This report summarizes employment pathways for graduates of the Itasca Community College (ICC), Natural Resource (NR) Program as they enter the workforce. Students graduating from the NR Program are conferred an Associate of Applied Science (AAS) degree in Natural Resources. The Program provides an education designed to prepare a workforce ready for employment in the broad field of Natural Resource Management. Data provided in this summary is derived from two sources. First, the Northeast Higher Education District (NHED), Office of Institutional Research. Second, the Natural Resource Program internal tracking of graduates.

Data provided by NHED originates from a “Student Success” survey, conducted one year post graduation. This survey provides insight on whether students chose to go directly into the workforce, or continue their education, identifies if they are unable to find work, or unavailable to work. This survey has utilized 210 graduates from 2004 through 2015 to conduct analysis. Of this total, 190 responded to the survey, a 91.1% response rate. From the responses (n=190) only two students (1.1%) are identified as “available for work but unemployed”. Additionally, four students are identified as “unavailable for work” (2.1%). All others either were employed, or had chosen to continue their education (96.8%).

Graph 1. Results of the Student Success survey administered one year after graduation by NHED Office of Institutional Research.

Status of AAS-NR Graduates
2004-2015

- Related/ Unrelated Work
- Continuing Education
For some students, moving directly into the workforce is a primary goal. Nearly one-quarter (22.6%) of the graduates elect this option. Typical employment for these students are technician classifications. An example of a recent job posting is included as an attachment to this summary.

While we are unable to further evaluate the respondents that indicate “unrelated work”, there is some anecdotal evidence that suggests these individuals have gained employment in sectors aligned with the forest industry but not related to natural resource management. Examples include paper mill (Blandin Paper), forest products equipment companies (Ponsee) and right-of-way agencies (Lake States Tree Service). For those who have elected unrelated work (6.3% of the respondents), anecdotal evidence again indicates many have chosen to stay in the local area.

Achieving an advanced degree is the next step after obtaining an AAS degree for a large number of students. Primary choices for advanced degrees include the University of Minnesota in St. Paul, University of Minnesota in Crookston, and the University of Wisconsin in Stevens Point. Based on survey results, 67.9% of the graduates elected to advance their education.

Again, it should be noted that only 1.1% are classed as “Available for Work, but Unemployed”. The work status of all 210 graduates surveyed is summarized in Graph 2. The graph also includes data for students who did not respond to the survey (8.9%), these are classified as “status unknown”.

Graph 2: Summary of Graduates Work Status, First Year Post Graduation.
The second source of data for this report is from individual student contacts made by the NR Program. This data includes students who terminate their education with Associate of Applied Science degree and also tracks students gaining employment after the completion of their advanced degrees. The Program has been able to track about 45% of the graduates. The data represents 50 students who graduated from Itasca since 2010 (50 out of 113, or 44.2%).

Graph 3 provides a summary of the type of employment that students engage in, including those that have advanced degrees. It should be noted that this data likely over represents employment classes for AAS degree students, since graduates from Itasca Community College after 2013 would not yet have completed their advanced degrees. The data provided in Graph 3 indicates the type employment (job classification) and is displayed to show the mix of educational degrees in each.


Students receiving AAS or AAS and BS degrees in Natural Resources are employed by a wide variety of agencies, including County, State, Federal and Private entities. The data indicating employment agency by employing group is shown in Graph 4.

The largest employer of graduates are State Governmental Units with 48% of the graduates. Students in this classification include State Department of Natural Resources, State Conservation Districts, State Recreation Departments and State Fire Agencies. The data includes students working in Minnesota State Government, as well as North Dakota and Wisconsin.

The next largest employment agencies are in the private land management sector with 20% of the graduates. Agencies include private forest consultants, private forest industry and land management contractors.
County forestland management also employs a large number of graduates at 16%. Fifteen northern counties in Minnesota have Land Departments that are charged with managing approximately 2.8 million acres 3,000,000 of land. These agencies are an important employment source for Natural Resource students.

The Federal Government also employs a large number of graduates, at 14%. Agencies included in this sector include the US Forest Service, the Bureau of Indian Affairs, and the US Army Corps of Engineers.

Graph 4. Graduate Employment by Agency Type.