho. Specifically, College of Southern Idaho believes that the proposed degrees delve into a community college mission as defined in Idaho statute and in Board Policy. North Idaho College would prefer to collaborate on the offering of the proposed associate programs. Idaho State University and Boise State University recommend that UI work collaboratively to build these programs with a community college such as North Idaho College.

The program anticipates five initial enrollments and 15-20 enrollments in subsequent years. Estimates were determined by consulting with stakeholders about potential for the proposed degree program. The university contracted with Gray Associates, who has developed a dynamic database for the institution that allows for the calculation of the contribution margin (net revenue less costs) for each academic program. UI indicates that the program will need to have at least 15 students to result in a positive contribution margin. If this number is not reached for three consecutive years, the program will be discontinued.

UI's proposed A.S. in Forest Operations and Technology (formerly listed as Forest Harvesting Technologies in the Three-Year Plan) is included in their current institution plan for Delivery of Academic Programs in Region II. As provided in the Three-Year Plan, no institution has the statewide program responsibility specifically for Forest Operations and Technology at the associate degree level. UI has statewide program responsibility for Bachelor of Science in Forestry and Master of Science, Master of Natural Resources, and Ph.D in Natural Resource concentration, Forestry.

The proposed program will require completion of 73 credits (36 of which are general education), which surpasses the maximum number identified in Board Policy III.E for an associate degree. Specifically, III.E provides that an associate degree shall not require more than 60 credits unless necessary for matriculation to a specific baccalaureate degree or for unique accreditation, certification, or professional licensure or by exception approved by the Board. Based on the information provided by UI, the program intends to seek professional accreditation of the A.S., Forest Operations and Technology degree through the Society of American Foresters (SAF), which already provides accreditation of the B.S. Forestry degree. Therefore, staff has concluded that an exception to policy III.E is not necessary for this degree program given that the program will be seeking specialized accreditation.

Letters of support are provided from:

- Idaho Forest Products Commission, Director Jennifer Okerlund
- Associated Logging Contractors, Inc., Executive Director, Shawn Keough
- Riley Stegner and Associates, Jim Riley and Peter Stegner

The proposal completed the program review process and was discussed by the Council on Academic Affairs and Programs on March 31, 2022. The community college representatives of CAAP voted in opposition to a motion to recommend this program for approval. The University of Idaho voted in support. The remaining CAAP representatives abstained. The proposal was discussed by the Instruction, Research, and Student Affairs Committee on April 7, 2022. Given that this proposed program is part of three associate degrees, the first proposed by the university in its history, the Board's Executive Director determined to defer consideration of the proposals to the full Board.

Board Policy does not explicitly prohibit any public postsecondary institution in Idaho from proposing or offering Associate of Arts or Associate of Science degrees. Board Policy III.Z. does prohibit UI and Boise State University (BSU) from offering Associate of Applied Science (AAS) degrees, because such degrees are for Career Technical Education (CTE) programs which are not offered by UI and BSU. Thus, the question of whether UI should offer the proposed AS degrees is not a policy decision, because Board policy is silent on the matter.

BSU does currently offer an AA/AS, which is a legacy holdover from when BSU had an embedded community college mission prior to the creation of the College of Western Idaho. BSU only offers an AA/AS in General Studies to students who have completed 60 credits or more and then stop out, so the student doesn't leave empty-handed. BSU does not offer, and does not intend to offer, AS or AA degrees in any specific subjects or disciplines. They also do not recruit students into the AS/AA General Studies degree program, or encourage students to be part of the program as a normal course of their study.

Board staff finds that UI clearly has the academic capacity and capital resources to deliver the program, and has demonstrated a strong industry demand for the program. The Board will need to weigh concerns voiced by sister institutions, and whether an associate degree is the appropriate credential for the program.

**BOARD ACTION**

I move to approve the request by University of Idaho to offer an Associate of Science in Forest Operations and Technology as provided in Attachment 1.

Moved by _____ Seconded by _____ Carried Yes _____ No _____

Institutional Tracking No. _____

# Idaho State Board of Education

Proposal for Academic Degree and Certificate Program

| | |
|---|---|
| Date of Proposal Submission: | 9/15/2021 |
| Institution Submitting Proposal: | University of Idaho |
| Name of College, School, or Division: | College of Natural Resources |
| Name of Department(s) or Area(s): | Department of Forest, Rangeland and Fire Sciences |

| | | | | | | |
|---|---|---|---|---|---|---|
| Official Name of the Program: | Forest Operations and Technology | | | | | |
| Implementation Date: | 7/1/2022 | | | | | |
| Degree Information: | Degree Level: Associate | | Degree Type: Associate of Science | | | |
| CIP code (consult IR /Registrar): | 03.0511 | | | | | |
| Method of Delivery: Indicate percentage of face-to-face, hybrid, distance delivery, etc. | 100% Face-to-Face | | | | | |
| Geographical Delivery: | Location(s) | Moscow | Region(s) | | | |
| Indicate (X) if the program is/has: (Consistent with Board Policy V.R.) | | Self-Support fee | | Professional Fee | | Online Program Fee |
| Indicate (X) if the program is: (Consistent with Board Policy III.Z.) | X | Regional Responsibility | | Statewide Responsibility | | |

**Indicate whether this request is either of the following:**

- [X] New Degree Program
- [ ] Undergraduate/Graduate Certificates (30 credits or more)
- [ ] Expansion of Existing Program
- [ ] Consolidation of Existing Program
- [ ] New Off-Campus Instructional Program
- [ ] Other (i.e., Contract Program/Collaborative

| | | | |
|---|---|---|---|
| College Dean (Institution) | 1/24/22 Date | Vice President for Research (Institution; as applicable) | Date |
| Graduate Dean or other official (Institution; as applicable) | Date | Academic Affairs Program Manager, OSBE | Date |
| VP/Chief Fiscal Officer (Institution) | 1-25-22 Date | Chief Financial Officer, OSBE | Date |
| Provost/VP for Instruction (Institution) | Torrey Lawrence 1-25-22 Date | Chief Academic Officer, OSBE | Date |
| President | 1.25.22 Date | SBOE/Executive Director Approval | Date |

**Page 1**
**Revised July 1, 2020**

**Before completing this form, refer to Board Policy Section III.G., Postsecondary Program Approval and Discontinuance**. This proposal form must be completed for the creation of each new program. All questions must be answered.

## Rationale for Creation or Modification of the Program

1. **Describe the request and give an overview of the changes that will result.** What type of substantive change are you requesting? Will this program be related or tied to other programs on campus? Identify any existing program that this program will replace. If this is an Associate degree, please describe transferability.

   *This proposed program (Associate of Science in Forest Operations and Technology) is a new program for the Department and College and is not related to any existing degree program at the University of Idaho (UI) or any other state two-year or four-year institution. The proposed program follows stakeholder input, and an assessment of workforce needs across the state and region. Currently, we offer a B.S. in Forestry with an emphasis area focused on advanced forest operations. While the B.S. Forestry degree requires extensive training in forest science, the proposed Associate of Science degree is focused specifically on workforce development and the needs of the logging and forest operations sector by linking basic forest operations with important skills needed to operate and maintain forest harvesting equipment.*

   *The University of Idaho (UI) is uniquely positioned in the state to help meet this demand for a skilled forest operations workforce. Our nationally ranked Forestry program has been training foresters for over 100 years and we have considerable expertise in forest operations and the application of new technologies. Additionally, the 10,000+ acre University of Idaho Experimental Forest (UIEF) provides a natural laboratory for an associate of science program in forest operations and technology. The UIEF is a true working forest, with active harvesting and forest operations, that provides hands-on learning opportunities for our students. Furthermore, the UIEF has recently acquired new harvesting and operations equipment, including a Caterpillar 538 Logging Processor with Waratah attachments ($480,000) and a John Deere 648L Grapple Skidder ($280,000). With these resources, we believe our program is uniquely positioned to support the type of hands-on workforce development program that many in Idaho's forest products sector are requesting. Furthermore, we anticipate that students from Idaho's rural communities (as well as other areas of the Pacific Northwest) will be interested in this program, and our efforts will help foster increased economic activity and opportunity for students in these rural communities. We believe this is a critical part of the University of Idaho's land-grant mission.*

   *As this new Associate of Science builds upon existing course offerings in forestry and other programs at UI (e.g., Agricultural Systems Management), we do not anticipate significant resources are needed to develop and deliver the program. We do anticipate that an Associate of Science degree will attract more students currently not enrolled at UI or being served by other institutions in the state. While we believe most graduates of the program will enter the forest operations workforce, students interested in transferring into a four-year degree (e.g., B.S. Forestry) will be well positioned to do so as many of the disciplinary-based courses that are part of the Associate of Science degree would meet some of the basic requirements, including disciplinary based electives, as part of the General Forestry Emphasis Area or our more advanced Forest Operations Emphasis Area.*

2. **Need for the Program**. Describe evidence of the student, regional, and statewide needs that will be addressed by this proposal to include student clientele to be served and address the ways in which the proposed program will meet those needs.

**a. Workforce and economic need:** Provide verification of state workforce needs that will be met by this program. Include job titles and cite the data source. Describe how the proposed program will stimulate the state economy by advancing the field, providing research results, etc.

*The Bureau of Labor Statistics (BLS) estimates that employment in positions identified as **forest operations managers, heavy equipment operators, and loggers**, positions we see the proposed Associate of Science supporting, will increase significantly over the next decade. Specifically, BLS data estimates nationally a total of 45,500 logging industry related jobs in 2020 and a positive employment outlook with seven percent growth between 2020 and 2030 (1). According to the BLS, "7,400 openings for logging workers are projected each year, on average, over the decade. Many of those openings are expected to result from the need to replace workers who transfer to different occupations or exit the labor force, such as to retire." These are high wage positions, with an Idaho entry wage of $45,775 (2).*

*We have provided support letters for this degree from the Idaho Forest Products Commission (IFPC) and the Associated Logging Contractors of Idaho (ALC), which represents about 500 members and 100 associate members. ALC's support letter reads, in part:*

> "Like many business sectors today, the business members of the ALC-Idaho struggle to find skilled and knowledgeable employees and the proposed Forest Harvesting and Technology degree can be a key to recruiting and training in the areas outlined within the program. This two-year program provides critical components of knowledge allowing students to start their careers sooner than a four-year program provides and fills a void of focused programing in this area in Idaho."

*IFPC's letter of support states, in part:*

> "IFPC applauds the University of Idaho (UI) and is proud to offer a letter of support for the offering of proactive educational solutions to a specific audience that's so essential to the health and success of the timber industry in Idaho.
>
> IFPC's supporters include milling, logging, wood-related transportation and forest landowners who will directly benefit from new educational opportunities focused on timber harvesting and nursery management."

*Based upon this demand and support for our proposed program, we anticipate that this new degree will help develop the workforce needed to support the forest industry in Idaho and beyond.*

*References*

*(1) Bureau of Labor Statistics. Employment by major occupational group, 2020 and projected 2030. Retrieved from: https://www.bls.gov/emp/tables/emp-by-detailed-occupation.htm.*
*(2) Idaho Department of Labor. Occupational and industry projections, 2020-2030. Retrieved from: https://lmi.idaho.gov/projections*

**b. Student demand.** What is the most likely source of students who will be expected to enroll (full-time, part-time, outreach, etc.). Provide evidence of student demand/ interest from inside and outside of the institution.

*We anticipate that the majority of students will enroll as full-time students. As we have designed this curriculum specifically for workforce development, it is not intended to compete for students with the current B.S. Forestry degree offered by the University of Idaho. We anticipate both primary and secondary sources of demand:*

*Primary Source of Demand: The primary source of demand will be recent high school graduates residing in the Pacific Northwest states of Idaho, Oregon, and Washington, which exhibit robust forestry, forest operations, and logging industries. Within Idaho, the degree will be specifically targeted at the rural high student population. Successful delivery of these degree programs has the potential to increase Idaho's "go-on rate" in rural communities.*

*Secondary Source of Demand: It is expected that this degree program will also build off the College of Natural Resources' national reputation in the forestry and forest operations fields (e.g., Forestry program ranked 4th in the nation in 2021 by Study.com). Relative to the few similar degree programs offered nationally, we can deliver a much deeper curriculum offering and are tied into employers on a national rather than state or regional scale.*

**c. Societal Need**: Describe additional societal benefits and cultural benefits of the program.

*According to an analysis of Idaho's Forest Products Sector by the University of Idaho's Policy Analysis Group and College of Natural Resources, it is estimated that Idaho's Forest Products Industry provides more than $2 Billion to the state's economy and employs over 30,000 individuals. While the majority of these jobs are associated with the wood products, paper, and furniture manufacturing sectors, almost 7,000 individuals are employed directly in the forest management and operations sector. These individuals are responsible for significant economic activity, adding over $400 million to the state's economy and $525 million in gross sales annually based upon a harvest of 1.1 billion board feet from private, state and federal lands.*

*The forest operations sector also remains one of the most dangerous professions in the United States. Since the start of the 2000's, nearly 1,700 logging employees have lost their lives while working, and over 60% have been timber fallers despite the increase in mechanized felling machines in forest operations. In 2019, the forest operations sector experienced over 60 fatalities for every 100,000 full-time equivalent workers (1).*

*Historically, many of these forest operations positions have been filled by individuals with little education beyond high school. However, as the forest operations sector modernizes and relies more and more on advanced technologies, employers are clamoring for a better trained and more skilled workforce. There is also a strong focus on workplace safety and using technology to help reduce workplace fatalities and injury. The new Associate of Science will help train this next generation of workers in the forest operations workforce and will provide them with skills to utilize and adapt to the increasing technology being implemented in forest operations. We anticipate that once trained, these individuals will remain in Idaho and the region and serve the forest industry and rural communities.*

*References*

*(1) Bureau of Labor Statistics. National Census of Fatal Occupational Injuries 2019. Retrieved from: https://www.bls.gov/news.release/pdf/cfoi.pdf*

**3. Program Prioritization**

Is the proposed new program a result of program prioritization?

Yes_____ No__X___

If yes, how does the proposed program fit within the recommended actions of the most recent program prioritization findings.

**4. Credit for Prior Learning**

Indicate from the various cross walks where credit for prior learning will be available. If no PLA has been identified for this program, enter 'Not Applicable'.

*Not Applicable*

**5. Affordability Opportunities**

Describe any program-specific steps taken to maximize affordability, such as: textbook options (e.g., Open Educational Resources), online delivery methods, reduced fees, compressed course scheduling, etc. This question applies to certificates, undergraduate, graduate programs alike.

*A variety of aspects of the new degree have been designed to help maximize affordability for students. First, by utilizing the University of Idaho Experimental Forest (UIEF) as the foundation of the new program, we are building upon the existing resources of the College, including new harvesting and operations equipment. With these resources, our program is uniquely positioned to support the type of hands-on workforce development program that many in Idaho's forest products sector are requesting. There is no need for us to replicate the aspects of a working forest, or the infrastructure required to deliver the program. Second, by utilizing the extensive knowledge of the UIEF staff to help deliver course content, as well as industry knowledge from our important industry stakeholders, we can provide a unique experiential learning environment and keep instructional costs down. Furthermore, the program is designed such that is builds upon existing coursework already being offered at the University of Idaho. As much of the specific coursework is hands-on, we do not anticipate excessive cost associated with course materials (e.g., textbooks, lab manuals, student fees). Third, by integrating courses to explore various careers in the forest operations and work experience through internships, we have established a framework to help students develop skills and relationships with potential employers following graduation. Finally, building off of our strong industry support, we will work with our industry stakeholders and CNR Advancement team to develop scholarship monies specifically for students enrolled in the new degree program.*

## Enrollments and Graduates

**6. Existing similar programs at Idaho Public Institutions.** Using the chart below, provide enrollments and numbers of graduates for similar existing programs at your institution and other Idaho public institutions for the most past four years.

*No similar degree program exists among the public higher education institutions in Idaho.*

7. **Justification for Duplication** (if applicable). If the proposed program is similar to another program offered by an Idaho public higher education institution, provide a rationale as to why any resulting duplication is a net benefit to the state and its citizens. Describe why it is not feasible for existing programs at other institutions to fulfill the need for the proposed program.

   *No similar degree program exists among the public higher education institutions in Idaho.*

8. **Projections for proposed program:** Using the chart below, provide projected enrollments and number of graduates for the proposed program:

| **Proposed Program: Projected Enrollments and Graduates First Five Years** | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Program Name: A.S., Forest Nursery Management and Technology** | | | | | | | | | | | |
| **Projected Fall Term Headcount Enrollment in Program** | | | | | | **Projected Annual Number of Graduates From Program** | | | | | |
| FY22 (first year) | FY23 | FY24 | FY25 | FY26 | | FY22 (first year) | FY23 | FY24 | FY25 | FY26 | |
| 5 | 15 | 20 | 20 | 20 | | 0 | 5 | 15 | 20 | 20 | |

9. **Describe the methodology for determining enrollment and graduation projections.** Refer to information provided in Question #2 "Need for the Program" above. What is the capacity for the program? Describe your recruitment efforts? How did you determine the projected numbers above?

   *Two factors were used to estimate demand for this proposed degree program. The first involved canvassing stakeholders about the potential of such a degree program to place students within the industry. While this process did not provide a specific estimate of demand, it did provide an estimate of student placement upon graduation, and student placement is a considerable driver of demand for associate degrees with a workforce development goal.*

   *To estimate the number of students that would be enrolled in the proposed degree program, we examined the enrollment at the few institutions that offer a somewhat similar degree; namely, Central Oregon Community College (Bend, Oregon), Dabney S. Lancaster Community College (Clifton Forge, Virginia), and the University of New Hampshire's Thomas School of Applied Science (Durham, New Hampshire). It should be noted that these comparable programs do not have the forest land base and operational equipment we can bring to bear to support this program. Consequently, we believe our estimates of enrollment are conservative, especially in light of our plans to market the new degree that builds upon the strong reputation of our Forestry degree, the College of Natural Resources, and University of Idaho.*

   *From a student recruitment perspective, the College of Natural Resources recruits nationally – about one-half of the college's undergraduate students are nonresidents. The college employs a strategic enrollment plan that segments and targets defined populations for each of its degree programs. To recruit for this proposed degree program, the college will target rural communities located in Idaho, California, Oregon, and Washington, implementing high school visits and various print and digital communication campaigns to introduce the program to*

*prospective students. Students expressing interest in the program will be directly contacted by a recruiter and faculty (i.e., one-on-one recruitment interaction). The college's national recruitment efforts will also very likely attract students from beyond Idaho and the West to this degree program.*

**10. Minimum Enrollments and Graduates.**

a. What are the minimums that the program will need to meet in order to be continued, and what is the logical basis for those minimums?

*The University of Idaho has contracted with Gray Associates, a company that has developed a dynamic database for the institution (Program Economics Platform), which allows for the calculation of the contribution margin (net revenue less costs) for each academic program. This proposed academic program will be discontinued if it experiences three consecutive years of negative contribution margin.*

*It is difficult to pinpoint an exact minimum enrollment that justifies continuance of the proposed academic program since delivery is contingent on cost structure, which can change year-to-year based on numerous variables. For example, the cost to deliver a course can differ substantially based on the faculty member teaching the course. A course taught by a full professor, with high salary and benefit costs, would be more costly to deliver relative to a newly hired assistant professor teaching the same course. Given the current cost structure in the department delivering the proposed academic program, it is believed that at least 15 students are necessary to result in a positive contribution margin.*

b. If those minimums are not met, what is the sunset clause by which the program will be considered for discontinuance?

*The sunset clause by which this degree will be considered for discontinuance is if the program fails to generate a positive contribution margin for three consecutive years.*

**11. Assurance of Quality.** Describe how the institution will ensure the quality of the program. Describe the institutional process of program review. Where appropriate, describe applicable specialized accreditation and explain why you do or do not plan to seek accreditation.

*Like all other academic programs at the University of Idaho, the proposed program will be required to perform an annual Academic Program Review (APR), which is a self-study quality assessment process required by the Idaho State Board of Education and the institution's accreditor, the Northwest Commission on Colleges and Universities (NWCCU). The APR process requires an examination of linked coursework to determine if student the stated learning outcomes for the academic program are being achieved and how well they are being achieved. The APR process also requires that academic programs annually assess student achievement, program demand and productivity, financial health, and resource use.*

*As the focus of the degree is workforce development, we will share assessment findings with the with the Idaho Forest Products Commission (IFPC) and Associated Logging Contractors of Idaho (ALC). Feedback from the IFPC and ALC will be collected on the program and graduates and shared with Department faculty to help improve of the program as needed.*

**12. In accordance with Board Policy III.G., an external peer review is required for any new doctoral program.** Attach the peer review report as **Appendix A**.

*Not applicable to this degree.*

13. **Teacher Education/Certification Programs** All Educator Preparation programs that lead to certification require review and recommendation from the Professional Standards Commission (PSC) prior to consideration and approval of the program by the State Board of Education.

Will this program lead to certification?

Yes_____ No__*X*___

If yes, on what date was the Program Approval for Certification Request submitted to the Professional Standards Commission?

14. **Three-Year Plan: If this is a new proposed program, is it on your institution's approved 3-year plan?**

Yes *X* No _____

If yes, proceed to question 15. If no:

a. **Which of the following statements address the reason for adding this program outside of the regular three-year planning process.**

Indicate (X) by each applicable statement:

| | |
|---|---|
| | Program is important for meeting your institution's regional or statewide program responsibilities. |
| | The program is in response to a specific industry need or workforce opportunity. |
| | The program is reliant on external funding (grants, donations) with a deadline for acceptance of funding. |
| | There is a contractual obligation or partnership opportunity related to this program. |
| | The program is in response to accreditation requirements or recommendations. |
| | The program is in response to recent changes to teacher certification/endorsement requirements. |

b. **Provide an explanation for all statements you selected.**

## Educational Offerings: Curriculum, Intended Learning Outcomes, and Assessment Plan

15. **Curriculum. Provide descriptive information of the educational offering.**

a. **Summary of requirements.** Provide a summary of program requirements using the following table.

| | |
|---|---|
| Credit hours in required courses offered by the department (s) offering the program. | 29 |
| Credit hours in required courses offered by other departments: | 8 |

| | |
|---|---|
| Credit hours in institutional general education curriculum | 36 |
| Credit hours in free electives | 0 |
| Total credit hours required for degree program: | 73 |

**b. Curriculum.** Provide the curriculum for the program, including credits to completion, courses by title and assigned academic credit granted.

*Required course work includes:*

*Required course work includes:*

| | | |
|---|---|---|
| *ACCT 201* | *Introduction to Financial Accounting* | *3* |
| *ASM 409* | *Agricultural Tractors, Power Units and Machinery Management* | *4* |
| *CHEM 101/101L* | *Introduction to Chemistry and Lab* | *4* |
| *COMM 101* | *Fundamentals of Oral Communication* | *2* |
| *ECON 201 or ECON 202* | *Principles of Macroeconomics or Principles of Microeconomics* | *3* |
| *ENGL 101* | *Writing and Rhetoric I* | *3* |
| *ENGL 102* | *Writing and Rhetoric II* | *3* |
| *FOR 102* | *Introduction to Forest Management* | *2* |
| *FOR 103* | *Introduction to Computer Applications in Natural Resources* | *1* |
| *FOR 201* | *Industrial Forest Management and Sawmill Tour* | *2* |
| *FOR 210* | *Winter Harvesting* | *1* |
| *FOR 211* | *Logging Safety and Emergency Preparedness* | *2* |
| *FOR 230* | *Forest Operations* | *3* |
| *FOR 231* | *Low Volume Forest Roads* | *2* |
| *FOR 236* | *Cable Systems* | *2* |
| *FOR 272* | *Forest Surveying and Mapping* | *3* |
| *FOR 293* | *Business of Forestry* | *2* |
| *FOR 296* | *Forest Harvesting Practicum* | *3* |
| *FOR 298* | *Forest Technology Internship* | *1* |
| *FSP 100* | *Introduction to Forest and Sustainable Products* | *2* |
| *MATH 123 or MATH 143* | *Math in Modern Society or College Algebra* | *3* |

| | | |
|---|---|---|
| *MKTG 321* | *Marketing* | *3* |
| *REM 144* | *Wildland Fire Management* | *3* |
| *SOIL 205* | *The Soil Ecosystem* | *3* |
| *SOIL 206* | *The Soil Ecosystem Lab* | *1* |
| *Select 12 credits of General Education electives to meet SBOE General Education requirements for Associate Degree* | | *12* |

*Total credits for degree: 73*

**c. Additional requirements.** Describe additional requirements such as comprehensive examination, senior thesis or other capstone experience, practicum, or internship, some of which may carry credit hours included in the list above.

*The proposed degree program requires the completion of an internship (FOR 298 – Forest Technology Internship).*

**16. Learning Outcomes: Expected Student Learning Outcomes and Connection to Curriculum.**

**a. Intended Learning Outcomes.** List the Intended Learning Outcomes for the proposed program, using learner-centered statements that indicate what students will know, understand, and be able to do, and value or appreciate as a result of completing the program.

