The first classes in the 2013 SMoCS series are now complete! We had a strong group of Environmental Science students finish the two courses. Along the way, they developed a cleanup plan for their site (complete with determining cleanup levels, screening technologies and actions, and a disproportionate cost analysis), wrote a modified DCAP, developed project ideas for next quarter, wrote proposals for those projects, and refined their communication skills.

To help with the learning we were joined by professionals who offered their unique perspectives of MTCA and contaminated site cleanup in Washington State. Jason Stutes from Hart Crowser led a field trip at the Custom Plywood Site and returned for a class lecture. The field trip was exactly what the students needed to quickly ground their understanding of what a contaminated site looks like and comprehend some of the complexities of a cleanup. Hun Seak Park, Peter Adolphson (Ecology), Doug Thompson (WDFW), Adrienne Stutes, and Emily Duncanson (Hart Crowser) joined us on the field trip, which highlighted the need for many experts on these projects. Ben Forson, Dawn Hooper, and Tim Nord (Ecology) joined us for lectures on the Puget Sound Initiative, Disproportionate Cost Analysis, and communication approaches for cleanups. Christine Woodward (Samish Nation) describes the projects the Department of Natural Resources works on and the tribal approaches to environmental work. Clay Patmont (Anchor QEA) discussed the current and emerging options for in-water cleanups and their limitations. Our final lecturer, Steve Thiele (Stool Rives), gave an in depth description of MTCA from a legal perspective. We are extremely fortunate to have had these interactions and the chance to learn from the experts. Thank you.

The People of SMoCS

Stephanie Eckard is the new 2013 TA for SMoCS. She started her master’s program in September 2012 at WWU under Dr. Sofield’s advisement two years after graduating from Huxley College with an emphasis in Environmental Toxicology.

Between degrees, she worked for an AmeriCorps organization called Washington Conservation Corps (WCC); the first six months were as an assistant supervisor on a trail crew, and a second yearlong position was as a research assistant at Padilla Bay National Estuaries Research Reserve. Stephanie gained field experience working with elgrass and other estuarine organisms in Padilla Bay, and developed skills in education and outreach.

Stephanie is a strong addition to the SMoCS team. She took the original SMoCS class (2010, Scott Paper Mill site) as an undergrad when we all called it the “MTCA class”. As Stephanie summarized “We all worked really hard and, I think, agree on how beneficial the class was to our current, post-college career paths. As a TA, I really enjoy building meaningful and helpful relationships with students who are also passionate about problem-solving the world’s environmental issues.”

Stephanie originally grew up in Sendai, Japan, where she developed her taste for strange and wonderful Asian cuisine and outdoor adventures. She enjoys skiing and is a big fan of gardening, reading in the sunshine, and socializing over board games and homebrews.

See some of Stephanie’s scientific and outreach articles at https://tinymatters.jux.com/
The SMoCS Approach to Washington’s Big Ol’ Hammer

- Matthew Slattery

Frankly, the thought of digesting over three hundred pages of environmental legislation made my stomach churn. My initial viewing of the Model Toxics Control Act was a rough experience, but it also marked the start to the most useful and applicable course I have taken at Western Washington University. The MTCA Rule would become the unifying theme of “Science and Management of Contaminated Sites” (SMoCS) at Huxley College and my introduction to navigating environmental cleanup policy in Washington State.

While this course was eye opening and invaluable in many ways, the interdisciplinary approach incorporating weekly guest speakers stands out as a keystone feature. Ranging from representatives from the Washington State Department of Ecology to a private attorney, our class was exposed to the professional insights and personal opinions of important players in the cleanup game. As we moved through the 10 week quarter, my understanding of the MTCA Rule evolved as I gathered unique bits of information from each guest. The speakers provided plenty of useful material in prepared lectures, but occasionally our class was able to probe deeper into their respective environmental territories over dinner. My personal favorite explanation of the prominent Washington document was “a big ol’ hammer,” a surprisingly apt phrase applied by Steve Thiele describing the legal prowess of CERCLA. Over time, our SMoCS class learned how this citizens’ initiative operates within the state, from site discovery to its eventual delisting; more importantly, we developed this perspective from an interdisciplinary angles to ensure a comprehensive understanding.

Looking back at MTCA now, I find it far more manageable. I’ve learned dozens of acronyms and picked the brains of environmental professionals. Lending the aid of experienced and informed guests, the SMoCS course has given me a clearer view of my career options and how my degree can be applied. I look forward to continuing the course for another 10 weeks and learning more about the “big ol’ hammer” in Washington’s environmental cleanup program.

Throughout my college career, most classes have been very impersonal, with the only judgment of abilities being through exams or essays. No matter the size of the class or subject, this has been my expectation of every class. In the fall of 2012, I registered for the Science and Management of Contaminated Sites (SMoCS); I believed it would be a good fit for me since I was a fourth year environmental science student focusing in toxicology. Any preconceived expectations I had of this class were completely changed in a matter of minutes; this is the first class where we worked out of a real legislative document, the work was self designed, and there were a number of opportunities to interact with professionals in the field. SMoCS has been one of the most unique classes I have had the opportunity to take in the sense that it was less of a class and more of a reality.

The assignments in SMoCS revolved around the Model Toxics Control Act (MTCA) document, or the MTCA Rule. It was clear from the start this was going to be complicated work from a very unfamiliar source. By the end of the quarter, a number of small teams developed their own Draft Cleanup Action Plan (DCAP) for a real toxic site the Washington State Department of Ecology is working at. We faced the same decisions as Ecology, consultants, and liable parties. It was difficult to pick up on the terminology and language used in this world; however, by the end of it I was better able to communicate and understand the important content this work includes.

By now, I have been involved in a number of group projects. This class was different though; a major group assignment was to propose and design a project in the winter quarter to carry out in the spring quarter. Each group worked in vastly different directions with their proposals, and it was fascinating to see what other groups wanted to focus on. Though this is a continuing project, even the preliminary steps were a learning experience. There was limited (but valuable) guidance about the project as each group was on its own timeline, and had very different approaches and requirements. This level of independence was not what I was used to, and I found it most important to communicate and be in agreement with others.

It is difficult to weigh how valuable each new experience in SMoCS has been, because I think they will all prove to be extremely beneficial. However, I most enjoyed the guest speakers in the class. Nearly every week there was a guest that joined our class to help further our understanding about MTCA and what they do as a consultant, lawyer, or in Ecology. This class has most importantly given me the opportunity to interact with professionals with experience in the field in a more relaxed environment. Maintaining a continuous dialogue has always been a slight challenge for me, and this has been a great learning experience for that reason.

SMoCS has been a wonderful life experience in a number of ways. The design of the class gave me an entirely new outlook on my education and future. If it weren’t for SMoCS, the Department of Ecology, and the phenomenal guests that joined our class, I would be in the same position as I was four months ago; with little idea of the path I wanted to pursue in the environmental science field, and a lack of understanding of what is really possible. Hearing the experiences of our guests first hand has helped shape my goals for after graduation. This class and the applicable knowledge it brings made me realize how great of an opportunity I had to learn about the extensive work a small number of people are doing today - before I join them tomorrow.

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