

Research Aims to Enhance Sustainable Building, Fire Resistance

SPOKANE, Wash. – Following the devastation wrought this summer by the Okanogan Complex of five wildfires, the largest in state history, Gonzaga civil engineering Professor Noel Bormann and his team of students have received a \$15,000 Environmental Protection Agency grant to help minimize damage from future fires.

The grant from the EPA’s People, Planet and Prosperity Program aims to inform the construction of “green buildings” in the wildland-urban interface to enhance fire resistance and sustainability.

Working with [community and industry project partners from Okanogan County](#), the Gonzaga team will research, collect and share information with property owners in the Okanogan Valley. The team will use energy modeling of efficient buildings and statistics of historical wildfires to suggest construction methods to reduce exposure to wildfires and increase potential energy savings. The methods suggested will comply with current building codes.

The effort is part of the senior capstone program for students **Ian Morrell** and **Jon Thorpe** (civil engineering); **Lauren May** and **Luke Blanchart** (mechanical engineering); **Daniel Barad** (biology); **Madeline Fritzen** (environmental studies); and international exchange student **Gabriel Agrisi Paigel**.

Some of the information developed may also apply to other locations in the West facing similar wildfire challenges in the wildland-urban interface.

“The sustainability challenge of this project is to increase the energy efficiency of new housing, and to reduce waste generation from fire debris and reconstruction required from fire damage,” Bormann said. “In addition, it will reduce the horrible suffering of people who lose homes to fire.”

At the end of this yearlong research effort, a package of information will be shared with area residents at the fall 2016 Okanogan County Fair. Also, a proposal will be submitted to continue this process in coming years.

“Sustainability challenges us to think differently about how we create a future that endures,” says Jim Simon, Gonzaga’s director of sustainability. “Gonzaga students are contributing in such an important way to addressing the real issues associated with another devastating fire season in the Okanogan Valley.”

For more information about this project, please contact Professor Bormann at (509) 313-3528, or bormann@gonzaga.edu.