*After completing the Associate of Science in Forest Operations and Technology, students will:*

1) *Be able to identify and describe traditional and advanced logging systems and understand considerations for feasible and safe forest operations accounting for topographic and forest conditions.*
2) *Be able to use basic computer-based applications and mobile technologies to aid the planning, execution, and assessment of forest operations.*
3) *Understand and apply safe practices, basic equipment operation and service, and cost tracking for manual and mechanized forest operations in real-world scenarios.*
4) *Understand the implications of the Forest Practices Act and best management practices (BMP's) for logging and forest road building activities to support sustainable forest management.*
5) *Understand basic forestry and fire management concepts to ensure effective communication with other natural resource professionals.*

**17. Assessment plans.**

**a. Assessment Process.** Describe the assessment plan for student learning outcomes that will be used to evaluate student achievement and how the results will be used to improve the program.

*Assessment will be measured directly through student performance on specific projects and exams associated with required coursework, including a new capstone course*

*called FOR 296 Forest Harvesting Practicum. In addition to these direct assessment metrics, we will conduct an exit survey with all graduates of the A.S. degree as part of FOR 296 Forest Harvesting Practicum. The survey will provide an opportunity for students enrolled in the program to assess how well they believe the program has prepared them for a career in the forest operations industry and related fields.*

*Direct assessment measures include:*

1) ***Identify and describe logging systems*** *– final project associated with FOR 296 Forest Harvesting Practicum.*
2) ***Be able to use basic computer-based applications and mobile technologies*** *– field-based projects associated with FOR 273 – Forest Surveying and Mapping.*
3) ***Understand and apply safe practices and best practices for manual and mechanized forest operations*** *– field-based projects associated with FOR 210 – Winter Harvesting and FOR 211 – Logging Safety and Emergency Procedures*
4) ***Understand Forest Practices Act*** *– final project associated with FOR 296 Forest Harvesting Practicum.*
5) ***Effective Communication*** *– final projects associated with FOR 211 – Logging Safety and Emergency Procedures and FOR 296 Forest Harvesting Practicum.*

*Indirect measures include:*

1) *Exit survey of graduates as part of capstone course FOR 296 Forest Harvesting Practicum.*

*Assessment activities will occur annually, associated with each class when scheduled in either the fall or spring semesters. The graduating student surveys will be completed each spring at the end of FOR 296 Forest Harvesting Practicum.*

**Resources Required for Implementation – fiscal impact and budget.**

Organizational arrangements required within the institution to accommodate the change including administrative, staff, and faculty hires, facilities, student services, library; etc.

**18. Physical Facilities and Equipment:** Describe the provision for physical facilities and equipment.

**a. Existing resources**. Describe equipment, space, laboratory instruments, computer(s), or other physical equipment presently available to support the successful implementation of the program.

*We will utilize existing College of Natural Resources physical facilities and equipment to deliver the program. Specifically, we will utilize the University of Idaho Experimental Forest (UIEF) to deliver new courses, including the new capstone course FOR 296. The UIEF includes over 10,000+ acres of working forest and newly renovated classroom space that will allow students to focus on hands-on learning.*

**b. Impact of new program**. What will be the impact on existing programs of increased use of physical resources by the proposed program? How will the increased use be accommodated?

*We anticipate minimal impact of the new program on the College of Natural Resources' physical facilities. There will be increased student activity at the University of Idaho*

*Experimental Forest (UIEF) associated with the new courses, however, the capacity of the forest and existing classroom space is more than sufficient to meet projected student demands. We will utilize the College of Natural Resources Motorpool and fleet of vans for the new course FOR 230 Industrial Forest Management and Sawmill Tour.*

c. **Needed resources.** List equipment, space, laboratory instruments, etc., that must be obtained to support the proposed program. Enter the costs of those physical resources into the budget sheet.

*No specific renovation to existing space is needed to deliver the program. We do anticipate the need for new equipment to deliver the program, including a cache of chainsaws and supporting safety and maintenance equipment for student use. We estimate an initial cost of $17,500, followed by $10,000 annually to replace and repair equipment. These costs will be covered in part by student fees in several courses (FOR 201, FOR 272, and FOR 296), as well as by the College of Natural Resources.*

**19. Library and Information Resources:** Describe adequacy and availability of library and information resources.

a. **Existing resources and impact of new program**. Evaluate library resources, including personnel and space. Are they adequate for the operation of the present program? Will there be an impact on existing programs of increased library usage caused by the proposed program? For off-campus programs, clearly indicate how the library resources are to be provided.

*We do not anticipate the program placing and significant demands on the UI Library and other informational resources.*

b. **Needed resources**. What new library resources will be required to ensure successful implementation of the program? Enter the costs of those library resources into the budget sheet.

*No new library resources are needed for the successful implementation of the program.*

**20. Faculty/Personnel resources**

a. **Needed resources.** Give an overview of the personnel resources that will be needed to implement the program. How many additional sections of existing courses will be needed? Referring to the list of new courses to be created, what instructional capacity will be needed to offer the necessary number of sections?

*We anticipate that the program will require additional instructional capacity beyond current tenure-track faculty to deliver the proposed curriculum. Existing Department faculty have the capacity to deliver courses that have higher-division, cross-listed courses (FOR 230, FOR 231, FOR 236 and FOR 293), as well as two new courses required in the degree (FOR 103 and FOR 272). Development and delivery of the remaining new courses will require hiring part-time instructors. We anticipate using University of Idaho Experimental Forest professional staff to help meet these instructional needs, specifically staff that have the expertise in logging safety and emergency preparedness, and forest harvesting operations. In terms of existing courses both delivered by the College of Natural Resources and other programs at UI, our anticipated enrollments will increase enrollment in these courses. Our review of*

*past course offerings, however, suggests that there is capacity to meet any increased demand for seats in these courses from students enrolled in the new program.*

**b. Existing resources**. Describe the existing instructional, support, and administrative resources that can be brought to bear to support the successful implementation of the program.

*Existing Department faculty have the capacity to deliver courses that have higher-division, cross-listed courses (FOR 230, FOR 231, FOR 236 and FOR 293), as well as two new courses required in the degree (FOR 103 and FOR 272). In addition to the existing instructional support, the Department has the administrative and support capacity to effectively manage the program, including program assessment.*

*In addition to Departmental support, the College will also support the program primarily in terms of student recruitment and marketing through the College's Director of Student Recruitment and Stakeholder Engagement. Student academic advising will be provided through the professional advisors in the College, while career advising will occur across the new curriculum by Department faculty.*

**c. Impact on existing programs**. What will be the impact on existing programs of increased use of existing personnel resources by the proposed program? How will quality and productivity of existing programs be maintained?

*We anticipate little impact on existing programs in the Department and College and view the potential impact on the University of Idaho Experimental Forest (UIEF) as a positive development. The new degree program will highlight the UIEF and add a significant educational and workforce development component to its mission.*

**d. Needed resources.** List the new personnel that must be hired to support the proposed program. Enter the costs of those personnel resources into the budget sheet.

*We anticipate needing part-time instructors to teach the following courses:*

1) *FOR 103 Introduction to Computer Applications in Natural Resources (1 CH)*
2) *FOR 201 Industrial Forest Management and Sawmill Tour (2 CH)*
3) *FOR 211 Logging Safety and Emergency Preparedness (2 CH)*
4) *FOR 296 Forest Harvesting Practicum (3 CH)*

*We anticipate utilizing University of Idaho Experimental Forest (UIEF) professional staff to meet these instructional needs, specifically part-time staff that have the expertise in all three areas. Following standard College of Natural Resources guidelines for temporary instructors ($2,000 per CH), we estimate the costs of delivering these three new courses (8 total credits) will be $16,000 annually.*

**21. Revenue Sources**

a) **Reallocation of funds:** If funding is to come from the reallocation of existing state appropriated funds, please indicate the sources of the reallocation. What impact will the reallocation of funds in support of the program have on other programs?

*We do not anticipate a significant reallocation of funds to support the program. Funding for the increased instructional costs associated with hiring part-time instructors will come from*

*existing non-state appropriated funds to the Department from the College of Natural Resources.*

b) **New appropriation**. If an above Maintenance of Current Operations (MCO) appropriation is required to fund the program, indicate when the institution plans to include the program in the legislative budget request.

*No new appropriation of funds is requested to support the program.*

c) **Non-ongoing sources**:
   i. If the funding is to come from one-time sources such as a donation, indicate the sources of other funding. What are the institution's plans for sustaining the program when that funding ends?

   *No one-time funding sources are anticipated.*

   ii. Describe the federal grant, other grant(s), special fee arrangements, or contract(s) that will be valid to fund the program. What does the institution propose to do with the program upon termination of those funds?

   *No grants, special fees, or contracts are being proposed to fund the program.*

d) **Student Fees**:
   i. If the proposed program is intended to levy any institutional local fees, explain how doing so meets the requirements of Board Policy V.R., 3.b.

   *No institutional local fees are requested.*

   ii. Provide estimated cost to students and total revenue for self-support programs and for professional fees and other fees anticipated to be requested under Board Policy V.R., if applicable.

   *We anticipate course fees associated with the following courses:*

   *FOR 201: $25 per student to cover transportation costs as part of industrial forest and sawmill tour.*

   *FOR 272: $100 per student to cover field surveying equipment, including tablets used for mobile mapping*

   *FOR 296: $100 per student to cover forest harvesting equipment used in field practicum course (chainsaws, safety and maintenance equipment)*

**22.** Using the excel budget template provided by the Office of the State Board of Education, provide the following information:

- Indicate all resources needed including the planned FTE enrollment, projected revenues, and estimated expenditures for the first **four** fiscal years of the program.
- Include reallocation of existing personnel and resources and anticipated or requested new resources.

- Second and third year estimates should be in constant dollars.
- Amounts should reconcile subsequent pages where budget explanations are provided.
- If the program is contract related, explain the fiscal sources and the year-to-year commitment from the contracting agency(ies) or party(ies).
- Provide an explanation of the fiscal impact of any proposed discontinuance to include impacts to faculty (i.e., salary savings, re-assignments).

**Program Resource Requirements.**

- Indicate all resources needed including the planned FTE enrollment, projected revenues, and estimated expenditures for the first **four** fiscal years of the
- Include reallocation of existing personnel and resources and anticipated or requested new resources.
- Second and third year estimates should be in constant dollars.
- Amounts should reconcile subsequent pages where budget explanations are provided.
- If the program is contract related, explain the fiscal sources and the year-to-year commitment from the contracting agency(ies) or party(ies).
- Provide an explanation of the fiscal impact of any proposed discontinuance to include impacts to faculty (i.e., salary savings, re-assignments).

**I. PLANNED STUDENT ENROLLMENT**

| | FY 22 | | FY 23 | | FY 24 | | FY 25 | |
|---|---|---|---|---|---|---|---|---|
| | FTE | Headcount | FTE | Headcount | FTE | Headcount | FTE | Headcount |
| A. New enrollments | 5 | 5 | 15 | 15 | 20 | 20 | 20 | 20 |
| B. Shifting enrollments | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ***Total Enrollment*** | 5 | 5 | 15 | 15 | 20 | 20 | 20 | 20 |

**II. REVENUE**

| | FY 22 | | FY 23 | | FY 24 | | FY 25 | |
|---|---|---|---|---|---|---|---|---|
| | On-going | One-time | On-going | One-time | On-going | One-time | On-going | One-time |
| 1. New Appropriated Funding Request | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 2. Institution Funds | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 3. Federal | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 4. New Tuition Revenues from Increased Enrollments | $30,909.00 | $0.00 | $92,727.00 | $0.00 | $123,636.00 | $0.00 | $123,636.00 | $0.00 |
| 5. Student Fees | $11,736.00 | $0.00 | $35,208.00 | $0.00 | $46,944.00 | $0.00 | $46,944.00 | $0.00 |
| 6. Other (i.e., Gifts) | $5,000.00 | $0.00 | $10,000.00 | $0.00 | $15,000.00 | $0.00 | $15,000.00 | $0.00 |
| ***Total Revenue*** | $47,645 | $0 | $137,935 | $0 | $185,580 | $0 | $185,580 | $0 |

***Ongoing is defined as ongoing operating budget for the program which will become part of the base.***
***One-time is defined as one-time funding in a fiscal year and not part of the base.***

**III. EXPENDITURES**

| | FY 22 | | FY 23 | | FY 24 | | FY 25 | |
|---|---|---|---|---|---|---|---|---|
| | On-going | One-time | On-going | One-time | On-going | One-time | On-going | One-time |
| ***A. Personnel Costs*** | | | | | | | | |
| 1. FTE | 0.5 | 0.00 | 0.5 | 0.00 | 0.5 | 0.00 | 0.5 | 0.00 |
| 2. Faculty | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 3. Adjunct Faculty | $ 16,000.00 | $0.00 | $16,000.00 | $0.00 | $ 16,000.00 | $0.00 | $ 16,000.00 | $0.00 |
| 4. Graduate/Undergrad Assistants | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 5. Research Personnel | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 6. Directors/Administrators | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 7. Administrative Support Personnel | $ 900.00 | $0.00 | $ 2,700.00 | $0.00 | $ 3,600.00 | $0.00 | $ 3,600.00 | $0.00 |
| 8. Fringe Benefits | $ 367.20 | $0.00 | $ 1,101.60 | $0.00 | $ 1,468.80 | $0.00 | $ 1,468.80 | $0.00 |
| 9. Other: _____ | | | | | | | | |
| ***Total Personnel and Costs*** | $17,267 | $0 | $19,802 | $0 | $21,069 | $0 | $21,069 | $0 |

Draft-November 6, 2015
Page 2

| | FY 22 | | FY 23 | | FY 24 | | FY 25 | |
|---|---|---|---|---|---|---|---|---|
| ***B. Operating Expenditures*** | On-going | One-time | On-going | One-time | On-going | One-time | On-going | One-time |
| 1. Travel | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 2. Professional Services | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 3. Other Services | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 4. Communications | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 5. Materials and Supplies | $125.00 | $0.00 | $250.00 | $0.00 | $375.00 | $0.00 | $375.00 | $0.00 |
| 6. Rentals | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 7. Materials & Goods for Manufacture & Resale | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 8. Miscellaneous | $1,500.00 | $0.00 | $1,500.00 | $0.00 | $1,500.00 | $0.00 | $1,500.00 | $0.00 |
| ***Total Operating Expenditures*** | $1,625 | $0 | $1,750 | $0 | $1,875 | $0 | $1,875 | $0 |

| | FY 22 | | FY 23 | | FY 24 | | FY 25 | |
|---|---|---|---|---|---|---|---|---|
| ***C. Capital Outlay*** | On-going | One-time | On-going | One-time | On-going | One-time | On-going | One-time |
| 1. Library Resources | $0.00 | $0.00 | 0 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 2. Equipment | $17,500.00 | $0.00 | $10,000.00 | $0.00 | $10,000.00 | $0.00 | $10,000.00 | $0.00 |
| ***Total Capital Outlay*** | $17,500 | $0 | $10,000 | $0 | $10,000 | $0 | $10,000 | $0 |

| | FY 22 | | FY 23 | | FY 24 | | FY 25 | |
|---|---|---|---|---|---|---|---|---|
| ***D. Capital Facilities Construction or Major Renovation*** | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |

Draft-November 6, 2015
Page 3

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ***E. Other Costs*** | | | | | | | | |
| Utilites | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| Maintenance & Repairs | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| Other _____ | | | | | | | | |
| ***Total Other Costs*** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| ***TOTAL EXPENDITURES:*** | $36,392 | $0 | $31,552 | $0 | $32,944 | $0 | $32,944 | $0 |
| ***Net Income (Deficit)*** | $11,253 | $0 | $106,383 | $0 | $152,636 | $0 | $152,636 | $0 |

Budget Notes (specify row and add explanation where needed; e.g., "I.A.,B. FTE is calculated using…"):

| | |
|---|---|
| I.A. | Conservative estimate of new studnets enrolling in program |
| II.4 | Conservative tuition estimate $6181.80 per student based upon all resident enrollment; CNR has high non-resident enrollment |
| II.5 | Fee estimates inlcude $2122.20 for University fees per student; $225 additional course fees per student |
| II.6 | Estimate of new scholarships via CNR Advancement office |
| III.A.1 | Conservative estimate of instructional needs; 8 CH total (Full-time FTE 24 CH) plus time for preparation and student advising |
| III.A.3 | Adjunct faculty salary based upon CNR standard of $2,000 per CH for temporary instructors |
| III.A.7 | Administrative suppoprt estimated at $180 per enrolled student |
| III.A.9 | Administrative support fringe rate of 40.8% |
| III.B.5 | Marterials and supplies for student recruitment; estimated $25 per student, includes travel and based on CNR recruitment analysis |
| III.B.8 | Miscellaneous administrative costs supporting program |
| III.C.2 | Capital outlay for new chainsaws and associated safety/mainteance equipment, as well as surveying equipment; replacement costs |
| | for out years |
| | |

**Addendum to #461 Forest Operations Technology Proposal**

3. **Program Prioritization**

   *Is the proposed new program a result of program prioritization?*

   Yes_____ No__X___

   *If yes, how does the proposed program fit within the recommended actions of the most recent program prioritization findings.*

4. **Credit for Prior Learning – *if not applicable, provide a sentence to explain why not applicable.**

   *Indicate from the various cross walks where credit for prior learning will be available. If no PLA has been identified for this program, enter 'Not Applicable'.*

   While it is true that our proposed courses as part of this Associate Degree rely heavily on experiential learning, they also include content that goes beyond just experience, or knowledge that is acquired through professional work experience or training.

   The University of Idaho does have a policy and mechanism for students to challenge courses by examination (UI Catalog I-2-a). We have used this policy in the past successfully with students that wish to receive credit for work experience. It allows the student to obtain credit based upon experience or prior training while at the same time ensuring that student learning outcomes of the course and our professional accreditation standards are maintained.

5. **Affordability Opportunities**

   *Describe any program-specific steps taken to maximize affordability, such as: textbook options (e.g., Open Educational Resources), online delivery methods, reduced fees, compressed course scheduling, etc. This question applies to certificates, undergraduate, graduate programs alike.*

   A variety of approaches will be taken to help maximize affordability. First, many of the new courses to be developed are based upon existing expertise and course materials. This ensures the efficient use of resources to develop the new courses to support the degree program. Second, since most of the required courses for the degree are field-based and experiential in nature, there are not textbooks available to be used to support student learning. As such, we will rely largely on self-produced material that will be shared via the University of Idaho's learning Management System – Canvas. We are already doing this for many courses in the Department where faculty have designed supplemental learning

materials that are freely available online and built course content that precludes the need for expensive textbooks. Third, the Department and College are actively working with stakeholders and industry partners to develop funds to support the acquisition and maintenance of field equipment to support the new degree program. Finally, the CNR Development Office is working to secure endowments for scholarships to support students, and one such endowment is currently being established to support students in the Forest Operations Technology program.

**Response to Idaho State Board of Education Inquiry**

Below are responses to questions that the University of Idaho received from T.J. Bliss and Patty Sanchez concerning the University of Idaho's three proposed A.S. degrees.

**A.S., Forest Operations and Technology**

For the **AS, Forest Operations and Technology**, the proposal indicates that the program will require 73 credits. This does not align with Board Policy III.E. definitions for an Associate's degree. Policy provides that *an associate's degree will not require more than 60 credits unless necessary for matriculation to a specific baccalaureate degree or for unique accreditation, certification, or professional licensure OR by exception approved by the Board*. There doesn't appear to be a need for matriculation into a specific baccalaureate degree or for unique accreditation purposes, etc. Please let us know if we missed something. Otherwise, UI needs to include some rationale for the exception to policy that can be included as part of the request for Board approval.

The proposed A.S., Forest Operations and Technology degree requires the completion of 73 credits, 13 credits in excess of the Board Policy III.E.1.c. The UI requests that the Board provide an exception to Board Policy III.E.1c. for the A.S., Forest Operations and Technology degree for two reasons. First, The UI's College of Natural Resources intends to seek professional accreditation of the A.S., Forest Operations and Technology degree through the Society of American Foresters (SAF), which already provides accreditation of the College's B.S. Forestry degree. As specified by SAF, to meet the *Forest Technology* accreditation standard, programs must have [1] clear program purpose and learning outcomes, [2] adequate resources, including advising, [3] adequate levels of faculty and staff to support program (minimum of two faculty with disciplinary expertise with at least one degree in forestry), [4] support the learning environment with computers, specialized software, spatial information technologies, specialized equipment, access to appropriate outdoor sites for experiential learning and development of field skills, and [5] have a curriculum focused on four major areas - ecology and biology, measurement of forest resources, forest resource policy, economics, and administration, silviculture and forest measurement. The fifth component of the *Forest Technology* accreditation standard requires that this degree consist of more than 60 credits.

Second, this degree was closely developed with industry stakeholder input. In the development of A.S., Forest Operations and Technology degree, the College of Natural Resources was aware of the maximum credits standard set forth Board Policy III.E. and approached industry stakeholders in an effort to reduce the number of credits to 60 by through the removal of select courses. Industry stakeholders, however, responded that all courses in the degree program should remain since they meet specific industry needs.

Note that the A.S., Forest Operations and Technology degree matriculates into UI's B.S., Forestry, Forest Operations Emphasis degree.

**ASSOCIATED LOGGING CONTRACTORS, INC.**

P. O. Box 671 | Coeur d'Alene, Idaho 83816
Phone 208-667-6473 | alc@idahologgers.com
www.idahologgers.com

August 11, 2021

**Charles Goebel, Ph.D.**
Department Head & Professor
Department of Forest, Rangeland and Fire Sciences
College of Natural Resources - University of Idaho
875 Perimeter Drive MS1133
Moscow, Idaho 83844-1133

Dear Dr. Goebel,

I write in support of the proposal for two new Applied Associate Degrees at the University of Idaho College of Natural Resources.

The Associated Logging Contractors of Idaho (ALC-Idaho) is a statewide trade association of logging and wood products and equipment hauling contractor businesses. Established in 1966 we currently represent 500 members. The ALC-Idaho also represents 100 associate members who are consumers, suppliers, and vendors in our forest products sector.

The ALC-Idaho supports both proposed programs. The Applied Associate of Science in Forest Nursery Management and Technology is an important addition as the need for professionals who assist in nurturing, growing, and improving tree species is critical as we continue our collective commitment to reforestation in the United States. The Applied Associate of Science in Forest Harvesting and Technology is also critical to our forest products sector as there is a growing need for training of the next generation of foresters and of forest harvesting professionals.

Like many business sectors today, the business members of the ALC-Idaho struggle to find skilled and knowledgeable employees and the proposed Forest Harvesting and Technology degree can be a key to recruiting and training in the areas outlined within the program. This two-year program provides critical components of knowledge allowing students to start their careers sooner than a four-year program provides and fills a void of focused programing in this area in Idaho.

Thank you and the CNR for this effort to launch these two important programs.

Sincerely,

Shawn Keough

Shawn Keough
Executive Director

IDAHO FOREST PRODUCTS COMMISSION

Post office Box 855
Boise, Idaho 83701
Tel: (208) 334-3292
Toll Free: 800-ID-WOODS
Edu. (208) 334-4061
Fax (208) 334-3449
email: ifpc@idahoforests.org
plt@idahoforests.org
www.idahoforests.org

August 5, 2021

David Gabrielsen
District 1 - (208) 660-3701

Jack A. Buell
District 2 - (208) 245-2501

Jesse D. Short
District 3 - (208) 848-2301

Mark Mahon
District 4 - (208) 741-9067

Trevor Stone
At-Large - (208) 748-2038

Jennifer Okerlund
Director

Michelle Youngquist
Education Coordinator

Charles Goebel
Department Head & Professor
Department of Forest, Rangeland and Fire Sciences
College of Natural Resources
University of Idaho
875 Perimeter Drive MS1133
Moscow, ID 83844-1133

Re: Support for A.A.S., Forest Harvesting and Technology and A.A.S, Forest Nursery Management and Technology

The Idaho Forest Products Commission (IFPC) would like to offer its compliments and complete support of the University of Idaho's introduction of A.A.S., Forest Harvesting and Technology and A.A.S, Forest Nursery Management and Technology. The addition of these degree offerings further expand and diversify the College of Natural Resources educational opportunities, while also being responsive to current timber industry needs within the state of Idaho.

Idaho's Forests Sector offers reliable employment for over 30,000 hardworking Idahoans with competitive wages. The provision of educational opportunities is essential in maintaining a sustainable workforce. IFPC has always valued its partnership with the UI in providing those opportunities – together creating a healthier Idaho through education, managed forests and strong rural and state economies.

IFPC applauds the University of Idaho (UI) and is proud to offer a letter of support for the offering of proactive educational solutions to a specific audience that's so essential to the health and success of the timber industry in Idaho.

IFPC's supporters include milling, logging, wood-related transportation and forest land owners who will directly benefit from new educational opportunities focused on timber harvesting and nursery management.

If you need any additional information, please contact me directly.

