



## MORE RESEARCH SMALLER FOOTPRINT

Shelley Kayfish has made a career of pollution prevention. A former environmental consultant, Kayfish is manager of Health, Safety and Environment (HSE) for the Okanagan campus, and has engaged the campus in a variety of innovative programs that build gradually, like building blocks, and encourage the conscientious use of best practices.

It's an approach that works. Take, for example, one of the first initiatives her office introduced: a program for safely disposing of contaminated waste. Laboratory managers supported it, and the program demonstrated how faculty and staff are ready and willing to do all the right things when it comes to preventing pollution.

That, says Kayfish, was clear encouragement to develop further initiatives.

"Now that our foundational pollution prevention programs are in place, our goal is to drive down both cost and environmental impact," says Kayfish. "Next year we want to see our hazardous volumes at a stable level and decrease in future years. This year our pollution prevention initiatives are greater than any previous year—by threefold."

According to Kayfish, awareness and the desire to act responsibly are on the rise.

"When people know the options they are very receptive to jump on board," she says. "We have a responsible culture, one that is looking for direction."

UBC's Green Research Program is reducing the environmental impact of research at UBC's Okanagan campus. Projects to support this mandate are well underway, ranging from a pollution prevention lab manual that encourages researchers to consider the environment by instituting sustainable measures, to regular pollution prevention reviews for labs in addition to their already mandatory lab safety audits.

"The key is to remain flexible and make sure the projects we choose meet the needs of our community," Kayfish says, adding that her office can tailor recommendations to the specific needs of any particular lab.

"Next year, we will be providing individual lab users with environmental impact statements in terms of both the amount of chemical and biological wastes we collected and the associated costs," she says. Kayfish will also follow up with suggestions on reducing impact.

"It's about more eyes, more ears, and more knowledge. By applying the expertise of our researchers, we are leveraging our ability to reduce impact."

Along with her HSE colleagues, Kayfish is taking pollution prevention online with initiatives such as a 'Virtual Green Lab.' Currently under development, this web-based resource showcases the ideal lab and suggests ways researchers can reduce their ecological footprint. HSE's waste tracking system will also become electronic, allowing for efficient data management and reporting.

With numerous ongoing projects, Kayfish sought input from faculty experts and formed the UBC Okanagan Green Research Advisory Committee.

The committee, she says, is as much about creating a vision of what's needed as it is about applying expertise.

"We talk about grand ideas," says Kayfish, "and then use the multi-disciplinary experience of the group to look at the feasibility and benefits."

The committee, which will be expanded to represent all relevant faculties, includes members Stephen McNeil, Ed Neeland, Alex Lane, Rosemary Garner, Judith Moldovan, and James Bailey.

The group collaboratively guided undergraduate chemistry student Madeline Kirk through one of the campus' first pollution prevention initiatives. Kirk was hired to review the feasibility of small-scale distillation of solvents in teaching and research laboratories.

"It's a great learning experience and a mutually beneficial project in terms of furthering our mandate as an operational unit and producing learning opportunities for students," Kayfish notes.

The initiative was supported by the Fisher Sustainability Fund, a Fisher Scientific Inc. program to support green research that can enhance an environmentally responsible culture in UBC research laboratories.

Kayfish describes building such a campus culture as a thoughtful process that is unique to the campus, and that requires collaboration across the research community.

"We work to find creative ways to conduct green research in ways that fit our campus," she says. "It's important to stay connected to the campus community."