National Weather Service Riverton, WY STEM-Related Activities – 2016

On the morning of May 17, 2016, nearly 230 young women in grades 7 through 12 gathered at Central Wyoming College in Riverton, Wyoming. These young women were the participants in the eighth Women in Science conference, an all-day event where students were able to interactively learn about various careers in the fields of science, technology, engineering, and mathematics (STEM). Students were able to participate in three, 55-minute workshops during which they were able to meet with professionals in various fields to have an interactive introduction to their careers. The represented careers included this year were: Veterinary Science, Paleontology, Forensic Science, Architecture, Environmental Health, Civil Engineering, Investigative Operations, Wildlife Forensics, Petroleum Engineering, and Aviation Meteorology. Feedback from students, teachers, and speakers was quite positive from this event.

Committee members and volunteers arrived early on the day of the event to begin preparing the CWC gymnasium which served as the venue for student registration, opening ceremonies, career exploration booths, breakfast, and lunch. Students began to arrive around 8:00 a.m., with the first of three workshops starting at 9:35 a.m. During these workshops, students received interactive introductions to STEM related careers. All speakers are strongly encouraged to provide a hands-on learning experience where students can truly understand job opportunities within a specific career. Our point-of-contact for the workshop presenters, Peggy Peterson, explains, “By offering these hands-on, laboratory-type, interactive sessions, the students are able to experience, first-hand, the professional women’s careers. We hope to encourage the students by providing these meaningful experiences and role models in the STEM fields.” The day ended for committee members and Central Wyoming College staff around 3:30 p.m.

Guests and career exploration booths from Central Wyoming College, NOAA’s National Weather Service, the Wyoming Dinosaur Center and Dig Site, Natural Resources Conservation Service, Dragonfly TV, Sage West Healthcare and Guardian Flight, Fremont County Sheriff Department, Bureau of Land Management, United States Department of Agriculture, Bureau of Indian Affairs/Forestry Division, Wyoming Department of Agriculture, Riverton Workforce Center, Wind River Job Corps, and Wyoming Game and Fish had their displays arranged throughout the CWC gymnasium where students visited and learned about the wide range of STEM careers during registration and their lunch period. The NWS in Riverton had tables which featured many interactive weather elements, informational handouts about weather and career opportunities, NWS rulers and badge holders, and information on continuing education, financial aid to include information on the Hathaway scholarships, and colleges. The tables were staffed by Chris Jones (Meteorologist in Charge), Nancy Eustice (Information Technology Officer), Rob McFall (Electronic Systems Analyst), Peggy Peterson (Electronics Technician), Curt Lutz (Electronic Technician), Kayt Branham (General Forecaster), and Jim Fahey (Service Hydrologist). In addition to tending to the display, everyone served as volunteers during the day where they led students to their workshops and ensured the presenters had what they needed for their presentations.

This year’s event hosted roughly 225 students, 20-25 teachers, 10 workshops with 16 speakers, 14 career exploration booths, 20 volunteers, and just 3 committee/board members. There were 10 schools represented at the conference, with approximately 25% of the student tally being from schools on the Wind River Reservation (Wyoming Indian Middle & High schools) and 30% being Native American. 63% of the students were White with the remaining 27% registering as African American, Asian, or Hispanic. The 7th and 8th grade students comprised 83% of student attendance while 17% were young women in the 9th through 12th grades. Powell High School traveled the greatest distance to attend, driving 160 miles (approximately three and a half hours) one way to participate. Several other schools made drives of 1.5-2.5 hours one way. Eight schools from Fremont county (NWS Riverton’s home county) were also in attendance.

The 2016 Women in Science planning committee members continue to receive supporting comments from students, teachers, and speakers. From workshop presenter, Sabrina Hamner (Petroleum Engineer for the Wyoming Oil and Gas
Conservation Commission), “Thank you again for all of your efforts and help yesterday at the Women in Science fair at the college. It was a lot of fun, and the students were receptive to our activities. I remember when I was a student and attended it 10 years ago in high school. It made an impact on myself, especially at that age when guidance is so valuable.” Plans are already in the works for a Men in Science conference (for young men in grades 7-12) in 2017.

NOAA’s National Weather Service Riverton WFO has been heavily involved in the development of these conferences since 2004, resulting in several weather service employees filling the roles of officers, board members, planning committee members, and/or volunteers on the day of the conference. The planning committee meets regularly throughout the year to organize the number of workshop presenters, sponsors, vendors, volunteers, student registration, and search for grant opportunities and local funding for necessary funding. Attendance has increased over the years and is now limited to a first-come, first-served basis due to limited resources. With the continued success of these events, the Women/Men in Science planning committee will continue to alternate events each year. Plans are in development for a fifth Men in Science conference which will be held in May of 2017. If you have questions, or would like to learn more about these conferences, please contact Katy Branham or Peggy Peterson through our email addresses: katy.branham@noaa.gov or peggy.peterson@noaa.gov.

For more information about the upcoming conference, please visit the website at www.wyomingwis.org.