Sincerely,

Jennifer Okerlund
Director

*"Abundant forests forever through proper management and an informed public."*

R|S

RILEY STEGNER AND ASSOCIATES

March 30, 2022

Idaho State Board of Education
P.O. Box 83720
Boise, Idaho 83720-0037
*Delivered via electronic mail*

RE: Industry support for University of Idaho College of Natural Resources' request to offer proposed Associate of Science (A.S.) degrees

Dear Idaho State Board of Education Members:

We write in support of the University of Idaho's College of Natural Resources' request to offer the following Associate of Science (A.S.) degrees:

- A.S., Forest Operations & Technology
- A.S., Forest Nursery Management & Technology
- A.S., Wildland Fuels & Fire Technology (> 90% online)

The forest products industry in Idaho has long depended on the University of Idaho (UI) and the College of Natural Resources (CNR) to provide the next generation workforce of natural resource professionals for our companies. UI is uniquely, and perhaps solely, positioned to offer the educational resources to future employees that are in short supply for our sector. The mission of land-grant universities to focus on the research and educational advancement in the agriculture and forestry sectors is a critical piece of the rural, resource rich infrastructure that allows these sectors to thrive and survive.

Idaho's higher educational institutions have a proud history of responding to the educational needs of its business sectors to support their advancement such as in the areas of nuclear energy, law, computer science, agriculture, forestry and more. Creation of the three A.S. degrees will continue in this tradition, and as Idaho's land-grant university, the UI is the right home for the new programs. The proposed degrees will undoubtedly benefit from the CNR's resources and experienced staff, one-of-kind experimental forest, world class nursery, well known and respected programs, and deep connections to other research universities with like missions. It would be hard to identify an educational institution where these degree programs could thrive without the resources and staff at CNR.

The forest products industry is a significant part of Idaho's economic vitality, contributing $4 billion to the economy and employing–directly and indirectly–over 30,000 Idahoans.

On this matter we represent Bennett Lumber Products Inc., Clearwater Paper, Idaho Forest Group, Manulife Investment Management Timberland and Agriculture, Molpus Woodlands Group, PotlatchDeltic Corporation, and Stimson Lumber Company.

101 S Capitol Blvd #930 • Boise, ID 83702 • 208.310.5949

Thank you for your consideration of this request.

Sincerely,

Peter Stegner
Principal
Riley Stegner and Associates

Jim Riley
Principal
Riley Stegner and Associates

**University of Idaho**
**Proposed Associate of Science Degrees**

**Lewis-Clark State College**
*Supports. No comments.*

**Idaho State University**
*ISU recommends that U of I and NIC work collaboratively to build these programs rather than the programs being housed at any one institution. We realize that this requires a great deal of work and alignment, but in this situation, we believe it is the best course of action.*

The University of Idaho (UI) fully supports and participates in numerous mutually beneficial collaborative partnerships with community colleges throughout the state. Some current collaborations include the development and execution of transfer articulations, the management and delivery of many 2+2 programs, and co-instruction. For example, the UI's College of Natural Resources currently partners with the College of Southern Idaho to collaboratively teach range management courses virtually and in-person at the UI's Rinker Rock Creek Ranch. We are also working with CSI to deliver a 2+2 in Rangeland Ecology and Management from Twin Falls.

SBOE policy III.Z. formally defines collaboration between two or more institutions to deliver an academic degree program as a joint program. Unlike our other collaborations, the UI believes that a joint program in this specific case would not be student-centered. Rather, we expect that a joint program would result in the creation of additional layers of administrative services to deliver the degree programs. Moreover, prospective students would be required to navigate through bureaucratic and duplicative administrative processes (e.g., recruitment, admissions, financial aid, student support functions) to earn their degree, which would likely negatively impact enrollments in the degrees and, consequently, provide a suboptimal outcome to the citizens of Idaho and the industries that would benefit from the three proposed A.S. degrees.

The UI believes the any "best course of action" should focus squarely on what is best for students and citizens throughout the State of Idaho when offering any degree program. Generally, strong and vibrant programs possess well-qualified instructors, a breadth of relevant courses that are regularly available, and modern, well-maintained facilities and equipment that provide for the development of skills needed in the workforce. The combination of these three ingredients will increase the likelihood of producing graduates that add economic value to the State of Idaho.

SBOE policy allows all state institutions to offer A.S. degrees; the UI is barred from offering A.A.S. degrees per board policy, a policy that, after discussing with other institutions across the state and SBOE staff, we are in full agreement. As with all our B.S. degrees that have been designed in consultation with industry partners, all three proposed A.S. degrees have been specifically designed with direct industry input to [1] serve a clearly defined statewide need, [2] leverage very extensive capital resources managed by the College of Natural Resources, and [3] leverage faculty expertise and the multitude courses currently being taught by the College at the B.S. degree level.

With respect to meeting statewide need, the UI has submitted many support letters from statewide, regional, and national stakeholders that would be positively influenced by the proposed A.S. degrees. Each of these stakeholders already provide significant support to the College of Natural Resources'

existing B.S., M.S., and Ph.D. programs and have a clear understanding through their partnerships of how the College will leverage its current expertise and assets to better meet the specific workforce development needs in their respective industries. This type of interaction and dialogue with stakeholders is at the core of UI's tripartite land-grant mission and social contract of providing accessible educational opportunities that incorporate the best available science to improve the lives of the citizens of Idaho and the nation.

SBOE Governing Policies and Procedures III.Z.2.b.iii.1 and Idaho Code § 33-2101 (Education, Junior Colleges) define North Idaho College's (NIC) service region as embracing the counties of Benewah, Bonner, Boundary, Kootenai, and Shoshone. This delivery area is consistent with language contained in NIC's 2021-2022 Catalog: "Beyond Coeur d'Alene, NIC meets the diverse educational needs of residents in Idaho's five northern counties with the NIC Sandpoint center in Sandpoint, Idaho, online services and courses, and comprehensive outreach services." Allowing NIC to deliver the proposed A.S. degrees statewide would violate SBOE policy and state code, or, in the alternative, serve prospective students only within the five counties NIC's degrees are designated for delivery, which defeats the UI's purpose in providing a statewide benefit with the proposed degrees to the broadest student population.

Regarding capital resources for the delivery of the proposed A.S. degrees, the College of Natural Resources will rely on the use of its 10,000+ acre UI Experimental Forest located near Moscow and its more than $2 million in modern harvesting equipment in offering the A.S. Forest Operations and Technology degree. Students will be trained in hands-on forest harvest preparation, road layout, harvest, and post-harvest activities at the UI Experimental Forest using traditional and cutting-edge technology and equipment that will prepare them to enter the workforce with the skills needed to succeed.

The Pitkin Forest Nursery is a modern commercial-scale nursery consisting of millions of dollars in investments in buildings and specialized equipment. Students pursuing the A.S. Forest Nursery Management and Technology degree will be fully exposed to all facets of production and sales of nursery stock. The UI is one of only two universities in the United States operating a commercial forest nursery, which makes this proposed degree and student experience unique not only in the state, but also nationally.

Similarly, the A.S. Wildland Fuel and Fire Technology degree builds upon unique assets as the first and leading wildland fire program in the United States. While the proposed degree is intended to be delivered almost entirely online, we will leverage [1] our faculty and staff expertise, [2] one of the only fire combustion labs on a university campus in the country, and [3] our long-standing relationships with federal agencies responsible for wildland fuel and fire training (e.g., National Wildfire Coordinating Group) to develop and deliver a unique program that integrates fuel and vegetation management with wildland fire. Furthermore, as the proposed degree has been designed to be delivered almost entirely online, we would respectfully submit that this A.S. degree should be governed by SBOE Governing Policies and Procedures III.Z.6.a., "This policy [Planning and Delivery of Postsecondary Programs and Courses] is not applicable to programs for which 90% or more of all activity is required or completed online, or dual credit courses for secondary education." Thus, SBOE policy dictates that the UI is authorized to offer the A.S. Wildland Fuel and Fire Technology degree without any designated service areas constraints.

Finally, we have consciously designed the proposed programs to build upon the numerous pre-existing courses that are currently being taught on a regular basis by more than two dozen faculty in the College

of Natural Resources. The College faculty have redesigned many existing courses for the three proposed A.S. degrees. The courses have been redesigned to focus more heavily on applied components of their respective discipline areas and less on the theoretical, consistent with input from stakeholders about the skills and training the view as critical for their respective industries. In this way, we have already done much of groundwork to ensure that students will be immediately and directly employable into the workforce as we do for all of our degree programs regardless of level.

The UI respectfully questions whether NIC has the established relationships with industry stakeholders necessary to design and deliver the three proposed A.S. degrees statewide. The UI is also unaware of any existing capital resources either owned, leased, or managed by NIC that would contribute to the delivery of any of the three proposed A.S. degrees. Furthermore, examination of course offerings in NIC's 2021-2022 *Catalog* demonstrates that NIC offers no courses in either forest operations and technology or forest nursey management and technology. NIC offers a single apprentice-based course that addresses wildland fire (FST-100 Fire Service Technology). In sum, offering these degrees seems cost prohibitive for NIC, as well as for all other community colleges in the state.

If NIC were to either offer the three proposed A.S. degrees or form a joint program with the UI in offering the degrees, then it would almost certainly have to expend significant funds to help offset the costs associated with the College of Natural Resources' capital assets, instructors, and courses. Given both the SBOE's and the UI's budget/revenue models, the College of Natural Resources would be required to charge NIC for any resources they would find necessary to utilize to successfully deliver the proposed degree programs.

The UI is requesting no additional general education funding to offer any of the three proposed A.S. degrees; as such, we respectfully submit that these degrees can be delivered with current institutional resources only within the College of Natural Resources at UI. Thus, a joint program between NIC and UI in the delivery of the three proposed A.S. degrees, as suggested by Idaho State University, runs counter to the SBOE's efforts to reduce or eliminate duplication of effort as mandated by Idaho Code § 33-113 (Limits of Instruction), which states that "The state board, in the interests of efficiency, shall define the limits of all instruction in the educational institutions supported in whole or in part by the state, and, as far as practicable, prevent wasteful duplication of effort in said institutions." [emphasis added]

**North Idaho College**

*North Idaho College does not support these degree programs. Per Board Policy 3Z it is the responsibility of Community Colleges to meet workforce needs in our region. North Idaho College has reached out to the University of Idaho and offered to collaborate on these efforts. We will continue to engage in conversations to find a way to meet the needs of students and regional workforce demands.*

- *Wildland Fuel and Fire Technology (AS)*
- *Forest Nursery Management and Technology (AS)*
- *Forest Operations and Technology (AS)*

The UI believes that North Idaho College (NIC) has misinterpreted SBOE Policy contained in III.Z. [Planning and Delivery of Postsecondary Programs and Courses]. This policy bars the UI from offering A.A.S. degrees (III.Z.2.b.iii.2.). However, the policy allows all institutions, including the UI, to offer A.S. degrees.

NIC's response states that "it is the responsibility of Community Colleges to meet workforce needs in our region." The UI respectfully disagrees with NIC's perspective that degrees focused on workforce development are restricted to state's community colleges. All of the College of Natural Resources degrees, especially those in the Department of Forest, Rangeland and Fire Sciences in which the three proposed A.S. degrees will be housed, have been designed with the direct input of employers and industry stakeholders. In fact, the College frequently organizes "Industry Summits" for stakeholders to review curricula and meet with faculty to ensure that students are graduating with the necessary skills to enter the workforce. Additionally, the College of Natural Resources annually sponsors a field tour for the UI President, state and federal government officials and agency staff, and industry leaders to discuss pressing natural resource issues and how the College – through its education, research, and extension missions as a land-grant university – can contribute to finding solutions that benefit the citizens of Idaho, which includes workforce development and training. The proposed A.S. degrees evolved from just this type of engagement.

To assume that only community colleges are responsible for workforce development needs suggests a clear misunderstanding of mission of the UI and the land-grant university system as established by the Morrill Act (1862) and reaffirmed for Historical Black Colleges and Universities (1890) and Tribal Colleges (1994). These institutions were created specifically to educate the next generation workforce in agriculture and mechanical arts, which comprises the natural resources fields. From Section 4 of the original 1862 legislation, "…each State which may take and claim the benefit of this act, to the endowment, support, and maintenance of at least one college where the leading object shall be … to teach such branches of learning as are related to agriculture and the mechanic arts … in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life." [emphasis added]

Language in Idaho Code § 33-2814 (Education, University of Idaho, Courses) is consistent with Section 4 of the Morrill Act (1862) when it states that the UI "…shall embrace courses of instruction in mathematical, physical and natural sciences, with their application to the industrial arts, such as agriculture, mechanics, engineering, mining and metallurgy, manufactures [manufacturing], architecture and commerce, and such branches … as shall be necessary to a proper fitness of the pupils in the scientific and practical courses for their chosen pursuits."

Workforce development is essential to and implicit in the tripartite land-grant mission of the UI and our social contract with the citizens of the State of Idaho. Faculty and staff at the UI strive to educate and train a workforce that is supported by the best available science through basic and applied research and disseminated (or extended) to the general public to improve the lives of the citizens of Idaho and the nation.

Consistent with this mission, numerous land-grant institutions across the United States that UI considers peer institutions offer A.S. degrees that are designed to train a strong and vibrant workforce that is responsive to industry needs. Examples include Michigan State University, Montana State University, North Carolina State University, The Ohio State University, Oklahoma State University, Pennsylvania State University, Purdue University, State University of New York, Virginia Tech, University of Arkansas-Monticello, University of Hawaii, University of Maine, University of Massachusetts, University of Nebraska, University of New Hampshire, and West Virginia University. Similarly, 1890 and 1994 land-grant institutions such as Delaware State University (1890) and Salish-Kootenai College (1994) provide workforce development through A.S., B.S., and graduate degrees.

Furthermore, the UI's College of Agricultural and Life Science, College of Engineering, and College of Natural Resources specifically focus on workforce development in the form of their existing B.S. degrees. The UI is regularly awarded federal and state grants and contracts explicitly focused on workforce development needs at both the national at state levels. For instance, the Idaho Workforce Development Council awarded the UI a grant in 2019 in the amount of $419,622. In 2022, the USDA awarded a grant to the College of Natural Resources to develop educational programing to meet workforce development needs in forest operations – a grant that was awarded unconnected to the proposed A.S. degrees.[1]

Consequently, we believe the suggestion that Idaho's community colleges have exclusivity in providing programs that are focused workforce development represents a fundamental misunderstanding of the UI's mission as Idaho's land-grant university. While the UI is open to engaging with NIC in the delivery of the proposed A.S. degrees, the engagement must serve the best interests of the students and the industries that would benefit from the degrees. We respectfully disagree that such a partnership with NIC is necessary based upon our current understanding of NIC's regionally mandated focus and the resources needed to deliver the type of education and training industry desires.

[1] Advancing Technological and Fundamental Skillsets of Next Generation Forest Operations Workforces Through Enhanced Education and Extension, $225,000.

**Boise State University**

*Abstains. Boise State has some serious reservations about UI offering AS degrees. This concern is not about the quality of programs, nor about UI's expertise and ability to deliver the programs. Instead, our concern is about "mission creep." The AA/AS degrees should be generally delivered by the 2-year schools. Thus, we defer to the Community Colleges in their assessment of the proposed new degrees. However, we would like to note that mission creep negatively affects all higher education institutions, whether it be community colleges offering 4-year baccalaureate degrees or 4-year universities offering specialized AS/AA degrees.*

While the UI generally agrees with Boise State University's (BSU) philosophical assessment, it should be noted that all three proposed A.S. degree programs require very significant resource allocations to effectively deliver to meet industry and stakeholder needs. The UI currently has the capacity to offer the three degree programs with no additional general education funding and only minor internal reallocations (e.g., course staffing) within the College of Natural Resources. The UI suspects that community colleges attempting to offer any of the three proposed A.S. degrees would require significant additional general education funding and/or substantial reallocation of their current institutional resources to deliver in the same capacity as UI.

We respectfully submit that such additional general education funding or reallocation of institutional resources would be an inefficient and a wasteful use of resources considering the UI has nearly all of the resources now in place to deliver the three A.S. degrees in a fashion that is best for students and industry. Allowing each community college to develop and offer the proposed A.S. degrees to cover statewide needs would be inconsistent with Idaho Code § 33-113, which was enacted to "prevent wasteful duplication of effort" across higher education institutions.

The UI disagrees with BSU's perspective that the three proposed A.S. degrees would introduce mission creep. Mission creep is defined as the *gradual shift in strategic objectives frequently resulting in an unresolved conflict or open-ended commitment* (Oxford English Dictionary). The three proposed A.S. degrees fit exceptionally well by leveraging UI's obligation to deliver statewide B.S.-level degree programs that meet the workforce development needs in the natural resources industries (i.e., no shift in strategic objectives), which the UI has done for more than 100 years. Nor should the three proposed A.S. degrees be perceived as potentially resulting in unresolved conflict or open-ended commitment at the UI. The degrees were carefully planned and designed using direct input from industry stakeholders with all necessary resources in place for effective and efficient delivery. Students earning any of the three proposed A.S. degrees could, if they desired, enter rather seamlessly into corresponding B.S. degrees offered by UI.

Reflecting this commitment to being responsive to student and industry needs, all B.S. programs in the Department of Forest, Rangeland and Fire Sciences are accredited by professional societies (e.g., Association for Fire Ecology, Society of American Foresters, Society for Rangeland Management, Society of Wood Science and Technology). The College of Natural Resources intends to work with the Society of American Foresters (SAF) and professionally accredit each A.S. program under SAF's *Forest Technology* Standard. Such accreditation emphasizes quality and will help position each degree within their respective industries, helping students be more competitive in the job market. As specified by SAF, to meet the *Forest Technology* standard, programs must have [1] clear program purpose and learning outcomes, [2] adequate resources, including advising, [3] adequate levels of faculty and staff to support program (minimum of two faculty with disciplinary expertise with at least one degree in forestry), [4] support the learning environment with computers, specialized software, spatial information

technologies, specialized equipment, access to appropriate outdoor sites for experiential learning and development of field skills, and [5] have a curriculum focused on four major areas - ecology and biology, measurement of forest resources, forest resource policy, economics, and administration, silviculture and forest measurement. We contend that the UI is the only institution in the state that can effectively meet these professional accreditation standards using existing resources.

If the UI were to offer a generic A.S. or A.A. degree that is composed of general education requirements and coursework selected from elective courses in the student's area(s) of interest, then mission creep would certainly be an issue of concern as elective course are indeterminant with regard to resource needs. That is not what is being proposed by UI in this instance.

**College of Southern Idaho**

*The College of Southern Idaho opposes the approval of the three Associate of Science Degrees submitted on 2.5.2022 for comment: Wildland Fuel and Fire Technology, Forest Nursery Management and Technology, and Forest Operations and Technology. All three are obvious forays into the community college mission as defined by Idaho statute and further described in Idaho State Board of Education policy. They also represent (by virtue of their respective titles) what can reasonably be considered career technical education (CTE) programs. While they are indeed submitted as transfer programs, we question where they would transfer to. They appear to be terminal degrees as evidenced by the arguments around "industry supported." UI has no legal standing to offer CTE programs; these appear to be transfer degrees in name only. Even the proposals themselves include AAS language, and the curriculum seems to indicate that 20 credits of General Education were simply tacked on to the originally crafted AAS curriculum. [Torrey has advised me that this is not the case.]*

*As the sole authorized provider of associate degrees, CTE programs, workforce training, and (according to SBOE policy III.Z. and Idaho statute) lower division (including baccalaureate) postsecondary instruction in Region I, North Idaho College should at a minimum be provided a right of first refusal for all of these programs. Further, we would advocate for the most cost effective access to these programs as possible, something NIC can easily accomplish when compared to UI. Understanding that UI may have current facilities, operations, and other resources to support these programs provides an excellent opportunity for a collaboration, rather than a subordination or competition.*

*As Idaho's Land Grant Institution, UI has a particular, unique position and mission, and that is far from that of the community college. While Idaho community colleges have a clear, statutory endorsement to deliver bachelor's degrees, Idaho universities (with the specific exception of Idaho State University) clearly hold no such literal authority to offer associate degrees, and in particular, CTE programming. While the case can be made that these are programs addressing workforce needs, those needs are best met through the Idaho community and technical colleges.*

The College of Southern Idaho (CSI) presents that "Idaho universities (with the specific exception of Idaho State University) clearly hold no such literal authority to offer associate degrees." This statement inconsistent with SBOE policy III.Z. that specifically allows all state institutions to offer A.S. degrees. Boise State University, for example, offers both A.A. and A.S. degrees. The UI is currently the only state higher education institution that does not offer an A.S. degree.

We agree with the CSI that the UI is not allowed to offer A.A.S. degrees per SBOE policy III.Z.2.b.iii.2. The UI apologizes for any confusing language in the proposals that mention A.A.S. degrees as that was carelessly made in error.

CSI states that "They [proposed A.S. degrees] also represent (by virtue of their respective titles) what can reasonably be considered career technical education (CTE) programs." Here, CSI implies that any workforce-oriented degree offered by an institution is narrowly designated as a CTE program. The College of Natural Resources and other colleges at UI offer numerous B.S. degrees with titles that could reasonably be considered CTE programs if workforce-oriented degrees were narrowly defined as CTE programs (e.g., B.S. Fire Ecology and Management; B.S. Forest and Sustainable Products, B.S. Forestry, Forest Operations Emphasis; B.S. Wildlife; Conservation Law Emphasis).

As described in detail in the response to comments provided by NIC, workforce education and training is clearly mandated in the originating Morrill Act (1862) legislation creating the land-grant universities. In

this we would agree wholeheartedly with CSI's statement that "As Idaho's Land Grant Institution, UI has a particular, unique position and mission." That mission is clearly articulated in Section 4 of the Morrill Act (1862) that states the land-grant university is to "promote the liberal and practical education of the industrial classes in the several pursuits and professions in life." To suggest that the proposed A.S. degrees that prepare students for the workforce should not be developed, utilize the resources and expertise, and not be delivered by the UI suggests a fundamental misunderstanding of the mission of the land-grant university.

CSI expresses that "While they [the proposed A.S. degrees] are indeed submitted as transfer programs, we question where they would transfer to." All three proposed A.S. degrees directly transfer to B.S. degrees offered by the UI. The proposed A.S. Forest Operations and Technology degree transfers into UI's B.S. Forestry, Forest Operations Emphasis degree. The proposed A.S. Forest Nursery Management and Technology degree transfers into several programs including UI's B.S. Forestry, Forest Biology Emphasis degree and B.S. Horticulture and Urban Agriculture degree. The proposed A.S. Wildland Fuel and Fire Technology degree transfers into UI's B.S. Fire Ecology and Management degree, as well as the B.S. Forestry, General Forestry Emphasis degree. The B.S. degrees mentioned above are available for CSI's and SBOE members' inspection in the UI's *General Catalog*.[2]

CSI remarks that "They [the proposed A.S. degrees] appear to be terminal degrees as evidenced by the arguments around 'industry supported.'" For decades, the College of Natural Resources has partnered closely with the natural resources industries in the State of Idaho and the curricula of eight of the College's B.S. degree programs are designed, in part, with direct input from industry participants and stakeholders.

The Morrill Act (1862), which established the land-grant university system, was enacted to educate the next generation workforce in agriculture, which comprises the natural resources fields, and mechanical arts. Educating the next generation workforce should not be based on developing degree programs that disregard industry needs. As such, the UI would expect that members of the SBOE would strongly encourage industry participation in the development of undergraduate certificates and degrees that benefit natural resources industries statewide. Indeed, the opening sentence of SBOE policy III.Z. states "The purpose of this policy is to ensure Idaho's public institutions meet the education and workforce needs of the state through academic planning, alignment of programs and courses, and collaboration and coordination." [emphasis added]

Under "Rationale for Creation or Modification of the Program" on the SBOE's *Proposal for Academic Degree and Certificate* form, which is the form used to submit each of the three proposed A.S. degrees, section 2.b. requires that the institution detail the "Workforce and economic need" for the proposed program. The institution is required to "Provide verification of state workforce needs that will be met by this program" and to "Describe how the proposed program will stimulate the state economy…." Section 2.c. of this form requires the institution to articulate the "societal benefits" that would accrue from offering the proposed program. Hence, the SBOE's own new program submission form implies that workforce development should be a component of any new degree program.

CSI contends that the delivery of the proposed degree programs would be most cost effective through NIC. The UI emphatically disagrees with this position. The UI requires no additional general education funding to deliver the proposed degrees. Establishing a partnership with NIC would very likely require

[2] catalog.uidaho.edu

new general education funding for NIC and/or NIC's reallocation of their current general education funding to support the program. It also severely limits the delivery of the proposed degree programs to one region in the state when the degrees are clearly intended to meet statewide industry needs.

NIC currently does not own, lease, or manage any capital resources that would contribute to the delivery of any of the three proposed A.S. degrees. Examination of course offerings in NIC's 2021-2022 *Catalog*[3] demonstrates that NIC offers no courses in either forest operations and technology or forest nursey management and technology. NIC offers a single apprentice-based course that addresses wildland fire (FST-100 Fire Service Technology). In sum, offering these degrees seems cost prohibitive for NIC, as well as for all other community colleges in the state, and the development of any such program would be duplicative in terms of capital and skill-building experiential resources already in place at the UI.

