**W3192 Multistate Wildland Firefighter Project**

**Accomplishment Report 2020**

**Project Number:** W3193

**Project Title:** Improving Safety and Health of Wildland Firefighters Through Personal Protective Clothing (formerly WDC39)

**Period Covered:** October 2019-October 2020

**Date of Report:** October 6, 2020

**Annual Meeting Date:** September 28, 2020, 3:00-4:00 EST; Meeting held via Zoom conference

**Participants:** “McGuire, Mark (mmcguire@uidaho.edu)- University of Idaho;” “McQuerry, Meredith (mmcquerry@jmc.fsu.edu)- Florida State University;” “Martindale, Addie (addiemartindate@gmail.com) - Georgia Southern University;” “McKinney, Ellen (emckinne@iastate.edu) - Iowa State University;” “Stannard, Casey (stannard@lsu.edu) - Louisiana State University;” “Xia, Sibei (sibeixia@lsu.edu) - Louisiana State University;” “Meyer, Sonya (sonyam@uidaho.edu) - University of Idaho;” “Easter, Elizabeth (Elizabeth.easter@uky.edu) - University of Kentucky;” “Hwang, Chanmi (chanmi.hwang@wsu.edu) - Washington State University;” “Den Hartung, Emil (eadenhar@ncsu.edu) – North Carolina State University (not present at meeting)”

**Brief summary of minutes of annual meeting:**

The meeting was called to order by Meredith McQuerry. Sonya Meyer volunteered to serve as secretary for the meeting.

Sibei Xia was introduced as a new member of our committee from Louisiana State University. Sibei has a background in functional apparel design and computer science.

Dr. Mark McGuire, Associate Dean for Research and Director of Experiment Stations, College of Agricultural and Life Sciences University of Idaho, was introduced to the group. Mark provided an overview of the function of multistate committees and reporting process. He stressed the importance of listing impact statements as a separate list with the annual reports. This allows for quick access to the impacts for national reporting and reviews. He also provided information on resources available for multistate committees.

**Reports from Stations and Institutions for 2020:**

**Florida State University and the University of Kentucky** – Meredith reported that she and Dr. Easter started work on Objectives 2 and 3 of the project. After multiple discussions with a PPE manufacturer and Independent Service Providers (ISPs), they found that recommended care and maintenance of PPE exists for various users, except wildland firefighters. Currently, there is a proposed National Firefighter Protection Association (NFPA) standard draft for the Selection, Care, and Maintenance of Wildland Firefighting Protective Clothing. Little to no research exists regarding when, where, and how wildland firefighters clean their gear. Therefore, they plan to survey wildland firefighters across the United States, in partnership with CalFire, regarding the maintenance and care practices of their PPE. The survey is being developed with the assistance of a University of Kentucky graduate student.

**University of Idaho** – Sonya collaborated with an Extension Specialist and dietitian conducting research on nutrient needs of wildland firefighters being met through fire camp caterers. Previous anecdotal information from local wildland firefighters included comments related to PPE design not having enough pockets for snack foods while on fire lines. The UI team developed a survey addressing both nutrition knowledge and needs and PPE. PPE survey questions included modifications made to PPE by the survey participant and team members. The survey was developed through focus group interviews. Three Hot Shot crews in the Inland Northwest were identified for data collection. However, due to COVID-19’s impact on the university’s and Hot Shot crews’ training schedules, data collection has not yet occurred. This work addresses project Objectives 2 and 3.

**Iowa State University** – Ellen McKinney reported current work on analysis of firefighter gloves. This work is supported by a FEMA grant and will relate to Objective 1.

**Louisiana State University** – Casey searched online sources for PPE size charts which relates to Objective 1 and 2 on PPE design modifications. Meredith mentioned that the 1977 NFPA specifications for wildland firefighters PPE contain size charts.

**Review Plans and 2021 Goal Setting:**

The planned surveys (Idaho and Florida State/Kentucky) described in the meeting will be distributed in the coming year. Survey instruments will be shared with all committee members for additional input and use. Several questions were raised during the reports relating to PPE design and opportunities for the other states to participate in survey development and/or distribution.

Additional resources were identified for data populations, i.e. Hot Shot crews outside of the Inland North West, LSU Fire Science School, Florida State Fire College, etc.

Washington State and University of Idaho will collaborate on data collection and analysis of survey developed at University of Idaho.

Sibei Xia shared her ability and access to programing to convert qualitative data into quantitative data from focus group and individual interviews.

Dr. McGuire shared with the group that there was not a limit on the number of times a committee can meet during the year. However, we are required to hold one official meeting. He suggested the group might consider meeting earlier in the year to finalize surveys. The group will endeavor to meet remotely in late 2020 or early 2021 to finalize the surveys and share potential populations to investigate.

**Election of Governing Positions:**

Rather than seeking nominations, the committee requested volunteers for Committee Chair and Secretary.

Meredith McQuerry volunteered to serve as Committee Chair for the coming year.

Casey Stannard volunteered to serve as Committee Secretary for the same time period.

It was suggested that Secretary position also serve as Vice Chair and move into the chair position. A formal decision was not made on this suggestion.

**Next Annual Meeting:**

The next annual meeting for the committee was tentatively set for Baton Rouge, LA, LSU host institution, possible in early June. Casey will send a Doodle Poll to committee members to identify dates.

**Accomplishments:**

**Short-term Outcomes:** None for year one.

**Outputs:** surveys were drafted for both the UKY/FSU study and the UI study.

**Impacts from Year One:**

1. (relating to Objectives 2 and 3) PPE stakeholders were consulted and it was determined that care of wildland firefighter clothing is not well understood. A survey was planned to investigate how wildland firefighters select and care for their PPE. The survey will be administered in spring with help from industry stakeholders including CalFire.
2. (relating to Objectives 1 and 2) Researchers at University of Idaho collaborated to investigate the nutritional and some clothing requirement needs of wildland firefighters. A survey was developed. Three hotshot crews were identified and will be surveyed in early spring.

Respectfully submitted,

Casey Stannard