In addition, the College of Natural Resources incurs substantial annual costs to maintain their capital assets (e.g., UI Experimental Forest, Pitkin Forest Nursery, forest harvesting equipment). These costs are covered by the College through a combination F&A on research grants, income-producing activities (e.g., timber sales, seedling sales), endowments, and annual giving from donors. A joint program with NIC in delivering the proposed degree programs would require that the UI to either [1] significantly subsidize NIC's costs of delivery of a joint program or [2] require the UI to be financially reimbursed by NIC proportional to their use to deliver their component of the joint program. Either option would likely be cost-prohibitive for both institutions and, again, would require duplication of resources which runs counter to the SBOE's efforts to reduce or eliminate duplication of effort as mandated by Idaho Code § 33-113 (Limits of Instruction), which states that "The state board, in the interests of efficiency, shall define the limits of all instruction in the educational institutions supported in whole or in part by the state, and, as far as practicable, prevent wasteful duplication of effort in said institutions." [emphasis added]

Finally, and perhaps most importantly, a joint program in this specific case would not be student-centered. A partnership would result in the needless creation of an additional layers of administrative services to deliver the degree programs. Prospective students would be required to navigate through bureaucratic and duplicative administrative processes (e.g., recruitment, admissions, articulations, financial aid, student support functions) to earn their degree, which would likely negatively impact enrollments in the degrees and, consequently, provide a suboptimal outcome to the citizens of Idaho and the industries that would benefit from the three proposed A.S. degrees.

It should be emphasized that executive leadership at CSI and UI share the same philosophical belief that the best course of action in higher education should focus squarely on what is best for students and citizens throughout the State of Idaho and not on the institutions. At the January 26, 2022, Idaho State Legislature's Joint Finance-Appropriations Committee meeting,[4] CSI President Dean Fisher responded to an enrollment growth question by Senator Crabtree stating that "I think I understand the question … it's just my general philosophical thoughts about how we [CSI] get enrollment successfully accomplished and retained. I think one of the most fundamental things we've done at the College of Southern Idaho is to step back and make sure that any impediment, any barrier, anything that is just part of the bureaucracy that serves us but not the students, is eliminated."[5]

[3] catalog.nic.edu

[4] https://insession.idaho.gov/IIS/2022/Joint%20Finance-Appropriations%20Committee/220126_jfac_0800AM-Meeting.mp4 [at 0:22:20]

[5] https://www.kmvt.com/2022/01/27/csi-emphasizes-growth-during-budget-hearing/

## UNIVERSITY OF IDAHO

### SUBJECT

Online Associate of Science in Wildland Fuel and Fire Technology

### APPLICABLE STATUTE, RULE, OR POLICY

Idaho State Board of Education Governing Policies & Procedures, Sections III.E, III.G., and III.Z.

### BACKGROUND/DISCUSSION

University of Idaho (UI) proposes to create an Associate of Science (A.S.) in Wildland Fuel and Fire Technology. The proposed program is based on stakeholder input and an assessment of workforce needs across the state and region. Currently, UI offers a Bachelor of Science (B.S.) in Fire Ecology and Management that is designed to provide students with a strong foundation in fire ecology, vegetation and fuels management, and wildland fire management. While the B.S. Fire Ecology and Management degree requires extensive training in fire science, the proposed A.S. degree is focused on preparing students for careers in the wildland fire sector and supports the needs of both permanent and seasonal employees employed as wildland firefighters and fire suppression technicians, including vegetation management for fuel reduction and use of prescribed burning.

The UI is uniquely positioned in the state to help meet this demand for a skilled wildland fuel and fire workforce. Our nationally ranked B.S. Fire Ecology and Management degree was the first of its kind in the nation and we have been training fire scientists for more than 40 years. We have extensive expertise with wildland fire and fuels management at the faculty level, and an extensive network of stakeholders at federal and state levels. Our faculty and staff deliver courses to wildland firefighters through online workshops and have developed online content for the National Wildfire Coordinating Group (NWCG), an operational group designed to coordinate fire management programs of eleven participating federal agencies, including training. Our proposed A.S. Wildland Fuels and Fire Technology will build upon existing field-based experience of potential students with more in-depth education focused on developing the technical and leadership skills needed to support the increasing challenges presented by wildfires. We anticipate that students from Idaho's rural communities will be particularly interested in this program, as well as students from other western states (especially California, Oregon, and Washington). Furthermore, because we have designed this A.S. degree to be delivered almost exclusively online, we will be in a position to serve a broad audience of fuels technicians, wildland firefighters, and other individuals effectively and efficiently across the U.S. that are seeking to develop credentials to help advance in their careers. We believe this extended outreach is a critical component of the University of Idaho's land-grant mission.

As this new A.S. builds upon existing course offerings in fire ecology and management and existing content developed and approved by the NWCG, we do

not anticipate additional significant resources will be needed to deliver the program. Rather, we will utilize our expertise with the material and connections with stakeholders to create and effectively deliver content online. We anticipate that our proposed A.S. degree will attract students currently not enrolled at UI or being served by other institutions in the state.

This degree was developed in consultation with the NWCG. The NWCG issues standards that establish practices and requirements that "enable efficient and coordinated national interagency wildland fire operations." Additionally, as the proposed degree focuses on both fuels and wildfire, we have designed the course offerings, content, and student learning outcomes to follow the core competencies suggested for both wildland fuels and wildland fire certification as recommended by the Association for Fire Ecology (AFE); https://fireecology.org/professional-certification). For example, core competencies for wildland fuels technicians include 14 total competencies in the following categories: 1) fuels sampling and monitoring; 2) fuels management fundamentals; 3) fire ecology; 4) fuels program management. This is the same organization that accredits our B.S., Fire Ecology and Management. To fully meet the standards set forth by NWCG and AFE, the proposed A.S., Wildland Fuel and Fire degree must exceed 60 credits. The UI requests that the Board provide an exception to Board Policy III.E., which limits A.S. degrees to 60 credits.

**IMPACT**

We anticipate the proposed degree program supporting positions identified as wildland fuels technicians, wildland fuel specialists, wildland fire planners and analysts, wildland fire ecologists, and wildland fire restoration specialists. Employment in the sector is increasing dramatically as public agencies are working to suppress the increasing prevalence of wildland fires and implementing fuel treatments to reduce fire risk and restoring areas impacted by wildland fire.

As the wildland fire season has lengthened and there are more individuals required in the workforce, NWCG has struggled to meet training demand. The UI partners with NWCG to develop and deliver online coursework. The USDA Forest Service alone employs approximately 10,000 personnel annually in various positions in their wildland fire program, while the U.S. Department of Interior employs 5,000 personnel. A significant number of these positions are managerially oriented and include fuels technicians, fuels specialists, fire planners and analysts, and fire ecologists. Normal rates of employee attrition in these two federal agencies alone would provide ample employment opportunities for students of this proposed A.S. degree program. Factoring the employment needs of many state wildland fire agencies, as well as private consulting companies that are emerging to help combat wildland fire, only increases the demand, opportunities, and need for a well-trained wildland fuel and fire technology workforce.

## ATTACHMENTS

Attachment 1 – A.S., Wildland Fuel and Fire Technology Proposal and Letters of Support

## BOARD STAFF COMMENTS AND RECOMMENDATIONS

Consistent with Board Policy III.G, each full proposal is reviewed by the Council on Academic Affairs and Programs (CAAP) within a 30-day review period and makes recommendations to the Board's Instruction, Research and Student Affairs Committee. This review process provides institutions opportunities to provide feedback based on thoughtful review for quality, demand, centrality to mission, cost effectiveness/resources, and duplication that will inform the Board in its decision-making with regard to new program offerings.

On February 3, 2022, the Board office received three proposals from UI for proposed Associate degrees, one of which was the Wildland Fuel and Fire Technology. This proposal went through the 30-day review with CAAP with the review concluding on March 5, 2022. As a result of this review, the Board office received comments and/or concerns from four institutions regarding the offering of associate degree level programs by the University of Idaho. Specifically, College of Southern Idaho believes that the proposed degrees delve into a community college mission as defined in Idaho statute and in Board Policy. North Idaho College would prefer to collaborate on the offering of the proposed Associate programs. Idaho State University and Boise State University recommend that UI work collaboratively to build these programs with a community college such as North Idaho College.

The program anticipates five initial enrollments and 15-35 enrollments in subsequent years. Estimates were determined by consulting with stakeholders about potential for the proposed degree program. The university contracted with Gray Associates, who has developed a dynamic database for the institution that allows for the calculation of the contribution margin (net revenue less costs) for each academic program. UI indicates that the program will need to have at least 15 students to result in a positive contribution margin. If this number is not reached for three consecutive years, the program will be discontinued.

UI's proposed A.S. in Wildland Fuel and Fire Technology (formerly listed as Wildland Fire Technology and Operations in the Three-Year Plan) is included in their current institution plan for Delivery of Academic Programs in Region II. As provided in the Three-Year Plan, no institution has the statewide program responsibility specifically for Wildland Fuel and Fire Technology at the associate degree level. UI has statewide program responsibility for Bachelor of Science in Forestry and Master of Science, Master of Natural Resources, and Ph.D in Natural Resource concentration, Forestry.

The proposed program will require completion of 81 credits (38 of which are general education), which surpasses the maximum number identified in Board Policy III.E for an associate degree. Specifically, III.E provides that an associate

degree shall not require more than 60 credits unless necessary for matriculation to a specific baccalaureate degree or for unique accreditation, certification, or professional licensure or by exception approved by the Board. Based on the information provided by UI, the program provides that in order to fully meet the NWCG and AFE standards, the proposed degree must exceed 60 credits and has included a request that the Board provide an exception to Board Policy III.E., which limits associate degrees to 60 credits.

Letters of support are provided from:

- USDA, Washington, Heath Cota
- Nez Perce Tribe Forestry and Fire Management Division, Selina Miles
- Riley Stegner and Associates, Jim Riley and Peter Stegner

The proposal completed the program review process and was discussed by the Council on Academic Affairs and Programs on March 31, 2022. The community college representatives of CAAP voted in opposition to a motion to recommend this program for approval. The University of Idaho voted in support. The remaining CAAP representatives abstained. The proposal was discussed by the Instruction, Research, and Student Affairs Committee on April 7, 2022. Given that this proposed program is part of three associate degrees, the first proposed by the university in its history, the Board's Executive Director determined to defer consideration of the proposals to the full Board.

Board Policy does not explicitly prohibit any public postsecondary institution in Idaho from proposing or offering Associate of Arts or Associate of Science degrees. Board Policy III.Z. does prohibit UI and Boise State University (BSU) from offering Associate of Applied Science (AAS) degrees, because such degrees are for Career Technical Education (CTE) programs which are not offered by UI and BSU. Thus, the question of whether UI should offer the proposed AS degrees is not a policy decision, because Board policy is silent on the matter.

BSU does currently offer an AA/AS, which is a legacy holdover from when BSU had an embedded community college mission prior to the creation of the College of Western Idaho. BSU only offers an AA/AS in General Studies to students who have completed 60 credits or more and then stop out, so the student doesn't leave empty-handed. BSU does not offer, and does not intend to offer, AS or AA degrees in any specific subjects or disciplines. They also do not recruit students into the AS/AA General Studies degree program, or encourage students to be part of the program as a normal course of their study.

Board staff finds that UI clearly has the academic capacity and capital resources to deliver the program, and has demonstrated a strong industry demand for the program. The Board will need to weigh concerns voiced by sister institutions, and whether an associate degree is the appropriate credential for the program.

**BOARD ACTION**

I move to approve the request by the University of Idaho to provide an exception to the 60-credit requirement for associate degrees, as provided in Board Policy III.E., in relation to the proposed Associate of Science in Wildland Fuel and Fire Technology as provided in Attachment 1.

Moved by _____ Seconded by _____ Carried Yes _____ No _____

I move to approve the request by University of Idaho to offer an Associate of Science in Wildland Fuel and Fire Technology as provided in Attachment 1.

Moved by _____ Seconded by _____ Carried Yes _____ No _____

Institutional Tracking No. _____

# Idaho State Board of Education

Proposal for Academic Degree and Certificate Program

| | |
|---|---|
| Date of Proposal Submission: | 9/15/2021 |
| Institution Submitting Proposal: | University of Idaho |
| Name of College, School, or Division: | College of Natural Resources |
| Name of Department(s) or Area(s): | Department of Forest, Rangeland and Fire Sciences |

| | | | | |
|---|---|---|---|---|
| Official Name of the Program: | Wildland Fuel and Fire Technology | | | |
| Implementation Date: | 7/1/2022 | | | |
| Degree Information: | Degree Level: Associate | | Degree Type: Associate of Science | |
| CIP code (consult IR /Registrar): | 03.0511 | | | |
| Method of Delivery: Indicate percentage of face-to-face, hybrid, distance delivery, etc. | 100% Face-to-Face | | | |
| Geographical Delivery: | Location(s) | Moscow | Region(s) | |
| Indicate (X) if the program is/has: (Consistent with Board Policy V.R.) | | Self-Support fee | | Professional Fee | | Online Program Fee |
| Indicate (X) if the program is: (Consistent with Board Policy III.Z.) | X | Regional Responsibility | | Statewide Responsibility |

**Indicate whether this request is either of the following:**

- [X] New Degree Program
- [ ] Undergraduate/Graduate Certificates (30 credits or more)
- [ ] Expansion of Existing Program
- [ ] Consolidation of Existing Program
- [ ] New Off-Campus Instructional Program
- [ ] Other (i.e., Contract Program/Collaborative _____)

| | | | |
|---|---|---|---|
| College Dean (Institution) | 1/24/22 Date | Vice President for Research (Institution; as applicable) | Date |
| Graduate Dean or other official (Institution; as applicable) | Date | Academic Affairs Program Manager, OSBE | Date |
| VP/Chief Fiscal Officer (Institution) | 1-25-22 Date | Chief Financial Officer, OSBE | Date |
| Provost/VP for Instruction (Institution) | 1-25-22 Date | Chief Academic Officer, OSBE | Date |
| President | 1-25-22 Date | SBOE/Executive Director Approval | Date |

**Before completing this form, refer to Board Policy Section III.G., Postsecondary Program Approval and Discontinuance**. This proposal form must be completed for the creation of each new program. All questions must be answered.

## Rationale for Creation or Modification of the Program

1. **Describe the request and give an overview of the changes that will result.** What type of substantive change are you requesting? Will this program be related or tied to other programs on campus? Identify any existing program that this program will replace. If this is an Associate degree, please describe transferability.

   *This proposed program (Associate of Science in Wildland Fuel and Fire Technology) is a new program for the Department and College and is not related to any existing degree program at the University of Idaho. The proposed program follows stakeholder input, and an assessment of workforce needs across the state and region. Currently, we offer a B.S. in Fire Ecology and Management that is designed to provide students with a strong background in fire ecology, vegetation and fuels management, and wildland fire management. While the B.S. Fire Ecology and Management degree requires extensive training in fire science, the proposed Associate of Science degree is focused preparing students for careers in the wildland fire sector and supports the needs of both permanent and seasonal employees working as wildland firefighters and fire suppression technicians (including vegetation management for fuel reduction and use of prescribed burning).*

   *The University of Idaho (UI) is uniquely positioned in the state to help meet this demand for a skilled wildland fuel and fire workforce. Our nationally ranked Fire Ecology and Management program was the first of its kind in the nation and we have been training fire scientists for over 40 years. We have extensive expertise with wildland fire and fuels management at the faculty level, and an extensive network of stakeholders at the federal and state level. Our faculty and staff are already delivering courses to wildland firefighters through online workshops and have developed online content for the National Wildfire Coordinating Group (NWCG), an operational group designed to coordinate fire management programs of participating federal agencies, including training. Our proposed Associate of Science in Wildland Fuels and Fire Technology will build upon existing field-based experience of potential students with more in-depth education focused on developing the technical and leadership skills needed to support the increasing challenges presented by wildfires. We anticipate that students from Idaho's rural communities will be interested in this program, as well as students from other western states (especially California, Oregon, and Washington). Additionally, because we have designed the Associate of Science degree to be delivered almost entirely online (with key in-person and field-based learning opportunities delivered at the University of Idaho in Moscow), we will be in a position to effectively and efficiently serve a broad audience of wildland firefighters, fuels technicians, and other individuals across the U.S. and beyond that are looking to develop credentials to help advance in their careers. We believe this is a critical part of the University of Idaho's land-grant mission.*

   *As this new Associate of Science builds upon existing course offerings in fire ecology and management and existing content developed and approved by the NWCG, we do not anticipate significant resources are needed to develop and deliver the program. Rather, we will utilize our expertise with the material and connections with stakeholders to create and effectively deliver content online. We anticipate that our proposed Associate of Science degree will attract students currently not enrolled at UI or being served by other institutions in the state.*

2. **Need for the Program**. Describe evidence of the student, regional, and statewide needs that will be addressed by this proposal to include student clientele to be served and address the ways in which the proposed program will meet those needs.

   a. **Workforce and economic need:** Provide verification of state workforce needs that will be met by this program. Include job titles and cite the data source. Describe how the proposed program will stimulate the state economy by advancing the field, providing research results, etc.

   *We anticipate the proposed degree program supporting positions identified as wildland fuels technicians, wildland fuel specialists, wildland fire planners and analysts, wildland fire ecologists, and wildland fire restoration specialists. Employment in the sector is increasing dramatically as public agencies are working to suppress increasing wildland fires and implementing fuel treatments to reduce fire risk and restoring areas impacted by wildland fire. Historically, many of these positions have been seasonal and have not required education beyond a high school diploma – most training has occurred at the agency through professional development courses managed and certified by the National Wildfire Coordinating Group (NWCG) (1). For many employed by federal agencies, the lack of a higher education degree and coursework has limited their potential to advance in their careers.*

   *As the wildland fire season has lengthened and there are more individuals needed in the workforce, NWCG has struggled to meet training demand. The University of Idaho has already partnered with NWCG to develop and deliver online coursework. For example, in 2020 the Department of Forest, Rangeland and Fire Sciences developed online course modules for NWCG's RX-310 course (*Introduction to Fire Effects*) and delivered this material online to over 150 wildland fire personnel employed by state and non-profit fire management organizations. This demand for the material and revenue generated through the $300 online workshop fee demonstrated a clear need by the industry and a revenue model to support the development of new online NWCG content. We are currently working with NWCG to development online modules for other online courses that will support NWCG as well as the new degree program (1).*

   *The U.S.D.A. Forest Service alone employs approximately 10,000 personnel annually in various positions in the wildland fire program (2), while the U.S. Department of Interior employs 5,000 personnel (3). A significant number of these positions are managerially oriented and include fuels technicians, fuels specialists, fire planners and analysts, and fire ecologists. Normal rates of employee attrition in these two federal agencies alone would provide ample employment opportunities for students of this proposed degree program. Factoring the employment needs of many state wildland fire agencies, as well as private consulting companies that are emerging to help combat wildland fire (especially in California), only increases the demand, opportunities, and need for a well-trained Wildland Fuel and Fire Technology workforce (4).*

   *Recent directives at the federal level also point to a strong demand for graduates of the proposed program. For example, demand for trained wildfire specialists is so great that it was recognized at the highest level of government when on June 30, 2021, President Biden announced several initiatives to attract and maintain wildland fire professionals – including increases hourly pay, providing bonuses, and recalibrating the Government Service (GS) pay scale upward for wildland fire professionals.*

   *Based upon this demand and support for our proposed program, we anticipate that this new degree will help develop the workforce needed to support the wildland fuels and fire*

*industry. Additionally, our emphasis on both wildland fire and vegetation (fuels) management has potential to create the next generation of wildland fuel specialists nationally that support the extensive reforestation efforts needed across the western U.S. to reduce wildfire risk.*

*References*

*(1) National Wildlife Coordinating Group (NWCG) Training Catalog. https://www.nwcg.gov/publications/training-courses*
*(2) U.S.D.A. Forest Service, Careers in Wildland Fire. https://www.fs.usda.gov/working-with-us/jobs/fire*
*(3) U.S. Department of Interior, Office of Wildland Fire, Workforce https://www.doi.gov/wildlandfire/workforce*
*(4) Private fire crews in wine country raise concerns over equity and safety. Los Angeles Times, October 10, 2020. https://www.latimes.com/california/story/2020-10-09/questions-about-private-fire-crews-in-wine-country-inspire-concerns-over-equity-safety*

**b. Student demand.** What is the most likely source of students who will be expected to enroll (full-time, part-time, outreach, etc.). Provide evidence of student demand/ interest from inside and outside of the institution.

*We anticipate that the majority of students will enroll as full-time students. As we have designed this curriculum specifically for preparing students for the workforce,, it is not intended to compete for students with the current B.S. Fire Ecology and Management degree offered by the University of Idaho. We anticipate that this degree program will draw from a national market. The College of Natural Resources is the recognized leader in the U.S. in wildland fire science and management education, the program having been in existence for more than forty years. A very large number of individuals currently employed across the U.S. in the wildland fire field lack the educational credentials to move up the career ladder.*

*This proposed degree programs will likely experience strong national demand due to the fact that it will be (1) offered predominantly online with over 90 percent online content, (2) provides a credentialing pathway for upward career mobility, and (3) very affordable.*

**c. Societal Need**: Describe additional societal benefits and cultural benefits of the program.

*Wildfires continue to significantly impact the U.S., a trend that is predicted to continue into the future. In 2020, the National Interagency Fire Center (NIFC) reported over 10 million acres of forests and rangelands burned from over 58,950 reported fires, with 38% of this acreage burning California alone. Nationally, the impact of these wildfires was extensive –17,904 structures were destroyed in 2020 and over 30,000 firefighters deployed in fire suppression efforts, costing an estimated $2.3 billion of federal funds. Although these statistics were almost double in 2020 than 2019, the 5-year and 10-year trends suggest that the wildfire issue is likely to continue to worsen as the wildfire season increases due to prolonged drought and warming temperatures in the western U.S. Corresponding to the increase in wildfire activity, requests for firefighting resources in 2020 were near or above the 10-year average.*

*Although the 2021 fire season is not complete, NIFC reports similar trends with over 5.7 million acres burned as of September 15, 2021 and almost 17,000 personnel assigned to fight wildfires. As a result, many wildfire managers are suggesting a shift from seasonal*

*to full-time firefighting crews that would focus not only of wildland fire suppression, but also fuels management. In June 2021, U.S. Forest Service (USFS) Deputy Chief Christopher French testified to the U.S. Senate Committee on Energy and Natural Resources that the USFS conducts fuel treatments designed to reduce wildfire impacts on only about 3 million acres annually, and that 3-4 times that amount is necessary to make progress in helping to reduce the impact of wildfires on the 193 million acres the USFS manages. This impact is only compounded when other private, state, and other federal lands are considered, especially in many areas of the western U.S. with the expansion of homes and other structures into the wildland-urban interface.*

*The new Associate of Science will help train this next generation of wildland firefighters and vegetation managers by providing them with a specific skillset that integrates fuels management and wildland fire technology skills. Once trained, we anticipate these individuals will support communities across Idaho and beyond facing challenges related wildland fuels and fire.*

**3. Program Prioritization**

Is the proposed new program a result of program prioritization?

Yes_____ No__*X*___

If yes, how does the proposed program fit within the recommended actions of the most recent program prioritization findings.

**4. Credit for Prior Learning**

Indicate from the various cross walks where credit for prior learning will be available. If no PLA has been identified for this program, enter 'Not Applicable'.

*Not Applicable*

**5. Affordability Opportunities**

Describe any program-specific steps taken to maximize affordability, such as: textbook options (e.g., Open Educational Resources), online delivery methods, reduced fees, compressed course scheduling, etc. This question applies to certificates, undergraduate, graduate programs alike.

*A variety of aspects of the new degree have been designed to help maximize affordability for students. First, by utilizing existing course content developed and approved by the National Wildfire Coordinating Group (NWCG) as the foundation of the new program, we are building upon existing resources. There is no need for us to develop and duplicate much of the course content to deliver the program. As much of the specific coursework is online, we do not anticipate excessive cost associated with course materials (e.g., textbooks, lab manuals, student fees). Second, by utilizing the extensive knowledge of our faculty to help deliver course content in an online environment, as well as industry knowledge from our important industry stakeholders, we can help keep instructional costs down. Furthermore, the program is designed such that is builds upon some existing coursework already being offered at the University of Idaho, and for the two hands-on, in-person courses we will utilize the University of Idaho Experimental Forest. Third, by integrating courses to explore various careers in wildland fire and fuels management and work experience through internships, we have established a framework to help students develop skills and relationships with potential employers following graduation. Finally, building off of our strong industry support, we will work with our industry stakeholders and CNR Advancement team to develop scholarship monies specifically for students enrolled in the new degree program.*

## Enrollments and Graduates

6. **Existing similar programs at Idaho Public Institutions.** Using the chart below, provide enrollments and numbers of graduates for similar existing programs at your institution and other Idaho public institutions for the most past four years.

   *No similar degree program exists among the public higher education institutions in Idaho.*

   *Idaho State University offers both A.S. and B.S. degrees in Fire Services Administration that "prepares fire professionals with the management and administrative knowledge and skills necessary to advance their career and serve as leaders and officers in a fire department." There is no specific focus on wildland fire management within the Fire Services Administration degree program, nor does the program deliver any wildland fire or fuels management coursework per information contained in their degree maps and general catalog course listings. The program appears to be focused on structure, municipal, and community fire administration and management. Idaho State University does not publicly provide graduation statistics by major.*

   *The College of Western Idaho (CWI) currently offers an A.A. and two certificates in Fire Service Technology. Similar to Idaho State University, CWI's program does not address wildland fuels management of wildland fire per information contained in their degree maps and general catalog course listings. The program appears to be focused on structure, municipal, and community fire management. CWI does not publicly provide graduation statistics by major.*

7. **Justification for Duplication** (if applicable). If the proposed program is similar to another program offered by an Idaho public higher education institution, provide a rationale as to why any resulting duplication is a net benefit to the state and its citizens. Describe why it is not feasible for existing programs at other institutions to fulfill the need for the proposed program.

   *No similar degree program exists among the public higher education institutions in Idaho.*

8. **Projections for proposed program:** Using the chart below, provide projected enrollments and number of graduates for the proposed program:

| **Proposed Program: Projected Enrollments and Graduates First Five Years** | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Program Name: A.A.S., Forest Nursery Management and Technology** | | | | | | | | | | | |
| **Projected Fall Term Headcount Enrollment in Program** | | | | | | **Projected Annual Number of Graduates From Program** | | | | | |
| FY22 (first year) | FY23 | FY24 | FY25 | FY26 | | FY22 (first year) | FY23 | FY24 | FY25 | FY26 | |
| 5 | 15 | 25 | 35 | 35 | | 0 | 5 | 15 | 25 | 35 | |

9. **Describe the methodology for determining enrollment and graduation projections.** Refer to information provided in Question #2 "Need for the Program" above. What is the

capacity for the program? Describe your recruitment efforts? How did you determine the projected numbers above?

*Two factors were used to estimate demand for this proposed degree program. The first involved canvassing stakeholders about the potential of such a degree program to place students within the forest nursery industry. While this process did not provide a specific estimate of demand, it did provide an estimate of student placement upon graduation, and student placement is a considerable driver of demand for associate degrees with a workforce development goal. The second factor used is past recruitment efforts in the College of Natural Resources and record of success recruiting students in our degree programs.*

*To estimate the number of students that would be enrolled in the proposed degree program, we examined the enrollment at the few institutions that offer a somewhat similar degree; namely, Allan Hancock College (Santa Maria, California), Eastern New Mexico University (Ruidoso, New Mexico), and Treasure Valley Community College (Ontario, Oregon). Given the enrollments at these three institutions, we believe that we are conservative in our enrollment estimate*

*From a student recruitment perspective, the College of Natural Resources recruits nationally – about one-half of the college's undergraduate students are nonresidents. The college employs a strategic enrollment plan that segments and targets defined populations for each of its degree programs. To recruit for this proposed degree program, the college will target a national market. Students expressing interest in the program will be directly contacted by a recruiter and faculty (i.e., one-on-one recruitment interaction).*

**10. Minimum Enrollments and Graduates.**

a. What are the minimums that the program will need to meet in order to be continued, and what is the logical basis for those minimums?

*The University of Idaho has contracted with Gray Associates, a company that has developed a dynamic database for the institution (Program Economics Platform), which allows for the calculation of the contribution margin (net revenue less costs) for each academic program. This proposed academic program will be discontinued if it experiences three consecutive years of negative contribution margin.*

*It is difficult to pinpoint an exact minimum enrollment that justifies continuance of the proposed academic program since delivery is contingent on cost structure, which can change year-to-year based on numerous variables. For example, the cost to deliver a course can differ substantially based on the faculty member teaching the course. A course taught by a full professor, with high salary and benefit costs, would be more costly to deliver relative to a newly hired assistant professor teaching the same course. Given the current cost structure in the department delivering the proposed academic program, it is believed that at least 15 students are necessary to result in a positive contribution margin.*

b. If those minimums are not met, what is the sunset clause by which the program will be considered for discontinuance?

*The sunset clause by which this degree will be considered for discontinuance is if the program fails to generate a positive contribution margin for three consecutive years.*

**11. Assurance of Quality.** Describe how the institution will ensure the quality of the program. Describe the institutional process of program review. Where appropriate, describe applicable specialized accreditation and explain why you do or do not plan to seek accreditation.

*Like all other academic programs at the University of Idaho, the proposed program will be required to perform an annual Academic Program Review (APR), which is a self-study quality assessment process required by the Idaho State Board of Education and the institution's accreditor, the Northwest Commission on Colleges and Universities (NWCCU). The APR process requires an examination of linked coursework to determine if student the stated learning outcomes for the academic program are being achieved and how well they are being achieved. The APR process also requires that academic programs annually assess student achievement, program demand and productivity, financial health, and resource use.*

*As the focus of the degree is workforce development, we will share assessment findings with the National Wildfire Coordinating Group (NWCG), an operational group designed to coordinate fire management programs of participating federal agencies, including training. Feedback from the NWCG will be collected on the program and graduates and shared with Department faculty to help improve of the program as needed.*

**12. In accordance with Board Policy III.G., an external peer review is required for any new doctoral program.** Attach the peer review report as **Appendix A**.

*Not applicable to this degree.*

**13. Teacher Education/Certification Programs** All Educator Preparation programs that lead to certification require review and recommendation from the Professional Standards Commission (PSC) prior to consideration and approval of the program by the State Board of Education.

Will this program lead to certification?

Yes_____ No__*X*___

If yes, on what date was the Program Approval for Certification Request submitted to the Professional Standards Commission?

**14. Three-Year Plan: If this is a new proposed program, is it on your institution's approved 3-year plan?**

Yes *X* No _____

If yes, proceed to question 15. If no:

**a. Which of the following statements address the reason for adding this program outside of the regular three-year planning process.**

Indicate (X) by each applicable statement:

| | |
|---|---|
| | Program is important for meeting your institution's regional or statewide program responsibilities. |
| | The program is in response to a specific industry need or workforce opportunity. |
| | The program is reliant on external funding (grants, donations) with a deadline for acceptance of funding. |
| | There is a contractual obligation or partnership opportunity related to this program. |
| | The program is in response to accreditation requirements or recommendations. |

| | |
|---|---|
| | The program is in response to recent changes to teacher certification/endorsement requirements. |

**b. Provide an explanation for all statements you selected.**

## Educational Offerings: Curriculum, Intended Learning Outcomes, and Assessment Plan

**15. Curriculum. Provide descriptive information of the educational offering.**

**a. Summary of requirements.** Provide a summary of program requirements using the following table.

| | |
|---|---|
| Credit hours in required courses offered by the department (s) offering the program. | 43 |
| Credit hours in required courses offered by other departments: | 0 |
| Credit hours in institutional general education curriculum | 38 |
| Credit hours in free electives | 0 |
| Total credit hours required for degree program: | 61 |

**b. Curriculum.** Provide the curriculum for the program, including credits to completion, courses by title and assigned academic credit granted.

*Required course work includes:*

| | | |
|---|---|---|
| *COMM 101* | *Fundamentals of Oral Communication* | *3* |
| *ENGL 101* | *Writing and Rhetoric I* | *3* |
| *ENGL 102* | *Writing and Rhetoric II* | *3* |
| *FOR 102* | *Introduction to Forest Management* | *2* |
| *FOR 103* | *Introduction to Computer Applications in Natural Resources* | *1* |
| *FOR 111* | *Saws & Pumps* | *1* |
| *FOR 145* | *Careers in Fire and Fuels* | *2* |
| *FOR 202* | *Leadership and Decision-Making in Fire Management* | *3* |
| *FOR 213* | *Vegetation Management* | *3* |
| *FOR 226* | *Wildland-Urban Interface Assessment & Communication* | *3* |
| *FOR 253* | *Introduction to Fuels Inventory and Sampling* | *2* |
| *FOR 254* | *Fire Environment* | *3* |

| | | |
|---|---|---|
| *FOR 256* | *Science Synthesis in Fire Ecology and Management* | *1* |
| *FOR 261* | *Fire Technology* | *3* |
| *FOR 284* | *Fire Policy and Administration* | *3* |
| *FOR 290* | *Medical Response and Stress Management in Natural Resources* | *3* |
| *FOR 321* | *Cultural Use of Fire* | *3* |
| *FOR 323* | *Communication and Facilitative Instruction in Fire Management* | *2* |
| *MATH 123 or MATH 143* | *Math in Modern Society or College Algebra* | *3* |
| *PHIL 201* | *Critical Thinking* | *3* |
| *REM 142* | *Introduction to Wildland Fire Management* | *2* |
| *REM 151* | *Rangeland Principles* | *3* |
| *REM 210* | *Introduction to Fire Effects and Management* | *2* |
| *REM 298* | *Wildland Fuels and Fire Internship* | *2* |
| *SOC 101* | *Introduction to Sociology* | *3* |
| *Select 20 credits of General Education electives* | | *20* |
| | *Total credits for degree:* | *81* |

**c. Additional requirements.** Describe additional requirements such as comprehensive examination, senior thesis or other capstone experience, practicum, or internship, some of which may carry credit hours included in the list above.

*The proposed degree program requires the completion of an internship (REM 298 – Wildland Fuels and Fire Internship).*

**16. Learning Outcomes: Expected Student Learning Outcomes and Connection to Curriculum.**

**a. Intended Learning Outcomes.** List the Intended Learning Outcomes for the proposed program, using learner-centered statements that indicate what students will know, understand, and be able to do, and value or appreciate as a result of completing the program.

*After completing the* Associate of Science in Wildland Fuels and Fire Technology*, students will:*

1. *Identify the primary factors associated with the start, spread, and management of wildfires and prescribed fires in forests and rangelands.*
2. *Demonstrate the proper application of fuel measurement techniques and be able complete fuel assessments in forest, rangelands, and the wildland-urban interface.*
3. *Demonstrate the proper use of fire equipment and fire suppression and prescribed fire techniques.*

4. *Effectively synthesize and communicate fire and fuels management information to the public.*
5. *Demonstrate an ability to measure fire effects.*
6. *Demonstrate ability to assume leadership roles in fire and fuels management.*
7. *Identify cultural uses, programmatic structures, policies, and administration in fuels and fire management.*

**17. Assessment plans.**

**a. Assessment Process.** Describe the assessment plan for student learning outcomes that will be used to evaluate student achievement and how the results will be used to improve the program.

*Assessment will be measured directly through student performance on specific projects and exams associated with required coursework. For example, proficiency with field-based skills will be assessed using lab exercises associated with FOR 111 Saws and Pumps. Additionally, a new field-based capstone course FOR 213 Vegetation Management will be used to assess how well students can apply wildland fuel and fire techniques to manage vegetation in a real-world setting. In addition to these direct assessment metrics, we will conduct an exit survey with all graduates of the A.A.S. as part of FOR 323 Communication and Facilitative Instruction in Fire Management. The survey will provide an opportunity for students enrolled in the program to assess how well they believe the program has prepared them for a career in the wildland fuel and fire technology and related fields.*

*Direct assessment measures include:*

1. ***Identify the primary factors associated with the start, spread, and management of wildfires and prescribed fires in forests and rangelands*** *– exercises and exams associated with and FOR 254 Fire Environment.*
2. ***Demonstrate the proper application of fuel measurement techniques and be able complete fuel assessments in forest, rangelands, and the wildland-urban interface*** *– exercises and exams FOR 251 Introduction to Fuels Inventory and Sampling and final project associated with FOR 226 Wildland-Urban Interface Assessment and Communication.*
3. ***Demonstrate the proper use of fire equipment and fire suppression and prescribed fire techniques –*** *field-based exercises and exam associated with FOR 111 Saws and Pumps and projects associated with FOR 444 Prescribed burning for Ecologically Based Fire Management.*
4. ***Effectively synthesize and communicate fire and fuels management information to the public*** *– final project associated with FOR 323 Communication and Facilitative Instruction in Fire Management.*
5. ***Demonstrate an ability to measure fire effects*** *– final project associated with FOR 210 Introduction to Fire Effects and Management.*
6. ***Demonstrate ability to assume leadership roles in fire and fuels management*** *– Exercises and final project in FOR 206 Leadership and Decision-Making in Fire Management, and final project in capstone course FOR 213 Vegetation Management.*
7. ***Identify cultural uses, programmatic structures, policies, and administration in fuels and fire management*** *– final project associated with FOR 321 Cultural Use of Fire and application of relevant information into final project associated with capstone course FOR 213 Vegetation Management.*

*Indirect measures include:*

1) *Exit survey of graduates as part of course FOR 323 Communication and Facilitative Instruction in Fire Management.*

*Assessment activities will occur annually, associated with each class when scheduled in either the fall or spring semesters. The graduating student surveys will be completed each spring at the end of FOR 323 Communication and Facilitative Instruction in Fire Management.*

**Resources Required for Implementation – fiscal impact and budget.**
Organizational arrangements required within the institution to accommodate the change including administrative, staff, and faculty hires, facilities, student services, library; etc.

18. **Physical Facilities and Equipment:** Describe the provision for physical facilities and equipment.

a. **Existing resources**. Describe equipment, space, laboratory instruments, computer(s), or other physical equipment presently available to support the successful implementation of the program.

*As over 90% of the degree is to be delivered online, there is little need for physical resources to support the new program. We will utilize existing University of Idaho infrastructure and software to develop and deliver the online course content. For the two in-person and hands-on courses, we will utilize the College of Natural Resources physical facilities and equipment to deliver the program. Specifically, we will utilize the University of Idaho Experimental Forest (UIEF) to deliver FOR 111 and FOR 211. The UIEF includes over 10,000+ acres of working forest and newly renovated classroom space that will allow students to focus on hands-on learning.*

b. **Impact of new program**. What will be the impact on existing programs of increased use of physical resources by the proposed program? How will the increased use be accommodated?

*We anticipate minimal impact of the new program on the College of Natural Resources' physical facilities. There will be increased student activity at the University of Idaho Experimental Forest (UIEF) associated with the two new in-person courses, however, the capacity of the forest and existing classroom space are more than sufficient to meet projected student demands.*

c. **Needed resources.** List equipment, space, laboratory instruments, etc., that must be obtained to support the proposed program. Enter the costs of those physical resources into the budget sheet.

*No specific renovation to existing space is needed to deliver the program. We do anticipate the need for new equipment to deliver the program, including a cache of chainsaws and supporting safety and maintenance equipment for student use. We estimate an initial cost of $10,000, followed by $10,000 annually to replace and repair equipment. These costs will be covered in part by student fees in several courses (FOR 111, FOR 213), as well as by the College of Natural Resources.*

**19. Library and Information Resources:** Describe adequacy and availability of library and information resources.

**a. Existing resources and impact of new program**. Evaluate library resources, including personnel and space. Are they adequate for the operation of the present program? Will there be an impact on existing programs of increased library usage caused by the proposed program? For off-campus programs, clearly indicate how the library resources are to be provided.

*We do not anticipate the program placing and significant demands on the UI Library and other informational resources.*

**b. Needed resources**. What new library resources will be required to ensure successful implementation of the program? Enter the costs of those library resources into the budget sheet.

*No new library resources are needed for the successful implementation of the program.*

**20. Faculty/Personnel resources**

**a. Needed resources.** Give an overview of the personnel resources that will be needed to implement the program. How many additional sections of existing courses will be needed? Referring to the list of new courses to be created, what instructional capacity will be needed to offer the necessary number of sections?

*We anticipate that the program will require additional instructional capacity beyond current tenure-track faculty to deliver the proposed curriculum. While existing Department faculty are already delivering FOR 102, FOR 444, and REM 151 (total 7 CH), we have the capacity to deliver the following new courses: FOR 103, FOR 145, FOR 253, REM 142, REM 210 and REM 298 (total 11 CH).*

*We anticipate additional instructors will be required to deliver the following new courses: FOR 111, FOR 202, FOR 213, FOR 226, FOR 254, FOR 256, FOR 261, FOR 284, FOR 290, FOR 321, FOR 323, and REM 210 (total 28 CH). We anticipate using wildland fire professional staff to meet these instructional needs, specifically staff with expertise in NWCG course content. In terms of existing courses, our anticipated enrollments will increase enrollment in these courses, however, our review of past course offerings suggest there is capacity to meet any increased demand for seats in these courses from students enrolled in the new program.*

**b. Existing resources**. Describe the existing instructional, support, and administrative resources that can be brought to bear to support the successful implementation of the program.

*Existing Department faculty have the instructional capacity to deliver existing courses to be included in the proposed degree, including FOR 102, FOR 444, and REM 151 (total 7 CH). Additionally, we feel confident that we have the capacity to deliver the following new courses: FOR 103, FOR 145, GOR 253, REM 142, REM 210 and REM 298 (total 11 CH). Additionally, the Department has the administrative and support capacity to effectively manage the program, including program assessment.*

*The College of Natural Resources will also support the program primarily in terms of student recruitment and marketing through the College's Director of Student Recruitment and Stakeholder Engagement. Student academic advising will be*

*provided through the professional advisors in the College, while career advising will occur across the new curriculum by Department faculty.*

**c. Impact on existing programs**. What will be the impact on existing programs of increased use of existing personnel resources by the proposed program? How will quality and productivity of existing programs be maintained?

*We anticipate little impact on existing programs in the Department and College. Additionally, we anticipate using some online course content as part of professional development workshops, helping us to meet the land-grant mission of the University of Idaho.*

**d. Needed resources.** List the new personnel that must be hired to support the proposed program. Enter the costs of those personnel resources into the budget sheet.

*We anticipate needing part-time instructors to teach the following courses:*

*FOR 111 Saws & Pumps (1 CH)*

*FOR 202 Leadership and Decision-Making in Fire Management (3 CH)*

*FOR 213 Vegetation Management (3 CH)*

*FOR 226 Wildland-Urban Interface Assessment & Communication (3 CH)*

*FOR 254 Fire Environment (3 CH)*

*FOR 256 Science Synthesis in Fire Ecology and Management (1 CH)*

*FOR 261 Fire Technology (3 CH)*

*FOR 284 Fire Policy and Administration (3 CH)*

*FOR 290 Medical Response and Stress Management in Natural Resources (3 CH)*

*FOR 321 Cultural Use of Fire (3 CH)*

*FOR 323 Communication and Facilitative Instruction in Fire Management (2 CH)*

*We anticipate existing Department faculty will develop and teach some of these new online courses. For others, we will utilize professional wildland fire staff to meet these instructional needs, specifically part-time staff that have the expertise in areas of focus and experience with existing NWCG courses. Following Department of Forest, Rangeland and Fire Sciences guidelines for temporary online instructors ($1,000 per CH), we estimate the costs of delivering these new courses (28 total credits) will be $28,000 annually.*

**21. Revenue Sources**

a) **Reallocation of funds:** If funding is to come from the reallocation of existing state appropriated funds, please indicate the sources of the reallocation. What impact will the reallocation of funds in support of the program have on other programs?

*We do not anticipate a significant reallocation of funds to support the program. Funding for the increased instructional costs associated with hiring part-time instructors will come from existing non-state appropriated funds to the Department from the College of Natural Resources.*

b) **New appropriation**. If an above Maintenance of Current Operations (MCO) appropriation is required to fund the program, indicate when the institution plans to include the program in the legislative budget request.

*No new appropriation of funds is requested to support the program.*

c) **Non-ongoing sources**:

i. If the funding is to come from one-time sources such as a donation, indicate the sources of other funding. What are the institution's plans for sustaining the program when that funding ends?

*No one-time funding sources are anticipated.*

ii. Describe the federal grant, other grant(s), special fee arrangements, or contract(s) that will be valid to fund the program. What does the institution propose to do with the program upon termination of those funds?

*No grants, special fees, or contracts are being proposed to fund the program.*

d) **Student Fees**:

i. If the proposed program is intended to levy any institutional local fees, explain how doing so meets the requirements of Board Policy V.R., 3.b.

*No institutional local fees are requested.*

ii. Provide estimated cost to students and total revenue for self-support programs and for professional fees and other fees anticipated to be requested under Board Policy V.R., if applicable.

*We anticipate course fees associated with the following courses:*

*FOR 111: $200 per student to cover chainsaw costs and chainsaw safety equipment required for the course.*

*FOR 213: $100 per student to cover chainsaw costs and chainsaw safety equipment required for the course.*

**22.** Using the excel budget template provided by the Office of the State Board of Education, provide the following information:

- Indicate all resources needed including the planned FTE enrollment, projected revenues, and estimated expenditures for the first **four** fiscal years of the program.
- Include reallocation of existing personnel and resources and anticipated or requested new resources.
- Second and third year estimates should be in constant dollars.
- Amounts should reconcile subsequent pages where budget explanations are provided.
- If the program is contract related, explain the fiscal sources and the year-to-year commitment from the contracting agency(ies) or party(ies).
- Provide an explanation of the fiscal impact of any proposed discontinuance to include

impacts to faculty (i.e., salary savings, re-assignments).

**Program Resource Requirements.**

- Indicate all resources needed including the planned FTE enrollment, projected revenues, and estimated expenditures for the first **four** fiscal years of the
- Include reallocation of existing personnel and resources and anticipated or requested new resources.
- Second and third year estimates should be in constant dollars.
- Amounts should reconcile subsequent pages where budget explanations are provided.
- If the program is contract related, explain the fiscal sources and the year-to-year commitment from the contracting agency(ies) or party(ies).
- Provide an explanation of the fiscal impact of any proposed discontinuance to include impacts to faculty (i.e., salary savings, re-assignments).

**I. PLANNED STUDENT ENROLLMENT**

| | FY 22 | | FY 23 | | FY 24 | | FY 25 | |
|---|---|---|---|---|---|---|---|---|
| | FTE | Headcount | FTE | Headcount | FTE | Headcount | FTE | Headcount |
| A. New enrollments | 5 | 5 | 15 | 15 | 25 | 25 | 35 | 35 |
| B. Shifting enrollments | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ***Total Enrollment*** | 5 | 5 | 15 | 15 | 25 | 25 | 35 | 35 |

**II. REVENUE**

| | FY 22 | | FY 23 | | FY 24 | | FY 25 | |
|---|---|---|---|---|---|---|---|---|
| | On-going | One-time | On-going | One-time | On-going | One-time | On-going | One-time |
| 1. New Appropriated Funding Request | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 2. Institution Funds | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 3. Federal | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 4. New Tuition Revenues from Increased Enrollments | $30,909.00 | $0.00 | $92,727.00 | $0.00 | $154,545.00 | $0.00 | $216,363.00 | $0.00 |
| 5. Student Fees | $12,111.00 | $0.00 | $36,333.00 | $0.00 | $60,555.00 | $0.00 | $84,777.00 | $0.00 |
| 6. Other (i.e., Gifts) | $5,000.00 | $0.00 | $10,000.00 | $0.00 | $15,000.00 | $0.00 | $15,000.00 | $0.00 |
| ***Total Revenue*** | $48,020 | $0 | $139,060 | $0 | $230,100 | $0 | $316,140 | $0 |

***Ongoing is defined as ongoing operating budget for the program which will become part of the base.***
***One-time is defined as one-time funding in a fiscal year and not part of the base.***

Draft-November 6, 2015
Page 1

**III. EXPENDITURES**

| | FY 22 | | FY 23 | | FY 24 | | FY 25 | |
|---|---|---|---|---|---|---|---|---|
| | On-going | One-time | On-going | One-time | On-going | One-time | On-going | One-time |
| ***A. Personnel Costs*** | | | | | | | | |
| 1. FTE | 1.2 | 0.00 | 1.2 | 0.00 | 1.2 | 0.00 | 1.2 | 0.00 |
| 2. Faculty | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 3. Adjunct Faculty | $ 28,000.00 | $0.00 | $28,000.00 | $0.00 | $ 28,000.00 | $0.00 | $ 28,000.00 | $0.00 |
| 4. Graduate/Undergrad Assistants | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 5. Research Personnel | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 6. Directors/Administrators | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 7. Administrative Support Personnel | $ 900.00 | $0.00 | $ 2,700.00 | $0.00 | $ 4,500.00 | $0.00 | $ 6,300.00 | $0.00 |
| 8. Fringe Benefits | $ 367.20 | $0.00 | $ 1,101.60 | $0.00 | $ 1,836.00 | $0.00 | $ 2,570.40 | $0.00 |
| 9. Other: | | | | | | | | |
| ***Total Personnel and Costs*** | $29,267 | $0 | $31,802 | $0 | $34,336 | $0 | $36,870 | $0 |

| | FY 22 | | FY 23 | | FY 24 | | FY 25 | |
|---|---|---|---|---|---|---|---|---|
| | On-going | One-time | On-going | One-time | On-going | One-time | On-going | One-time |
| ***B. Operating Expenditures*** | | | | | | | | |
| 1. Travel | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 2. Professional Services | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 3. Other Services | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 4. Communications | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 5. Materials and Supplies | $125.00 | $0.00 | $250.00 | $0.00 | $375.00 | $0.00 | $375.00 | $0.00 |
| 6. Rentals | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 7. Materials & Goods for Manufacture & Resale | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 8. Miscellaneous | $1,500.00 | $0.00 | $1,500.00 | $0.00 | $1,500.00 | $0.00 | $1,500.00 | $0.00 |
| ***Total Operating Expenditures*** | $1,625 | $0 | $1,750 | $0 | $1,875 | $0 | $1,875 | $0 |

| | FY 22 | | FY 23 | | FY 24 | | FY 25 | |
|---|---|---|---|---|---|---|---|---|
| | On-going | One-time | On-going | One-time | On-going | One-time | On-going | One-time |
| ***C. Capital Outlay*** | | | | | | | | |
| 1. Library Resources | $0.00 | $0.00 | 0 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| 2. Equipment | $10,000.00 | $0.00 | $10,000.00 | $0.00 | $10,000.00 | $0.00 | $10,000.00 | $0.00 |
| ***Total Capital Outlay*** | $10,000 | $0 | $10,000 | $0 | $10,000 | $0 | $10,000 | $0 |

| | FY 22 | | FY 23 | | FY 24 | | FY 25 | |
|---|---|---|---|---|---|---|---|---|
| ***D. Capital Facilities Construction or Major Renovation*** | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |

Draft-November 6, 2015
Page 3

***E. Other Costs***

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Utilites | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| Maintenance & Repairs | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| Other _____ | | | | | | | | |
| ***Total Other Costs*** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| ***TOTAL EXPENDITURES:*** | $40,892 | $0 | $43,552 | $0 | $46,211 | $0 | $48,745 | $0 |
| ***Net Income (Deficit)*** | $7,128 | $0 | $95,508 | $0 | $183,889 | $0 | $267,395 | $0 |

Budget Notes (specify row and add explanation where needed; e.g., "I.A.,B. FTE is calculated using…"):

| | |
|---|---|
| I.A. | Conservative estimate of new studnets enrolling in program |
| II.4 | Conservative tuition estimate $6181.80 per student based upon all resident enrollment; CNR has high non-resident enrollment |
| II.5 | Fee estimates inlcude $2122.20 for University fees per student; $300 additional course fees per student |
| II.6 | Estimate of new scholarships via CNR Advancement office |
| III.A.1 | Conservative estimate of instructional needs; 28 CH total (Full-time FTE 24 CH) plus time for preparation and student advising |
| III.A.3 | Adjunct faculty salary based upon CNR standard of $2,000 per CH for temporary instructors |
| III.A.7 | Administrative suppoprt estimated at $180 per enrolled student |
| III.A.9 | Administrative support fringe rate of 40.8% |
| III.B.5 | Marterials and supplies for student recruitment; estimated $25 per student, includes travel and based on CNR recruitment analysis |
| III.B.8 | Miscellaneous administrative costs supporting program |
| III.C.2 | Capital outlay for new chainsaws and associated safety/mainteance equipment, as well as surveying equipment; replacement costs |
| | for out years |
| | |

**Addendum to #472 Wildland Fuel and Fire Technology Proposal**

3. **Program Prioritization**

   *Is the proposed new program a result of program prioritization?*

   Yes_____ No__X___

   *If yes, how does the proposed program fit within the recommended actions of the most recent program prioritization findings.*

4. **Credit for Prior Learning – *if not applicable, provide a sentence to explain why not applicable.**

   *Indicate from the various cross walks where credit for prior learning will be available. If no PLA has been identified for this program, enter 'Not Applicable'.*

   While it is true that our proposed courses as part of this Associate Degree rely heavily on experiential learning, they also include content that goes beyond just experience, or knowledge that is acquired through professional work experience or training.

   The University of Idaho does have a policy and mechanism for students to challenge courses by examination (UI Catalog I-2-a). We have used this policy in the past successfully with students that wish to receive credit for work experience. It allows the student to obtain credit based upon experience or prior training while at the same time ensuring that student learning outcomes of the course and our professional accreditation standards are maintained.

5. **Affordability Opportunities**

   *Describe any program-specific steps taken to maximize affordability, such as: textbook options (e.g., Open Educational Resources), online delivery methods, reduced fees, compressed course scheduling, etc. This question applies to certificates, undergraduate, graduate programs alike.*

   A variety of approaches will be taken to help maximize affordability. First, many of the new courses to be developed are based upon existing expertise and course materials. This ensures the efficient use of resources to develop the new courses to support the degree program. Second, since most of the required courses for the degree are field-based and experiential in nature, there are not textbooks available to be used to support student learning. As such, we will rely largely on self-produced or public domain material that will be shared via the University of Idaho's learning Management System – Canvas. We are already doing this for many courses in the Department where faculty have designed

supplemental learning materials that are freely available online and built course content that precludes the need for expensive textbooks. Third, the Department and College are actively working with stakeholders and industry partners to develop funds to support the acquisition and maintenance of field equipment to support the new degree program. Finally, the CNR Development Office is working to secure endowments for scholarships to support students.

**Response to Idaho State Board of Education Inquiry**

Below are responses to questions that the University of Idaho received from T.J. Bliss and Patty Sanchez concerning the University of Idaho's three proposed A.S. degrees.

### A.S., Wildland Fuel and Fire Technology

For the **AS, Wildland Fuel and Fire Technology**, the proposal indicated that the program will require 61 credits; however, upon further review, the number of credits totaled 81. Can you confirm that number? In either case, the total places the program over the 60 threshold as defined in policy III.E and will need rationale to include with the request. Under question 6 of the proposal, the UI lists two existing programs offered by ISU and CWI without enrollment and graduate data for those. We need for the UI to provide this information in the chart provided in the proposal form. This information can be obtained from ISU and CWI IRs or by going through the Provost offices.

The UI apologizes for the error in the credit count for the A.S., Wildland Fuel and Fire Technology degree. Too many drafts resulted in an incorrect credit count. The total credits for this A.S. degree should be noted as 82. The UI requests that the Board provide an exception to Board Policy III.E.1.c. for the A.S., Wildland Fuel and Fire Technology degree.

This degree was developed in consultation with representatives from the National Wildfire Coordinating Group (NWCG)[1]. The NWCG issues standards that establish workforce practices and requirements that "enable efficient and coordinated national interagency wildland fire operations." In addition, as the proposed degree focuses on both fuels and wildfire, we have designed the curriculum, course content, and student learning outcomes to follow the core competencies suggested for both fuels and wildland fire certification as recommended by the Association for Fire Ecology (AFE)[2], the same accreditor of UI's B.S., Fire Ecology and Management degree. For example, core competencies for wildland fuels technicians include 14 total competencies in the following categories: [1] fuels sampling and monitoring, [2] fuels management fundamentals, [3] fire ecology, and [4] fuels program management. To fully meet the accreditation standards set forth by NWCG and AFE, the proposed A.S., Wildland Fuel and Fire degree must exceed 60 credits.

UI recognizes that 82 credits is relatively high for an A.S. degree. However, more than 90 percent of the coursework for the proposed A.S., Wildland Fuel and Fire Technology degree will be offered online. Furthermore, the UI has the ability to provide students in the program technical competency credit[3] for coursework completed as part of NWCG training, as well as credit through challenged courses (i.e., credit by examination).[4]

Note that the A.S., Wildland Fuel and Fire Technology degree matriculates into UI's B.S., Fire Ecology and Management.

The table on the following page presents the fall census enrollment and degrees awarded data from 2018-2021 for fire-related degrees offered by the College of Western Idaho[5] and Idaho State University.[6]

[1] https://www.nwcg.gov/

[2] https://fireecology.org/academic-program-certification

[3] UI General Catalog, Regulation I-2-c.

[4] UI General Catalog, Regulation I-2-a.

[5] College of Western Idaho data provided by the Office of Institutional Effectiveness on March 18, 2022.

[6] Idaho State University data provided by the Office of Institutional Research on March 18, 2022.

It should be noted that UI's proposed A.S., Wildland Fuel and Fire degree noticeably differs from the College of Western Idaho's and Idaho State University's "Fire Service" degrees. These two institutions' "Fire Service" curricula are based upon the U.S. Fire Administration's *Fire and Emergency Services Service Higher Education* initiative,[7] which primarily focuses on municipal fire management, fire investigation, fire prevention, hazardous materials, emergency medical services, and leadership and not on wildland fuel and fire management. In fact, the initiative requires no wildland fire training and instead directs individuals to the NWCG for wildland fire training.[8]

The College of Western Idaho's A.A.S. Wildland Fire Management and A.A.S. Fire Service Technology degrees were discontinued effective August 20, 2018, per information obtained from CCWI's Office of Institutional Research.

| Instit. | Program Name | Fall Headcount Enrollment in Program | | | | Number of Graduates From Program (Summer, Fall, Spring) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | FY 18 | FY 19 | FY 20 | FY 21 (most recent) | FY 18 | FY 19 | FY 20 | FY 21 (most recent) |
| **CWI** | **A.A.S., Wildland Fire Management**[a] | 4 | -- | -- | -- | 4 | 3 | 1 | -- |
| **CWI** | **A.A.S., Fire Service Technology**[a] | 11 | 4 | 0 | 1 | 2 | 8 | 5 | -- |
| **CWI** | **A.A., Fire Service Technology**[b] | -- | -- | 2 | 26 | -- | -- | -- | -- |
| **CWI** | **A.A., Fire Service Management**[b] | -- | -- | 1 | 1 | -- | -- | -- | -- |
| **ISU** | **A.S., Fire Service Administration** | 9 | 8 | 5 | 9 | 2 | 2 | 4 | 4 |
| **ISU** | **B.S., Fire Service Administration** | 13 | 15 | 14 | 20 | 4 | 3 | 1 | 3 |

[a] Program end date August 20, 2018
[b] Program start date August 1, 2018

[7] https://www.usfa.fema.gov/training/prodev/about_feshe.html
[8] https://www.usfa.fema.gov/wui/training/

November 22, 2021

Subject: Letter of Support for University of Idaho

The Nez Perce Tribe Forestry and Fire Management Division is very supportive of the University of Idaho in its mission to educate current and future land managers and practitioners. Wildland fire and fuels management will always require highly skilled and educated workers to complete the field work in a productive, safe, and ethical manner. The Nez Perce Tribe Forestry and Fire Management Division supports an AAS program through the University of Idaho for Fire and Fuels Management.

This 2-year associates degree program could benefit the technical workforce that the Nez Perce Tribe Forestry and Fire Management Division employs, along with its interagency partners technical workforce. For over the course of 10 years; many forestry, fire and fuels technicians employed with the Nez Perce Tribe have been doing the extensive field work extinguishing wildfires, fuels monitoring, forest inventories, executing prescribed fires, and much more. These technicians could benefit from a formal education to better themselves and their profession by receiving a 2-year degree in Wildland Fire and Fuels management. This 2-year associates degree program would provide a learning opportunity for the fire and fuels technicians to improve critical thinking skills; technical forestry, fire, and fuels management knowledge; professional technical writing skills; workplace communication skills; peer to peer learning and exchange of knowledge and ideas.

The Nez Perce Tribe Forestry and Fire Management Division seeks to enhance the professional and technical skills in its employees. A program such as an AAS degree in Wildland Fire and Fuels would only sharpen the skills in the technical workforce. The Nez Perce Tribe Forestry and Fire Management Division looks forward to the future of this educational opportunity and the future of University of Idaho's College of Natural Resource Degree Programs.

Sincerely,

Selina Miles

Forester

Nez Perce Tribe Forestry and Fire Management

116 Veterans Ave

Lapwai, Idaho, 83540

208-843-7328

**United States Department of Agriculture** Forest Service WO FAM Workforce Development

Date: 10/7/2021

Subject: Letter of Support for University of Idaho

Wildland fire management will always be a technical skill-based profession, however the involving complexities of managing wildland fire, whether it is a planned or unplanned ignition, requires the agency to develop a more holistic fire and fuels professional.

The agency is currently exploring avenues internal and external that allow it to accelerate its ongoing efforts to educate and train its current and future professionals. Education opportunities that allow for the transfer of knowledge, reinforcement of technical skills, and the synthesis of both to improve critical thinking, problem solving, and more efficient decision making is essential to developing the type of professional fire and fuels managers that the agency is seeking.

Programs such as the AAS for Fire and Fuels Management are ideal for recruiting new fire and fuels managers and educating our current professionals. The agency looks forward to seeing how this program will help us maintain a high standard of technical skill in education for fire fuels professionals.

Sincerely,

/s/ Heath Cota

Forest Service
Washington Office
Branch Chief of Fire Workforce Development and Training

208-957-3045
heath.coda@usda.gov

**Pacific Southwest Region**

R|S

RILEY STEGNER AND ASSOCIATES

March 30, 2022

Idaho State Board of Education
P.O. Box 83720
Boise, Idaho 83720-0037
*Delivered via electronic mail*

RE: Industry support for University of Idaho College of Natural Resources' request to offer proposed Associate of Science (A.S.) degrees

Dear Idaho State Board of Education Members:

We write in support of the University of Idaho's College of Natural Resources' request to offer the following Associate of Science (A.S.) degrees:

- A.S., Forest Operations & Technology
- A.S., Forest Nursery Management & Technology
- A.S., Wildland Fuels & Fire Technology (> 90% online)

The forest products industry in Idaho has long depended on the University of Idaho (UI) and the College of Natural Resources (CNR) to provide the next generation workforce of natural resource professionals for our companies. UI is uniquely, and perhaps solely, positioned to offer the educational resources to future employees that are in short supply for our sector. The mission of land-grant universities to focus on the research and educational advancement in the agriculture and forestry sectors is a critical piece of the rural, resource rich infrastructure that allows these sectors to thrive and survive.

Idaho's higher educational institutions have a proud history of responding to the educational needs of its business sectors to support their advancement such as in the areas of nuclear energy, law, computer science, agriculture, forestry and more. Creation of the three A.S. degrees will continue in this tradition, and as Idaho's land-grant university, the UI is the right home for the new programs. The proposed degrees will undoubtedly benefit from the CNR's resources and experienced staff, one-of-kind experimental forest, world class nursery, well known and respected programs, and deep connections to other research universities with like missions. It would be hard to identify an educational institution where these degree programs could thrive without the resources and staff at CNR.

The forest products industry is a significant part of Idaho's economic vitality, contributing $4 billion to the economy and employing–directly and indirectly–over 30,000 Idahoans.

On this matter we represent Bennett Lumber Products Inc., Clearwater Paper, Idaho Forest Group, Manulife Investment Management Timberland and Agriculture, Molpus Woodlands Group, PotlatchDeltic Corporation, and Stimson Lumber Company.

101 S Capitol Blvd #930 • Boise, ID 83702 • 208.310.5949

Thank you for your consideration of this request.

Sincerely,

Peter Stegner
Principal
Riley Stegner and Associates

Jim Riley
Principal
Riley Stegner and Associates

101 S Capitol Blvd #930 • Boise, ID 83702 • 208.310.5949

**Associate Programs – Comments**

**Lewis-Clark State College**
Supports. No comments.

**Idaho State University**
ISU recommends that U of I and NIC work collaboratively to build these programs rather than the programs being housed at any one institution. We realize that this requires a great deal of work and alignment, but in this situation, we believe it is the best course of action.

**North Idaho College**
North Idaho College does not support these degree programs. Per Board Policy 3Z it is the responsibility of Community Colleges to meet workforce needs in our region. North Idaho College has reached out to the University of Idaho and offered to collaborate on these efforts. We will continue to engage in conversations to find a way to meet the needs of students and regional workforce demands.

- Wildland Fuel and Fire Technology (AS)
- Forest Nursery Management and Technology (AS)
- Forest Operations and Technology (AS)

**Boise State University**
Abstains. Boise State has some serious reservations about UI offering AS degrees. This concern is not about the quality of programs, nor about UI's expertise and ability to deliver the programs. Instead, our concern is about "mission creep." The AA/AS degrees should be generally delivered by the 2-year schools. Thus, we defer to the Community Colleges in their assessment of the proposed new degrees. However, we would like to note that mission creep negatively affects all higher education institutions, whether it be community colleges offering 4-year baccalaureate degrees or 4-year universities offering specialized AS/AA degrees.

**College of Southern Idaho**
The College of Southern Idaho opposes the approval of the three Associate of Science Degrees submitted on 2.5.2022 for comment: Wildland Fuel and Fire Technology, Forest Nursery Management and Technology, and Forest Operations and Technology. All three are obvious forays into the community college mission as defined by Idaho statute and further described in Idaho State Board of Education policy. They also represent (by virtue of their respective titles) what can reasonably be considered career technical education (CTE) programs. While they are indeed submitted as transfer programs, we question where they would transfer to. They appear to be terminal degrees as evidenced by the arguments around "industry supported." UI has no legal standing to offer CTE programs; these appear to be transfer degrees in name only. Even the proposals themselves include AAS language, and the curriculum seems to indicate that 20 credits of General Education were simply tacked on to the originally crafted AAS curriculum. [Torrey has advised me that this is not the case.]

As the sole authorized provider of associate degrees, CTE programs, workforce training, and (according to SBOE policy III.Z. and Idaho statute) lower division (including baccalaureate) postsecondary instruction in Region I, North Idaho College should at a minimum be provided a right of first refusal for all of these programs. Further, we would advocate for the most cost effective access to these programs as possible, something NIC can easily accomplish when compared to UI. Understanding that UI may have current facilities, operations, and other resources to support these programs provides an excellent opportunity for a collaboration, rather than a subordination or competition.

As Idaho's Land Grant Institution, UI has a particular, unique position and mission, and that is far from that of the community college. While Idaho community colleges have a clear, statutory endorsement to deliver bachelor's degrees, Idaho universities (with the specific exception of Idaho State University) clearly hold no such literal authority to offer associate degrees, and in particular, CTE programming. While the case can be made that these are programs addressing workforce needs, those needs are best met through the Idaho community and technical colleges.

**University of Idaho**
**Proposed Associate of Science Degrees**

## Lewis-Clark State College

*Supports. No comments.*

## Idaho State University

*ISU recommends that U of I and NIC work collaboratively to build these programs rather than the programs being housed at any one institution. We realize that this requires a great deal of work and alignment, but in this situation, we believe it is the best course of action.*

The University of Idaho (UI) fully supports and participates in numerous mutually beneficial collaborative partnerships with community colleges throughout the state. Some current collaborations include the development and execution of transfer articulations, the management and delivery of many 2+2 programs, and co-instruction. For example, the UI's College of Natural Resources currently partners with the College of Southern Idaho to collaboratively teach range management courses virtually and in-person at the UI's Rinker Rock Creek Ranch. We are also working with CSI to deliver a 2+2 in Rangeland Ecology and Management from Twin Falls.

SBOE policy III.Z. formally defines collaboration between two or more institutions to deliver an academic degree program as a joint program. Unlike our other collaborations, the UI believes that a joint program in this specific case would not be student-centered. Rather, we expect that a joint program would result in the creation of additional layers of administrative services to deliver the degree programs. Moreover, prospective students would be required to navigate through bureaucratic and duplicative administrative processes (e.g., recruitment, admissions, financial aid, student support functions) to earn their degree, which would likely negatively impact enrollments in the degrees and, consequently, provide a suboptimal outcome to the citizens of Idaho and the industries that would benefit from the three proposed A.S. degrees.

The UI believes the any "best course of action" should focus squarely on what is best for students and citizens throughout the State of Idaho when offering any degree program. Generally, strong and vibrant programs possess well-qualified instructors, a breadth of relevant courses that are regularly available, and modern, well-maintained facilities and equipment that provide for the development of skills needed in the workforce. The combination of these three ingredients will increase the likelihood of producing graduates that add economic value to the State of Idaho.

SBOE policy allows all state institutions to offer A.S. degrees; the UI is barred from offering A.A.S. degrees per board policy, a policy that, after discussing with other institutions across the state and SBOE staff, we are in full agreement. As with all our B.S. degrees that have been designed in consultation with industry partners, all three proposed A.S. degrees have been specifically designed with direct industry input to [1] serve a clearly defined statewide need, [2] leverage very extensive capital resources managed by the College of Natural Resources, and [3] leverage faculty expertise and the multitude courses currently being taught by the College at the B.S. degree level.

With respect to meeting statewide need, the UI has submitted many support letters from statewide, regional, and national stakeholders that would be positively influenced by the proposed A.S. degrees. Each of these stakeholders already provide significant support to the College of Natural Resources'

existing B.S., M.S., and Ph.D. programs and have a clear understanding through their partnerships of how the College will leverage its current expertise and assets to better meet the specific workforce development needs in their respective industries. This type of interaction and dialogue with stakeholders is at the core of UI's tripartite land-grant mission and social contract of providing accessible educational opportunities that incorporate the best available science to improve the lives of the citizens of Idaho and the nation.

SBOE Governing Policies and Procedures III.Z.2.b.iii.1 and Idaho Code § 33-2101 (Education, Junior Colleges) define North Idaho College's (NIC) service region as embracing the counties of Benewah, Bonner, Boundary, Kootenai, and Shoshone. This delivery area is consistent with language contained in NIC's 2021-2022 Catalog: "Beyond Coeur d'Alene, NIC meets the diverse educational needs of residents in Idaho's five northern counties with the NIC Sandpoint center in Sandpoint, Idaho, online services and courses, and comprehensive outreach services." Allowing NIC to deliver the proposed A.S. degrees statewide would violate SBOE policy and state code, or, in the alternative, serve prospective students only within the five counties NIC's degrees are designated for delivery, which defeats the UI's purpose in providing a statewide benefit with the proposed degrees to the broadest student population.

Regarding capital resources for the delivery of the proposed A.S. degrees, the College of Natural Resources will rely on the use of its 10,000+ acre UI Experimental Forest located near Moscow and its more than $2 million in modern harvesting equipment in offering the A.S. Forest Operations and Technology degree. Students will be trained in hands-on forest harvest preparation, road layout, harvest, and post-harvest activities at the UI Experimental Forest using traditional and cutting-edge technology and equipment that will prepare them to enter the workforce with the skills needed to succeed.

The Pitkin Forest Nursery is a modern commercial-scale nursery consisting of millions of dollars in investments in buildings and specialized equipment. Students pursuing the A.S. Forest Nursery Management and Technology degree will be fully exposed to all facets of production and sales of nursery stock. The UI is one of only two universities in the United States operating a commercial forest nursery, which makes this proposed degree and student experience unique not only in the state, but also nationally.

Similarly, the A.S. Wildland Fuel and Fire Technology degree builds upon unique assets as the first and leading wildland fire program in the United States. While the proposed degree is intended to be delivered almost entirely online, we will leverage [1] our faculty and staff expertise, [2] one of the only fire combustion labs on a university campus in the country, and [3] our long-standing relationships with federal agencies responsible for wildland fuel and fire training (e.g., National Wildfire Coordinating Group) to develop and deliver a unique program that integrates fuel and vegetation management with wildland fire. Furthermore, as the proposed degree has been designed to be delivered almost entirely online, we would respectfully submit that this A.S. degree should be governed by SBOE Governing Policies and Procedures III.Z.6.a., "This policy [Planning and Delivery of Postsecondary Programs and Courses] is not applicable to programs for which 90% or more of all activity is required or completed online, or dual credit courses for secondary education." Thus, SBOE policy dictates that the UI is authorized to offer the A.S. Wildland Fuel and Fire Technology degree without any designated service areas constraints.

Finally, we have consciously designed the proposed programs to build upon the numerous pre-existing courses that are currently being taught on a regular basis by more than two dozen faculty in the College

of Natural Resources. The College faculty have redesigned many existing courses for the three proposed A.S. degrees. The courses have been redesigned to focus more heavily on applied components of their respective discipline areas and less on the theoretical, consistent with input from stakeholders about the skills and training the view as critical for their respective industries. In this way, we have already done much of groundwork to ensure that students will be immediately and directly employable into the workforce as we do for all of our degree programs regardless of level.

The UI respectfully questions whether NIC has the established relationships with industry stakeholders necessary to design and deliver the three proposed A.S. degrees statewide. The UI is also unaware of any existing capital resources either owned, leased, or managed by NIC that would contribute to the delivery of any of the three proposed A.S. degrees. Furthermore, examination of course offerings in NIC's 2021-2022 *Catalog* demonstrates that NIC offers no courses in either forest operations and technology or forest nursey management and technology. NIC offers a single apprentice-based course that addresses wildland fire (FST-100 Fire Service Technology). In sum, offering these degrees seems cost prohibitive for NIC, as well as for all other community colleges in the state.

If NIC were to either offer the three proposed A.S. degrees or form a joint program with the UI in offering the degrees, then it would almost certainly have to expend significant funds to help offset the costs associated with the College of Natural Resources' capital assets, instructors, and courses. Given both the SBOE's and the UI's budget/revenue models, the College of Natural Resources would be required to charge NIC for any resources they would find necessary to utilize to successfully deliver the proposed degree programs.

The UI is requesting no additional general education funding to offer any of the three proposed A.S. degrees; as such, we respectfully submit that these degrees can be delivered with current institutional resources only within the College of Natural Resources at UI. Thus, a joint program between NIC and UI in the delivery of the three proposed A.S. degrees, as suggested by Idaho State University, runs counter to the SBOE's efforts to reduce or eliminate duplication of effort as mandated by Idaho Code § 33-113 (Limits of Instruction), which states that "The state board, in the interests of efficiency, shall define the limits of all instruction in the educational institutions supported in whole or in part by the state, and, as far as practicable, prevent wasteful duplication of effort in said institutions." [emphasis added]

**North Idaho College**

*North Idaho College does not support these degree programs. Per Board Policy 3Z it is the responsibility of Community Colleges to meet workforce needs in our region. North Idaho College has reached out to the University of Idaho and offered to collaborate on these efforts. We will continue to engage in conversations to find a way to meet the needs of students and regional workforce demands.*

- *Wildland Fuel and Fire Technology (AS)*
- *Forest Nursery Management and Technology (AS)*
- *Forest Operations and Technology (AS)*

The UI believes that North Idaho College (NIC) has misinterpreted SBOE Policy contained in III.Z. [Planning and Delivery of Postsecondary Programs and Courses]. This policy bars the UI from offering A.A.S. degrees (III.Z.2.b.iii.2.). However, the policy allows all institutions, including the UI, to offer A.S. degrees.

NIC's response states that "it is the responsibility of Community Colleges to meet workforce needs in our region." The UI respectfully disagrees with NIC's perspective that degrees focused on workforce development are restricted to state's community colleges. All of the College of Natural Resources degrees, especially those in the Department of Forest, Rangeland and Fire Sciences in which the three proposed A.S. degrees will be housed, have been designed with the direct input of employers and industry stakeholders. In fact, the College frequently organizes "Industry Summits" for stakeholders to review curricula and meet with faculty to ensure that students are graduating with the necessary skills to enter the workforce. Additionally, the College of Natural Resources annually sponsors a field tour for the UI President, state and federal government officials and agency staff, and industry leaders to discuss pressing natural resource issues and how the College – through its education, research, and extension missions as a land-grant university – can contribute to finding solutions that benefit the citizens of Idaho, which includes workforce development and training. The proposed A.S. degrees evolved from just this type of engagement.

To assume that only community colleges are responsible for workforce development needs suggests a clear misunderstanding of mission of the UI and the land-grant university system as established by the Morrill Act (1862) and reaffirmed for Historical Black Colleges and Universities (1890) and Tribal Colleges (1994). These institutions were created specifically to educate the next generation workforce in agriculture and mechanical arts, which comprises the natural resources fields. From Section 4 of the original 1862 legislation, "…each State which may take and claim the benefit of this act, to the endowment, support, and maintenance of at least one college where the leading object shall be … to teach such branches of learning as are related to agriculture and the mechanic arts … in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life." [emphasis added]

Language in Idaho Code § 33-2814 (Education, University of Idaho, Courses) is consistent with Section 4 of the Morrill Act (1862) when it states that the UI "…shall embrace courses of instruction in mathematical, physical and natural sciences, with their application to the industrial arts, such as agriculture, mechanics, engineering, mining and metallurgy, manufactures [manufacturing], architecture and commerce, and such branches … as shall be necessary to a proper fitness of the pupils in the scientific and practical courses for their chosen pursuits."

Workforce development is essential to and implicit in the tripartite land-grant mission of the UI and our social contract with the citizens of the State of Idaho. Faculty and staff at the UI strive to educate and train a workforce that is supported by the best available science through basic and applied research and disseminated (or extended) to the general public to improve the lives of the citizens of Idaho and the nation.

Consistent with this mission, numerous land-grant institutions across the United States that UI considers peer institutions offer A.S. degrees that are designed to train a strong and vibrant workforce that is responsive to industry needs. Examples include Michigan State University, Montana State University, North Carolina State University, The Ohio State University, Oklahoma State University, Pennsylvania State University, Purdue University, State University of New York, Virginia Tech, University of Arkansas-Monticello, University of Hawaii, University of Maine, University of Massachusetts, University of Nebraska, University of New Hampshire, and West Virginia University. Similarly, 1890 and 1994 land-grant institutions such as Delaware State University (1890) and Salish-Kootenai College (1994) provide workforce development through A.S., B.S., and graduate degrees.

Furthermore, the UI's College of Agricultural and Life Science, College of Engineering, and College of Natural Resources specifically focus on workforce development in the form of their existing B.S. degrees. The UI is regularly awarded federal and state grants and contracts explicitly focused on workforce development needs at both the national at state levels. For instance, the Idaho Workforce Development Council awarded the UI a grant in 2019 in the amount of $419,622. In 2022, the USDA awarded a grant to the College of Natural Resources to develop educational programing to meet workforce development needs in forest operations – a grant that was awarded unconnected to the proposed A.S. degrees.[1]

Consequently, we believe the suggestion that Idaho's community colleges have exclusivity in providing programs that are focused workforce development represents a fundamental misunderstanding of the UI's mission as Idaho's land-grant university. While the UI is open to engaging with NIC in the delivery of the proposed A.S. degrees, the engagement must serve the best interests of the students and the industries that would benefit from the degrees. We respectfully disagree that such a partnership with NIC is necessary based upon our current understanding of NIC's regionally mandated focus and the resources needed to deliver the type of education and training industry desires.

[1] Advancing Technological and Fundamental Skillsets of Next Generation Forest Operations Workforces Through Enhanced Education and Extension, $225,000.

**Boise State University**

*Abstains. Boise State has some serious reservations about UI offering AS degrees. This concern is not about the quality of programs, nor about UI's expertise and ability to deliver the programs. Instead, our concern is about "mission creep." The AA/AS degrees should be generally delivered by the 2-year schools. Thus, we defer to the Community Colleges in their assessment of the proposed new degrees. However, we would like to note that mission creep negatively affects all higher education institutions, whether it be community colleges offering 4-year baccalaureate degrees or 4-year universities offering specialized AS/AA degrees.*

While the UI generally agrees with Boise State University's (BSU) philosophical assessment, it should be noted that all three proposed A.S. degree programs require very significant resource allocations to effectively deliver to meet industry and stakeholder needs. The UI currently has the capacity to offer the three degree programs with no additional general education funding and only minor internal reallocations (e.g., course staffing) within the College of Natural Resources. The UI suspects that community colleges attempting to offer any of the three proposed A.S. degrees would require significant additional general education funding and/or substantial reallocation of their current institutional resources to deliver in the same capacity as UI.

We respectfully submit that such additional general education funding or reallocation of institutional resources would be an inefficient and a wasteful use of resources considering the UI has nearly all of the resources now in place to deliver the three A.S. degrees in a fashion that is best for students and industry. Allowing each community college to develop and offer the proposed A.S. degrees to cover statewide needs would be inconsistent with Idaho Code § 33-113, which was enacted to "prevent wasteful duplication of effort" across higher education institutions.

The UI disagrees with BSU's perspective that the three proposed A.S. degrees would introduce mission creep. Mission creep is defined as the *gradual shift in strategic objectives frequently resulting in an unresolved conflict or open-ended commitment* (Oxford English Dictionary). The three proposed A.S. degrees fit exceptionally well by leveraging UI's obligation to deliver statewide B.S.-level degree programs that meet the workforce development needs in the natural resources industries (i.e., no shift in strategic objectives), which the UI has done for more than 100 years. Nor should the three proposed A.S. degrees be perceived as potentially resulting in unresolved conflict or open-ended commitment at the UI. The degrees were carefully planned and designed using direct input from industry stakeholders with all necessary resources in place for effective and efficient delivery. Students earning any of the three proposed A.S. degrees could, if they desired, enter rather seamlessly into corresponding B.S. degrees offered by UI.

Reflecting this commitment to being responsive to student and industry needs, all B.S. programs in the Department of Forest, Rangeland and Fire Sciences are accredited by professional societies (e.g., Association for Fire Ecology, Society of American Foresters, Society for Rangeland Management, Society of Wood Science and Technology). The College of Natural Resources intends to work with the Society of American Foresters (SAF) and professionally accredit each A.S. program under SAF's *Forest Technology* Standard. Such accreditation emphasizes quality and will help position each degree within their respective industries, helping students be more competitive in the job market. As specified by SAF, to meet the *Forest Technology* standard, programs must have [1] clear program purpose and learning outcomes, [2] adequate resources, including advising, [3] adequate levels of faculty and staff to support program (minimum of two faculty with disciplinary expertise with at least one degree in forestry), [4] support the learning environment with computers, specialized software, spatial information

technologies, specialized equipment, access to appropriate outdoor sites for experiential learning and development of field skills, and [5] have a curriculum focused on four major areas - ecology and biology, measurement of forest resources, forest resource policy, economics, and administration, silviculture and forest measurement. We contend that the UI is the only institution in the state that can effectively meet these professional accreditation standards using existing resources.

If the UI were to offer a generic A.S. or A.A. degree that is composed of general education requirements and coursework selected from elective courses in the student's area(s) of interest, then mission creep would certainly be an issue of concern as elective course are indeterminant with regard to resource needs. That is not what is being proposed by UI in this instance.

**College of Southern Idaho**

*The College of Southern Idaho opposes the approval of the three Associate of Science Degrees submitted on 2.5.2022 for comment: Wildland Fuel and Fire Technology, Forest Nursery Management and Technology, and Forest Operations and Technology. All three are obvious forays into the community college mission as defined by Idaho statute and further described in Idaho State Board of Education policy. They also represent (by virtue of their respective titles) what can reasonably be considered career technical education (CTE) programs. While they are indeed submitted as transfer programs, we question where they would transfer to. They appear to be terminal degrees as evidenced by the arguments around "industry supported." UI has no legal standing to offer CTE programs; these appear to be transfer degrees in name only. Even the proposals themselves include AAS language, and the curriculum seems to indicate that 20 credits of General Education were simply tacked on to the originally crafted AAS curriculum. [Torrey has advised me that this is not the case.]*

*As the sole authorized provider of associate degrees, CTE programs, workforce training, and (according to SBOE policy III.Z. and Idaho statute) lower division (including baccalaureate) postsecondary instruction in Region I, North Idaho College should at a minimum be provided a right of first refusal for all of these programs. Further, we would advocate for the most cost effective access to these programs as possible, something NIC can easily accomplish when compared to UI. Understanding that UI may have current facilities, operations, and other resources to support these programs provides an excellent opportunity for a collaboration, rather than a subordination or competition.*

*As Idaho's Land Grant Institution, UI has a particular, unique position and mission, and that is far from that of the community college. While Idaho community colleges have a clear, statutory endorsement to deliver bachelor's degrees, Idaho universities (with the specific exception of Idaho State University) clearly hold no such literal authority to offer associate degrees, and in particular, CTE programming. While the case can be made that these are programs addressing workforce needs, those needs are best met through the Idaho community and technical colleges.*

The College of Southern Idaho (CSI) presents that "Idaho universities (with the specific exception of Idaho State University) clearly hold no such literal authority to offer associate degrees." This statement inconsistent with SBOE policy III.Z. that specifically allows all state institutions to offer A.S. degrees. Boise State University, for example, offers both A.A. and A.S. degrees. The UI is currently the only state higher education institution that does not offer an A.S. degree.

We agree with the CSI that the UI is not allowed to offer A.A.S. degrees per SBOE policy III.Z.2.b.iii.2. The UI apologizes for any confusing language in the proposals that mention A.A.S. degrees as that was carelessly made in error.

CSI states that "They [proposed A.S. degrees] also represent (by virtue of their respective titles) what can reasonably be considered career technical education (CTE) programs." Here, CSI implies that any workforce-oriented degree offered by an institution is narrowly designated as a CTE program. The College of Natural Resources and other colleges at UI offer numerous B.S. degrees with titles that could reasonably be considered CTE programs if workforce-oriented degrees were narrowly defined as CTE programs (e.g., B.S. Fire Ecology and Management; B.S. Forest and Sustainable Products, B.S. Forestry, Forest Operations Emphasis; B.S. Wildlife; Conservation Law Emphasis).

As described in detail in the response to comments provided by NIC, workforce education and training is clearly mandated in the originating Morrill Act (1862) legislation creating the land-grant universities. In

this we would agree wholeheartedly with CSI's statement that "As Idaho's Land Grant Institution, UI has a particular, unique position and mission." That mission is clearly articulated in Section 4 of the Morrill Act (1862) that states the land-grant university is to "promote the liberal and practical education of the industrial classes in the several pursuits and professions in life." To suggest that the proposed A.S. degrees that prepare students for the workforce should not be developed, utilize the resources and expertise, and not be delivered by the UI suggests a fundamental misunderstanding of the mission of the land-grant university.

CSI expresses that "While they [the proposed A.S. degrees] are indeed submitted as transfer programs, we question where they would transfer to." All three proposed A.S. degrees directly transfer to B.S. degrees offered by the UI. The proposed A.S. Forest Operations and Technology degree transfers into UI's B.S. Forestry, Forest Operations Emphasis degree. The proposed A.S. Forest Nursery Management and Technology degree transfers into several programs including UI's B.S. Forestry, Forest Biology Emphasis degree and B.S. Horticulture and Urban Agriculture degree. The proposed A.S. Wildland Fuel and Fire Technology degree transfers into UI's B.S. Fire Ecology and Management degree, as well as the B.S. Forestry, General Forestry Emphasis degree. The B.S. degrees mentioned above are available for CSI's and SBOE members' inspection in the UI's *General Catalog*.[2]

CSI remarks that "They [the proposed A.S. degrees] appear to be terminal degrees as evidenced by the arguments around 'industry supported.'" For decades, the College of Natural Resources has partnered closely with the natural resources industries in the State of Idaho and the curricula of eight of the College's B.S. degree programs are designed, in part, with direct input from industry participants and stakeholders.

The Morrill Act (1862), which established the land-grant university system, was enacted to educate the next generation workforce in agriculture, which comprises the natural resources fields, and mechanical arts. Educating the next generation workforce should not be based on developing degree programs that disregard industry needs. As such, the UI would expect that members of the SBOE would strongly encourage industry participation in the development of undergraduate certificates and degrees that benefit natural resources industries statewide. Indeed, the opening sentence of SBOE policy III.Z. states "The purpose of this policy is to ensure Idaho's public institutions meet the education and workforce needs of the state through academic planning, alignment of programs and courses, and collaboration and coordination." [emphasis added]

Under "Rationale for Creation or Modification of the Program" on the SBOE's *Proposal for Academic Degree and Certificate* form, which is the form used to submit each of the three proposed A.S. degrees, section 2.b. requires that the institution detail the "Workforce and economic need" for the proposed program. The institution is required to "Provide verification of state workforce needs that will be met by this program" and to "Describe how the proposed program will stimulate the state economy…." Section 2.c. of this form requires the institution to articulate the "societal benefits" that would accrue from offering the proposed program. Hence, the SBOE's own new program submission form implies that workforce development should be a component of any new degree program.

CSI contends that the delivery of the proposed degree programs would be most cost effective through NIC. The UI emphatically disagrees with this position. The UI requires no additional general education funding to deliver the proposed degrees. Establishing a partnership with NIC would very likely require

[2] catalog.uidaho.edu

new general education funding for NIC and/or NIC's reallocation of their current general education funding to support the program. It also severely limits the delivery of the proposed degree programs to one region in the state when the degrees are clearly intended to meet statewide industry needs.

NIC currently does not own, lease, or manage any capital resources that would contribute to the delivery of any of the three proposed A.S. degrees. Examination of course offerings in NIC's 2021-2022 *Catalog*[3] demonstrates that NIC offers no courses in either forest operations and technology or forest nursey management and technology. NIC offers a single apprentice-based course that addresses wildland fire (FST-100 Fire Service Technology). In sum, offering these degrees seems cost prohibitive for NIC, as well as for all other community colleges in the state, and the development of any such program would be duplicative in terms of capital and skill-building experiential resources already in place at the UI.

In addition, the College of Natural Resources incurs substantial annual costs to maintain their capital assets (e.g., UI Experimental Forest, Pitkin Forest Nursery, forest harvesting equipment). These costs are covered by the College through a combination F&A on research grants, income-producing activities (e.g., timber sales, seedling sales), endowments, and annual giving from donors. A joint program with NIC in delivering the proposed degree programs would require that the UI to either [1] significantly subsidize NIC's costs of delivery of a joint program or [2] require the UI to be financially reimbursed by NIC proportional to their use to deliver their component of the joint program. Either option would likely be cost-prohibitive for both institutions and, again, would require duplication of resources which runs counter to the SBOE's efforts to reduce or eliminate duplication of effort as mandated by Idaho Code § 33-113 (Limits of Instruction), which states that "The state board, in the interests of efficiency, shall define the limits of all instruction in the educational institutions supported in whole or in part by the state, and, as far as practicable, prevent wasteful duplication of effort in said institutions." [emphasis added]

Finally, and perhaps most importantly, a joint program in this specific case would not be student-centered. A partnership would result in the needless creation of an additional layers of administrative services to deliver the degree programs. Prospective students would be required to navigate through bureaucratic and duplicative administrative processes (e.g., recruitment, admissions, articulations, financial aid, student support functions) to earn their degree, which would likely negatively impact enrollments in the degrees and, consequently, provide a suboptimal outcome to the citizens of Idaho and the industries that would benefit from the three proposed A.S. degrees.

It should be emphasized that executive leadership at CSI and UI share the same philosophical belief that the best course of action in higher education should focus squarely on what is best for students and citizens throughout the State of Idaho and not on the institutions. At the January 26, 2022, Idaho State Legislature's Joint Finance-Appropriations Committee meeting,[4] CSI President Dean Fisher responded to an enrollment growth question by Senator Crabtree stating that "I think I understand the question … it's just my general philosophical thoughts about how we [CSI] get enrollment successfully accomplished and retained. I think one of the most fundamental things we've done at the College of Southern Idaho is to step back and make sure that any impediment, any barrier, anything that is just part of the bureaucracy that serves us but not the students, is eliminated."[5]

[3] catalog.nic.edu

[4] https://insession.idaho.gov/IIS/2022/Joint%20Finance-Appropriations%20Committee/220126_jfac_0800AM-Meeting.mp4 [at 0:22:20]

[5] https://www.kmvt.com/2022/01/27/csi-emphasizes-growth-during-budget-hearing/

## SUBJECT

Program Progress Reports

## REFERENCE

| | |
|---|---|
| December 2013 | The Board approved amendments to Policy III.G. that require institutions to provide a report on graduate programs approved by the Board. |
| December 2017 | The Board was presented with program progress reports for graduate programs offered by Idaho universities. |
| December 2018 | The Board was presented with program progress reports for graduate programs offered by Idaho universities. |
| October 2019 | The Board approved a first reading of proposed amendments to Policy III.G. requiring review of all new baccalaureate degree programs at all public postsecondary institutions. |
| December 2019 | The Board approved a second reading of proposed amendments. |
| April 2021 | The Board was presented with program progress reports for baccalaureate and graduate programs offered by Idaho public institutions. |

## APPLICABLE STATUTE, RULE, OR POLICY

Idaho State Board of Education Governing Policies and Procedures, Section III.G.9, Postsecondary Program Review and Approval

## BACKGROUND/DISCUSSION

Board Policy III.G.9 requires all institutions to provide an initial progress report on new graduate and baccalaureate programs approved by the Board. This provision was added in response to Board member inquiries regarding status of new programs and whether institutions met their projected enrollments from initial proposal submission. This report is provided to Board members to help evaluate whether programs are meeting expectations regarding continued student interest and sustainability.

Board staff, with input from the Council on Academic Affairs and Programs, developed a template and a timeline to determine when programs will be reviewed.

- Baccalaureate programs - reviewed after six years of implementation.
- Master's programs - reviewed after four years of implementation.
- Doctoral programs - reviewed after six years of implementation.

In accordance with Board Policy III.G.9.b, Boise State University (BSU), Idaho State University (ISU), and University of Idaho (UI) submitted the following progress reports for this review cycle.

**Boise State University**

- Master of Science, Accountancy (online)
- Bachelor of Science, Business and Economic Analytics
- Master of Science/Master of Economics
- Bachelor of Science, Games, Interactive Media, and Mobile
- Bachelor of Science, Imaging Sciences

**Idaho State University**

- Master of Arts, Teaching
- Master of Taxation

**University of Idaho**

- Bachelor of Science, Sustainable Food Systems
- 1st Year Law Program to Boise

## IMPACT

Program progress reports provide the Board with updates on new baccalaureate and graduate programs and whether institutions met intended goals and benchmarks.

## ATTACHMENTS

Attachment 1 – BSU Progress Report – Online Master of Science, Accountancy
Attachment 2 – BSU Progress Report – Bachelor of Science, Business and Economic Analytics
Attachment 3 – BSU Progress Report - Master of Science/Master of Economics
Attachment 4 – BSU Progress Report - Bachelor of Science, Games, Interactive Media, and Mobile
Attachment 5 – BSU Progress Report - Bachelor of Science, Imagining Sciences
Attachment 6 – ISU Progress Report - Master of Arts, Teaching
Attachment 7 – ISU Progress Report - Master of Taxation
Attachment 8 – UI Progress Report - First Year Law Program to Boise
Attachment 9 – UI Progress Report - Bachelor of Science, Sustainable Food Systems

## BOARD STAFF COMMENTS AND RECOMMENDATIONS

**Boise State University**

The online Master of Science (MS) in Accountancy was approved by the Board in February 2017. The program projected 22 enrollments in the first year and projected an average of 64 graduates once the program was up and running. Based on actual numbers provided in the report, the program continued to maintain steady enrollment, reaching 53 enrollees and 24 graduates in year four; however, the program has not yet reached the initial enrollment and graduate projections as provided in the original proposal. BSU reports this was likely due to specific circumstances and gaps in education of students seeking admission into the program, ultimately leading to the need for students to take foundational courses before they could enroll and be successful in the MS in Accountancy

program. To provide students with options, BSU's Department of Accountancy introduced an online MS Accountancy Foundations program in Fall 2020. This allows students to take a set of additional courses before moving onto the courses in the online MS Accountancy. Enrollment numbers in the MS Accountancy Foundations program have reached 62 in FY22. Combining this number with the 51 students enrolled in the MS Accountancy online totals 113 for the combined programs in FY 22, which surpasses the projected number of 106.

The Bachelor of Science in Business and Economic Analytics program was approved by the Board March 2015. The program projected a minimum of 50 enrollments in the first year and over the subsequent six years. The program also projected a minimum of 10 graduates per year. Based on actual numbers provided in the report, the program reached enrollment projections by year four and has maintained steady enrollment over the years, exceeding projections with 73 enrollments in FY22. BSU also reports that the number of graduates has also remained steady and reached graduate projections in FY19 and FY20, although there was a dip in FY21. The program provided that this was likely due to the effects of the pandemic.

The Master of Science in Economics and Master of Economics were approved by the Board in December 2016. The program projected 16 enrollments in the first year and projected an average of eight graduates once the program was up and running. Based on actual numbers provided in the report, the program had slight increases in enrollment over the years, reaching 15 enrollments in FY22 and 4 graduates in year four; however, the program has not reached initial enrollment and graduate projections as provided in the original proposal. BSU states that this was partially due to somewhat unreasonable enrollment projections for a thesis-based and research focused master's program. BSU reports that the combined program was placed in the fifth quintile during program prioritization in 2020-2021. The program developed an action plan and identified strategies that will improve enrollment and graduation rates, and enhance curriculum and marketing of the program.

The Bachelor of Science in Games, Interactive Media, and Mobile (GIMM) was approved by the Board in April 2015. The program projected a minimum of 200 enrollments once the program was fully up and running. BSU determined that the program was considered up and running by year three. Based on actual numbers provided in the report, the program exceeded enrollment in year three with 223 enrollments and 254 enrollments in year four. For number of graduates, BSU initially projected a minimum number of 40 per year, once program is fully up and running. While initial numbers were not met by year three, the program reports that number of graduates has been increasing. Projections were met in year five of the program with 48 in FY21.

The online Bachelor of Science in Imaging Sciences was approved by the Board in April 2015. The Imaging Sciences program projected a minimum of 200

enrollments and 180 graduates by year three. Based on actual numbers provided in the report, the program had 135 enrollments in FY21 with 41 graduates that same year. While the program has not reached initial enrollment and graduate projections as provided in their original proposal, BSU reports that the program has maintained solid increases. There has been a total of 412 student enrollments and 196 graduates, with 132 students currently enrolled.

**Idaho State University**

The Master of Arts in Teaching was approved by the Board in December 2016. The initial program proposal submitted to the Board did not provide enrollment and graduate projections over three-year period because those were not collected as part of the proposal process at that time. While projections were not provided, the program proposal did provide a statement indicating the program anticipated 20 enrollments in the first year. Based on the actual numbers provided in the report, the program exceeded expectations enrolling 27-58 students over a three-year period with 60 students currently enrolled. The program had 25 graduates in year four.

The Master of Taxation was approved by the Board in February 2017 and implemented Fall 2018. The program projected 24-34 enrollments over a six-year period and 22-32 graduates. Based on actual numbers provided in the report, the program did not meet enrollment and graduate projections. This was due, in part, to loss of a faculty line and lack of faculty resources to offer the curriculum. At the end of FY20, the program stopped enrolling students and at the end of this semester, ISU plans to discontinue the program.

**University of Idaho**

The expansion of the first year Law program to Boise was approved by the Board in February 2017. This expansion was part of the dual-location model that the University developed with the Board's approval under a three-phased approach. Year two of the program was approved October 2012 and year three in August 2008. The dual-location model provides students with opportunities to take all coursework required to earn the Juris Doctorate degree at either the Moscow campus or the Boise campus, or a combination of both. For the purposes of this review cycle, this report is only providing progress on the initial expansion of the first year program. It is important to note that the original program proposal submitted to the Board provided enrollment and graduate projections combined for both Moscow and Boise options. Based on the actual numbers provided for Boise only, the program had 143 enrollments at the time of implementation with increases each year reaching 251 by year five. The Boise location had 45-93 graduates over a four-year period.

The Bachelor of Science in Sustainable Food Systems was approved by the Board in March 2015. The initial program proposal submitted to the Board did not provide enrollment and graduate projections over three-year period because those were not collected as part of the proposal process at that time. While

projections were not provided for that time period, the program proposal did include a statement indicating the program anticipated 12 initial enrollments with 10-12 graduates per year after year four. Based on the actual numbers provided in the report, the program did not meet enrollment or graduate projections. The program recently updated their curriculum to reduce the number of credits to 120 based on student feedback with hopes of broadening the audience for this interdisciplinary program. There are also efforts underway to alleviate confusion with an existing Urban Agriculture major that may have been a factor in the lower enrollment numbers.

**BOARD ACTION**

This item is for informational purposes only.

**ATTACHMENT 1**

# NEW PROGRAM REVIEW

Idaho State Board of Education

| | |
|---|---|
| Institution: | Boise State University |
| Program: | MS Accountancy (online) |

## Elements for Report

1. Executive Summary of the program report

The Master of Science in Accountancy online accountancy program was approved by the Idaho State Board of Education in February 2017. The program serves the needs of people wanting to sit for the Certified Public Accountant (CPA) exam, but do not have the required number of academic credits to sit for the exam (which requires having 150 credit hours) and are also unable to attend in-person. Offering the master's program both in person and online helps the university meet a core theme of providing "students of all backgrounds with access to graduate educational opportunities in formats that are appropriate, flexible, accessible, and affordable." As shown below, enrollments and the number of graduates have not yet met the projections made in the proposal. One reason for this was that many students who wanted to enter the program had varying background and gaps in their education, and thus, needed to take foundational courses before they could enroll and succeed in the MS Accountancy program. Thus, effective Fall 2020, Department of Accountancy introduced MS Accountancy Foundations (Online) program in which students take a set of additional courses before moving onto the courses in MS Accountancy (Online). Enrollment numbers in the MS Accountancy Foundations program already reached 62 in FY 22, which is not shown below. Thus, there is a total of 113 (62 + 51) students enrolled in combined MS Accountancy Online programs in FY 22, surpassing the projected number of 106. We also expect that the number of graduates will increase substantially in a couple of years when both programs are more mature.

2. Brief overview of the program

The Master of Science in Accountancy online accountancy program curriculum is designed for people who want to advance their knowledge in accounting and prepare for careers in the accounting profession. The program benefits the Idaho economy by keeping residents in the state while they participate in the program and maintain their current job(s). The program offers a variety of advanced topics including financial reporting, audit, tax, data analytics, accounting information systems, managerial accounting, and research methodology.

3. Enrollment and Graduates

| **Enrollments** | **Implementation Year: FY2018** | FY2019 | FY2020 | FY2021 | FY2022 |
|---|---|---|---|---|---|
| Actual (fall headcount) | 12 | 36 | 49 | 53 | 51 |
| Projected (Fall headcount) | 22 | 90 | 106 | 106 | 106 |

| **Number of Graduates** | **Implementation Year: FY2018** | FY2019 | FY2020 | FY2021 | FY2022 |
|---|---|---|---|---|---|
| Actual | 0 | 4 | 22 | 24 | Not Available |
| Projected | 0 | 8 | 68 | 63 | 63 |

**ATTACHMENT 1**

Projected Enrollments and Graduates from original proposal for reference:

| **Proposed Program: Projected Enrollments and Graduates First Five Years** | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Program Name: Master of Science in Accountancy (ONLINE)** | | | | | | | | | | | |
| **Projected Fall Term Headcount Enrollment in Program** | | | | | | **Projected Annual Number of Graduates From Program** | | | | | |
| FY17 (first year) | FY18 | FY19 | FY20 | FY21 | FY22 | FY17 (first year) | FY18 | FY19 | FY20 | FY21 | FY22 |
| 22 | 90 | 106 | 106 | 106 | 106 | 0 | 8 | 68 | 63 | 63 | 63 |

**ATTACHMENT 2**

# NEW PROGRAM REVIEW

Idaho State Board of Education

| | |
|---|---|
| Institution: | Boise State University |
| Program: | BS Business and Economic Analytics |

## Elements for Report

1. Executive Summary of the program report

The Bachelor of Science in Business and Economic Analytics program was approved by the Idaho State Board of Education in March 2015. This collaborative program, co-owned by ITM&SCM and Economics Departments, is designed to produce data scientists who will help address the growing challenge presented by *big data*, a term that refers to large and complex data sets that are difficult to process using traditional methodologies. Graduates will have demonstrated competence in a core skillset required for a career as a data analyst. The Bachelor of Science in Business and Economic Analytics program has maintained a steady enrollment, higher than originally projected in (FY22). The number of graduates exceeded projected levels by year four of the program (FY19). The actual number of graduates remained steady and in alignment with projections for two years (FY19 and FY20) although there was a dip in FY21, likely partially due to the effect of the pandemic.

2. Brief overview of the program

The Bachelor of Science in Business and Economic Analytics is housed in the Department of Information Technology & Supply Chain Management in the College of Business and Economics. It is operated and managed in collaboration with the Department of Economics. The data scientists the program produces have a deep understanding of econometrics and data modeling and are capable of spanning the gap between abstract mathematical constructs and actionable information. The data scientists are capable of solving complex problems making use of their expertise in (1) statistical methods and econometrics, (2) database design, structure, and implementation, (3) computer scripting languages, and (4) core business and economics concepts.

3. Enrollment and Graduates

| **Enrollments** | **Implementation Year: FY2016** | FY2017 | FY2018 | FY2019 | FY2020 | FY2021 | FY2022 |
|---|---|---|---|---|---|---|---|
| Actual (fall headcount) | 19 | 39 | 40 | 52 | 42 | 43 | 73 |
| Projected (fall headcount) | 50 | 50 | 50 | 50 | 50 | 50 | 50 |

| **Number of Graduates** | **Implementation Year: FY2016** | FY2017 | FY2018 | FY2019 | FY2020 | FY2021 | FY2022 |
|---|---|---|---|---|---|---|---|
| Actual | 0 | 3 | 8 | 10 | 10 | 2 | Not Available |
| Projected | 0 | 10 | 10 | 10 | 10 | 10 | 10 |

**ATTACHMENT 2**

**Projected Enrollments and Graduates from original proposal – for reference**

| Institution | Relevant Enrollment Data | | | Number of Graduates | | | Graduate Rate |
|---|---|---|---|---|---|---|---|
| | Current | Year 1 Previous | Year 2 Previous | Current | Year 1 Previous | Year 2 Previous | |
| BSU | Projected a minimum enrollment 50 students | | | Project a minimum number of graduates will be 10 per year | | | 10 per year |

**ATTACHMENT 3**

# NEW PROGRAM REVIEW

Idaho State Board of Education

| | |
|---|---|
| Institution: | Boise State University |
| Program: | MS/Master's Economics |

**Elements for Report**

1. Executive Summary of the program report

The Master of Science (MS) in Economics and the Master of Economics (M.Ec) were approved by the Idaho State Board of Education in December 2016. The two graduate programs have the same core requirements while providing students with advanced training in current microeconomic theory, quantitative economics, econometrics, and other fields of economics as well as rigorous research methods. Actual enrollment and graduate numbers (shown in the table) are below the projected numbers provided in the program proposal. Partially this is due to somewhat unreasonable enrollment projections for a thesis-based and research focused master's program. Based on a quick analysis, out of 18 thesis-based (non-professional) master's programs at Boise State University, master's in Economics has a larger enrollment and cohort size than half of them in fall 21.

This combined program was placed in the 5th quintile during Program Prioritization in 20-21. Thus, the program identified and / or completed following actions to improve enrollment and graduation based on their program prioritization action plan:

- Work with regional universities to better connect with their undergraduate programs. The program has successfully connected with Idaho State University and has participated in a graduate college fair organized by BYU.
- Better publicize the graduate programs and certificate in econometrics:
  - Created and posted print materials adverting the programs across campus
  - Added video FAQ to graduate program website
  - Added job placement information of graduates to graduate program website
  - Adding student testimonials to graduate program website
- Filled retiring faculty position by a new visiting faculty member with expertise to offer a wider array of graduate electives and graduate thesis supervision.
- Market and publicize *Econometrics Graduate Certificate* and utilize it as a pathway into the Economics master's programs.
- Establish more balanced distribution of graduate electives in order to help students graduate on time.

2. Brief overview of the program

The MS in Economics and M.Ec of Economics programs prepare students for careers that regularly use economic concepts and quantitative methods to analyze and solve real-world problems faced by businesses, government, and society. Graduates are capable of conducting independent analyses, and use their skills and knowledge to develop and shape policy, to inform business decisions, to analyze data, and to manage organizations.

3. Enrollment and Graduates

Please note that the data in the tables below reflects combined enrollment and graduate numbers in the two tracks of the MS/Master's in/of Economics.

| Enrollments | Implementation Year: FY2018 | FY2019 | FY2020 | FY2021 | FY2022 |
|---|---|---|---|---|---|
| Actual (fall headcount) | 7 | 8 | 9 | 12 | 15 |
| Projected (fall headcount) | 16 | 26 | 31 | 37 | 41 |

| Number of Graduates | Implementation Year: FY2018 | FY2019 | FY2020 | FY2021 | FY2022 |
|---|---|---|---|---|---|
| Actual | 2 | 1 | 6 | 4 | Not Available |
| Projected | 0 | 2 | 8 | 10 | 12 |

Projected Enrollments and Graduates from original proposal for reference:

| **Proposed Program: Projected Enrollments and Graduates First Five Years** | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Program Name: MS in Economics and Master in Economics (M.Ec.)** | | | | | | | | | | | |
| **Projected Fall Term Headcount Enrollment in Program** | | | | | | **Projected Annual Number of Graduates From Program** | | | | | |
| FY 18 (first year) | FY 19 | FY 20 | FY 21 | FY 22 | FY 23 | FY 18 (first year) | FY 19 | FY 20 | FY 21 | FY 22 | FY 23 |
| 16 | 26 | 31 | 37 | 41 | 42 | 0 | 2 | 8 | 10 | 12 | 12 |

**ATTACHMENT 4**

# NEW PROGRAM REVIEW

Idaho Board of Education

| | |
|---|---|
| Institution: | Boise State University |
| Program: | BS Games, Interactive Media, and Mobile |

## Elements for Report

1. Executive Summary of the program report

The Bachelor of Science in Games, Interactive Media, and Mobile (GIMM) was approved by the Idaho State Board of Education in April 2015. The GIMM program is targeted at students who are interested in working with mobile applications, interactive media, and game development as programmers, interactive developers, and interactive media project managers. The GIMM program's actual enrollments exceeded enrollment projections at year four of the program (FY19). Enrollments have been steadily increasing year over year. The actual number of graduates has also been increasing and met projections at year five of the program (FY20).

2. Brief overview of the program

The Bachelor of Science in Games, Interactive Media, and Mobile (GIMM) is a broad transdisciplinary program that draws its faculty and expertise from four different academic units (Art, Computer Science, Information Technology & Supply Chain Management, and Educational Technology). The program provides a broad, comprehensive, and technologically focused program of study that includes courses in game development, interactive media creation, mobile application development, information technology management, art and graphic design. The program produces client-side developers capable of creating immersive and interactive experiences with both software and mobile hardware.

3. Enrollment and Graduates

| Enrollments | Implementation Year: FY2016 | FY2017 | FY2018 | FY2019 | FY2020 | FY2021 | FY2022 |
|---|---|---|---|---|---|---|---|
| Actual (fall headcount) | 41 | 122 | 176 | 223 | 254 | 250 | 224 |
| Projected (fall headcount) | | | | 200 | 200 | 200 | 200 |

| Number of Graduates | Implementation Year: FY2016 | FY2017 | FY2018 | FY2019 | FY2020 | FY2021 | FY2022 |
|---|---|---|---|---|---|---|---|
| Actual | 0 | 0 | 0 | 18 | 38 | 48 | Not available |
| Projected | | | | 40 | 40 | 40 | 40 |

**Projected Enrollments/Graduates from original proposal for reference**

| Institution | Relevant Enrollment Data | | | Number of Graduates | | | Graduate Rate |
|---|---|---|---|---|---|---|---|
| | Current | Year 1 Previous | Year 2 Previous | Current | Year 1 Previous | Year 2 Previous | |

**ATTACHMENT 4**

| | | | |
|---|---|---|---|
| Boise State BS in Games, Interactive Media, and Mobile | Projected a minimum overall enrollment of 200 students, once the program is fully up and running | Project that the minimum number of graduates will be 40 per year, once the program is fully up and running | 40 per year |

**ATTACHMENT 5**

# NEW PROGRAM REVIEW

Idaho State Board of Education

| | |
|---|---|
| Institution: | Boise State University |
| Program: | BS Imaging Sciences |

**Elements for Report**

1. Executive Summary of the program report

The Bachelor of Science in Imaging Sciences (BSIS) program was approved by the Idaho State Board of Education in April 2015. The BS in Imaging Sciences is a fully online degree completion program. This program meets the needs of working professionals in the state of Idaho and across the nation in medical imaging sciences who are able to seek promotion and job advancement due to having a Bachelor of Science degree. Only students holding at least an associate's degree in the field of medical imaging sciences and current credentials from the American Registry of Radiologic Technologists or equivalent are admitted into the program. As shown below enrollments are solid in this program and increasing. There are 132 students currently enrolled in FY 2022. Similarly, number of graduates are gradually increasing although falls short of the projections.

The original projections for the BSIS program were established by Everspring marketing company who was subsequently not retained for marketing and recruitment measures. We envisioned and still aim to enroll up to 100 new BSIS students each fall and spring semesters. The Boise State Extended Studies continues to hone its marketing and recruitment methods to focus on the eligible audience for the BSIS program. There have been 412 total students enrolled in the BSIS program, with 196 graduates and 132 currently enrolled, the program holds a higher than national average 79.6% retention rate. Faculty, student success coaches, and the BSIS program director work hard to establish manageable program progression plans for each student. COVID-19 has hindered many students from beginning and others from continuing due to personal or family illness and/or workload and family demands. The program stays in contact with stop-out students to create return-to-graduation plans and has been successful in helping many students return to complete their degree.

The BSIS program is working with Extended Studies and the School of Allied Health Sciences (SAHS) to advance marketing efforts in the clinical realm. Many BSIS students come from word-of-mouth referrals. Focus is being given on working with state and local healthcare facility educational offices, medical imaging directors and continuing education officers to identify methods in which Boise State can be a resource for their employees to complete a bachelor degree. The is hope of hiring a full-time recruiter that will facilitate recruitment efforts in both the clinical and educational environments to market the BSIS and other online SAHS programs.

With national deficits in qualified employee candidates in all modalities of medical imaging, the Department of Radiologic Sciences will propose this spring 2022 to expand Boise State's campus borders to offer programs for those interested in new medical imaging credentialing opportunities. Unlike the BSIS program, which provides a method for student to remain in their current field and complete a bachelor degree, the Advanced Medical Imaging (AMI) program will provide opportunities for students to move into a new field of focus. The Department of Radiologic Sciences will now regionally and nationally offer students the option to complete a BS degree and/or move into a new modality of medical imaging.

2. Brief overview of the program

The Bachelor of Science in Imaging Sciences learning outcomes include: promoting a safe environment for the patient, self and others by providing useful patient education, contributing with an informed and educated perspective as a health care provider and recognizing an imaging technologists overall inter-professional and social impact on patient outcomes; effectively analyze resources and advance research within the profession to promote life-long learning and knowledge sharing, and employ critical thinking and decision making strategies in leveraging technology to improve quality and efficiencies within the health care system. The BSIS program is a degree completion program for credentialed medical imagers wishing to remain in their field of focus and complete their bachelor degree for advancement opportunities.

3. Enrollment and Graduates

| **Enrollments** | **Implementation Year: FY2016** | FY2017 | FY2018 | FY2019 | FY2020 | FY2021 | FY2022 |
|---|---|---|---|---|---|---|---|
| Actual (fall headcount) | 5 | 34 | 61 | 81 | 89 | 135 | 132 |
| Projected (fall headcount) | | | 200 | 200 | 200 | 200 | 200 |

| **Number of Graduates** | **Implementation Year: FY2016** | FY2017 | FY2018 | FY2019 | FY2020 | FY2021 | FY2022 |
|---|---|---|---|---|---|---|---|
| Actual | 0 | 8 | 22 | 26 | 42 | 41 | 57(F21only) |
| Projected | | | 180 | 180 | 180 | 180 | 180 |

Projected Enrollments and Graduates from original proposal for reference

| **Institution** | **Relevant Enrollment Data** | | | **Number of Graduates** | | | **Graduate Rate** |
|---|---|---|---|---|---|---|---|
| | Current (Fall 2014) | Year 1 Previous | Year 2 Previous | Current (2013-14) | Year 1 Previous | Year 2 Previous | |
| BS in Imaging Sciences | Projected enrollment of ~200 incoming students per year by 3rd year of program | | | Project roughly 180 graduates per year by 3rd year of program | | | ~ 180 graduates per year |

**ATTACHMENT 6**

# NEW PROGRAM REVIEW

Idaho State Board of Education

| | |
|---|---|
| **Institution:** | **Idaho State University** |
| **Program:** | **MA Teaching** |

## Elements for Report

1. **Executive Summary of the program report**
   - The MAT program was originally designed to support the growing need for qualified teachers for Idaho schools, and it has grown to support the need for certified teachers all over the country.
   - Enrollment has exceeded expectations. Anticipated number of accepted students was 20 per academic year. The program is averaging 40 new students each academic year.

2. **Brief overview of the program**
   Through the MAT program, candidates can receive both a Master's Degree and Idaho Teacher Certification in as little as four semesters.

   Two different options are available leading to Idaho Teacher Certification, both requiring a bachelor's degree for admission. Neither requires any previous teaching experience.

   - Alternate Authorization: This option is for teachers in the state of Idaho who have been hired without certification (emergency hires/alternative authorization). This option is completed within 3 years.
   - Traditional Option: This option is for candidates with a bachelor's degree who would like to pursue Idaho Teacher Certification. This option can be completed in four semesters.

3. **Enrollment and Graduates**
   a. In the tables below, show the projected enrollment in the program and number of graduates from the program (section 14 of proposal). Please note cohort years will precede fiscal year description (i.e., FY19 would have Fall 2018 cohort).

| Enrollments | Implementation Year: FY__18__ | FY__18_ _ | FY__19_ _ | FY__20_ _ | FY_21__ _ | FY__22_ _ |
|---|---|---|---|---|---|---|
| Actual (fall headcount) | 0 | 6 | 27 | 48 | 58 | 60 |

| Number of Graduates | Implementation: FY_18___ | FY__18_ _ | FY__19_ _ | FY__20_ _ | FY_21__ _ | FY__22_ _ |
|---|---|---|---|---|---|---|
| Actual | 0 | 0 | 1 | 25 | 17 | * |

*No data to report.

ATTACHMENT 7

# NEW PROGRAM REVIEW

Idaho State Board of Education

| | |
|---|---|
| **Institution:** | **Idaho State University** |
| **Program:** | **Master of Taxation** |

**Elements for Report**

1. Executive Summary of the program report

The Master of Taxation program was implemented in Fall 2018. Based on internal review processes, this program stopped enrolling students at the end FY 2020. Enrollments and graduates never met projections. In addition, due to the loss of a faculty line, faculty resources are insufficient to offer the curriculum.

2. Brief overview of the program

The Master of Taxation degree complemented ISU's undergraduate and graduate accounting programs. The program built on existing courses from the Master of Accountancy and Master of Business Administration programs and required four new tax graduate-level courses. The program was offered in Pocatello.

3. **Enrollment and Graduates**

a. In the tables below, show the projected enrollment in the program and number of graduates from the program (section 14 of proposal). Please note cohort years will precede fiscal year description (i.e., FY19 would have Fall 2018 cohort).

| Enrollments | Implementation Year: FY__18__ | FY__19_ _ | FY__20_ _ | FY__21_ _ | FY_22__ _ | FY__23_ _ |
|---|---|---|---|---|---|---|
| Actual (fall headcount) | 2 | 7 | 2 | 0 | - | - |
| Projected | 24 | 26 | 28 | 30 | 32 | 34 |

| Number of Graduates | Implementation: FY_18___ | FY__19_ _ | FY__20_ _ | FY__21_ _ | FY_22__ _ | FY__23_ _ |
|---|---|---|---|---|---|---|
| Actual | 2 | 6 | 2 | 0 | - | - |
| Projected | 22 | 24 | 26 | 28 | 30 | 32 |

*No data to report.

**ATTACHMENT 8**

# NEW PROGRAM REVIEW

Idaho State Board of Education

| | |
|---|---|
| **Institution:** | **University of Idaho** |
| **Program:** | **1st Year Law Program to Boise** |

## Elements for Report

1. Executive Summary of the program report
   The College of Law enrolled its first class of first-year law students in Boise in Fall 2017, and that class graduated with a J.D. degree in Spring 2020. Every year since Fall 2017, the College of Law has enrolled first-year law students in both Boise and Moscow, with similar class sizes and entering credentials in both locations. In Fall 2020, upon the closure of Concordia University School of Law, the College of Law admitted approximately 100 second-year and third-year transfer students into the Boise location, temporarily increasing the total student body size in Boise in FY21 to 264 students and in FY22 to 251 students. In future fiscal years, the College anticipates enrolling about 80 first-year law students in Boise each fall, for a total anticipated Boise student body size of about 240 students. In December 2021, in order to accommodate growing demand from law school applicants, the College relocated its Boise operations from the Idaho Law and Justice Learning Center to the 501 W. Front Street Building. To date, the College of Law's accreditor, the American Bar Association, has determined that the College of Law's Boise operations comply with accreditation standards.

2. Brief overview of the program
   The University of Idaho, College of Law, expanded curricular offerings at the Boise campus of the University of Idaho College Law by offering first-year law courses at that campus. This expansion completed the dual-location model that the University of Idaho has been developing with the Board's approval and under its supervision since 2008. The dual-location model permitted students to take all course work required to earn the Juris Doctor degree at either the Moscow campus or the Boise campus, or both.

3. Enrollment and Graduates
   a. In the tables below, show the projected enrollment in the program and number of graduates from the program (section 14 of proposal). Please note cohort years will precede fiscal year description (i.e., FY19 would have Fall 2018 cohort).

| Enrollments | Implementation Year: FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 |
|---|---|---|---|---|---|---|
| Actual (fall headcount) (Boise only) | 143 | 160 | 180 | 264 | 251 | |
| Actual (fall headcount) (Boise and Moscow) | 310 | 314 | 335 | 461 | 436 | |

**ATTACHMENT 8**

| | | | | | | |
|---|---|---|---|---|---|---|
| Projections (Boise and Moscow) | 310 | 320 | 330 | 340 | 340 | |

| Number of Graduates | Implementation: FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 |
|---|---|---|---|---|---|---|
| Actual (Boise only) | 45 | 39 | 56 | 93 | | |
| Actual (Boise and Moscow) | 97 | 95 | 100 | 137 | | |
| Projections (Boise and Moscow) | 95 | 90 | 115 | 115 | 115 | 115 |

**ATTACHMENT 9**

# NEW PROGRAM REVIEW

Idaho State Board of Education

| | |
|---|---|
| **Institution:** | **University of Idaho** |
| **Program:** | **Sustainable Food Systems** |

## Elements for Report

1. Executive Summary of the program report

   The Sustainable Food Systems (SFS) degree at University of Idaho was designed and initiated to take a wholistic approach to the study of food, which is required to solve the increasingly complex issues around food security. The major was initiated in 2017, and the curriculum was recently updated (2021) to better reflect the diversity of student interests in the degree program. SFS is truly an interdisciplinary program, and the updated curriculum provides students with more options of campus-wide elective courses relating to sustainability and food. In addition, a SFS minor was created (approved in Fall 2021) to serve students who want to know more about food systems but also want to gain greater disciplinary depth in specific areas within or outside of the College of Agricultural and Life Sciences (CALS). Over the past 3 years, relationships have been established with CALS Admissions Counselors with regular contact from instruction to provide updates, information and recruitment materials to increase knowledge of this degree option.

2. Brief overview of the program

   The Sustainable Food Systems is a college-wide major that takes an interdisciplinary approach to the study of food and farming systems. The degree is designed to provide a science-based understanding of the many facets of food- from sustainable production, food chemistry and safety, to policy and marketing. Students tie everything together in sophomore and senior level courses that explore local, regional and global food systems. Many laboratory-based courses offer hands-on experience, and students may specialize in specific areas of the food system. Students gain hands-on experience through required practicum courses and internships, and can put concepts taught in courses to work while operating the campus certified organic farm.

3. Enrollment and Graduates

   a. In the tables below, show the projected enrollment in the program and number of graduates from the program (section 14 of proposal). Please note cohort years will precede fiscal year description (i.e., FY19 would have Fall 2018 cohort).

| Enrollments | Implementation Year: FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 |
|---|---|---|---|---|---|---|
| Actual (fall headcount) | | 3 | 2 | 2 | 3 | 5 |
| Projections | | 2 | 10 | 10 | | |

| Number of Graduates | Implementation: FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 |
|---|---|---|---|---|---|---|

**ATTACHMENT 9**

| | | | | | | |
|---|---|---|---|---|---|---|
| Actual | | 0 | 0 | 1 | 1 | 1 |
| Projections | | | | 10 | 10 | 10 |