**Collaborative on Health and the Environment - Washington (CHE-WA)**
**Quarterly Meeting**
**Antioch University Seattle, Room 200**
**July 17, 2006**
**2:00 - 4:00pm**
**NOTES**

**Participants:**
Anne Alfred, Public Health – Seattle & King County
Morgan Barry, Public Health – Seattle & King County
Madeline Beery, Department of Health
Marnie Boardman, Department of Health
Chloe Birnel, People for Puget Sound
Nanda Blasej, Antioch University Seattle graduate student/Cascadia Consulting
Diane Cortese, student at Antioch University Seattle
Eva Dale, Washington Citizens for Resource Conservation
Kate Davies, Antioch University Seattle
Nancy Dickeman, Physicians for Social Responsibility
Jamie Donatuto, Swinomish Tribe/University of British Columbia
Kathy Fletcher, People for Puget Sound, Puget Sound Partnership
Brittany Gallagher, Institute for Children's Environmental Health
Steve Gilbert, Institute for Neurotoxicology and Neurological Disorders, chair of Precautionary Principle Working Group
Jeff Ketchel, Public Health – Seattle & King County
Suellen Mele, Washington Citizens for Resource Conservation
Elise Miller, Institute for Children's Environmental Health, chair of CHE-WA
Martha Neuman, Puget Sound Partnership
Maria Victoria Peeler, Department of Ecology
Li Ming Leung, Public Health – Seattle & King County, UW student
Margaret Shield, Toxic-Free Legacy Coalition
Erika Schreder, Washington Toxics Coalition
Karen Snyder, University of Washington
Heather Trim, People for Puget Sound

**Next Meeting: Wednesday, October 25, time and location to be announced.**

**NOTES**

**1) Welcome**
Elise Miller welcomed everyone, especially those attending a CHE-WA meeting for the first time. Participants briefly introduced themselves. Elise thanked Kate for hosting the meeting and Brittany for taking notes. She then introduced Jamie Donatuto.

**2) Presentation on Bioaccumulative Toxics and Native American Shellfish Project**
-Jamie Donatuto, PhD (c), Environmental Specialist, Swinomish Indian Tribal Community

Jamie thanked the group for inviting her to speak at the meeting. She has been working with the Swinomish Tribe for the past six years on a project funded by EPA.

She began her presentation with the background of the tribe and the project. The Swinomish reservation on Fidalgo Island is home to about 1,000 tribal members. About 90% of the land area of the reservation is ringed by tidelands, which are home to shellfish that are important to the tribe for their food and economy.

The project's hypothesis is that the Swinomish people experience chronic low-level exposure to bioaccumulative toxics when they engage in subsistence gathering and consumption of shellfish.

Types of toxic chemicals targeted in the project include heavy metals (arsenic, copper, cadmium, selenium, mercury, lead and nickel), PCBs (Aroclors and congeners), dioxins, furans, chlorinated pesticides, and butyltins.

The project used traditional techniques like pitchforks and crab pots for collecting shellfish. They chose to study clams and crab because they are very commonly eaten, are abundant and have been part of other studies so results are available for comparison.

This project will be finished in August, and the full risk assessment will be released at the end of the year. This risk assessment will look at quantitative factors and will not include many cultural factors, such as the loss of cultural knowledge, education and traditional ceremonies.

This assessment used shellfish consumption rates for the Swinomish Tribe and assumed an exposure of 70 years. Therefore, the project's results and recommendations will apply only to the Swinomish.

Jamie noted that most fish consumption surveys ask what tribal members are eating now – now that they know that certain fish are contaminated. She said her study wanted to find traditional consumption rates as well, in order to compare how much shellfish people are eating now with how much they would like to be eating if there weren't any concerns about contamination.

Information was collected verbally. They used open-ended questions so elders could respond by telling a story rather than answering "yes" or "no."

Jamie discussed the project's community outreach and education efforts, which include attending and presenting at meetings and working with young children in environmental education programs, in the local schools and in after-school clubs and at a local museum. A program called "Native Lens" on the reservation's cable television channel gives kids an opportunity to express their views on various issues, including the environment. It has been very successful. The project also airs public service announcements on the cable channel and has hosted a community feast.

The next step for the project is developing mitigation options. Closing beaches and telling people they can't eat some species of fish are not viable options because they would be a negation of treaty rights. At the moment, tribal members are encouraged to continue eating shellfish, but also to remember that shellfish from some sites are less contaminated and that preparation and cooking methods can reduce contaminant levels.

Questions and Answers

a) How did you choose the collection sites?
   Jamie said they chose sites based on three factors: 1. Abundance, 2. Location, and 3. Availability of other studies to perform comparisons.

b) Could this project be called a Precautionary Assessment to put the EPA on the defensive?
   Jamie said for this project they used dose x toxicity (a conventional risk assessment model), but she's working on a new risk model to fit a precautionary framework.

c) What are some of the levels right now? Does this relate to the amount of fish consumed or the amount of toxics in fish?
   Jamie said that the largest problem is the levels of toxics in fish. Arsenic, PCBs, dioxins and furans, and mercury are all significant. They've had some high levels of PAHs as well.

d) Is there a high cancer or asthma rate in the tribe?
   Yes – disproportionately high. Asthma in particular is a huge problem.

e) What are the rates of learning and developmental disabilities like?
   Jamie said it's not well catalogued but she would guess rates are very high. There are lots of neurotoxins. There's also alcoholism, poor ventilation in the houses and other buildings and a high rate of smoking.

f) What are your next steps? Is biomonitoring a possibility?
   There are many tribal issues with biomonitoring and the tribes are very sensitive about it. The Swinomish people would prefer not to have it. Their values are impinged so they already know they're at risk.

**3) Precaution Academy Update**

-Steve Gilbert, Chair, Precautionary Principle Working Group

Steve said that Carolyn Raffensperger, Peter Montague, Ted Schettler and 14 local people met for the Precaution Academy on June 23-25 at Antioch. He noted it was important to have people from the city, county, and state levels of government together discussing how to use the Precautionary Principle. Participants have continued to engage in follow-

up conversations since the Academy. Steve is working on developing materials on the "toxics tipping point," as well as a website like wikipedia to be called "toxipedia."

Maria Victoria Peeler, who attended the Academy, added that the discussion was extremely helpful for her as someone working inside government on sustainability. Margaret Shield, another participant, noted that the textbook distributed before the conference, describing tools for using a precautionary approach, was excellent.

Documents from the Precaution Academy are on the Precautionary Principle Working Group's page on the CHE-WA website.

Steve encouraged everyone to join the Washington State Public Health Association (WSPHA) and to attend its annual meeting October 16th through18th in Yakima. A resolution on the Precautionary Principle will be presented and support is needed to ensure that it is passed.

Elise said more information on the WSPHA meeting will be on the CHE-WA listserv.

**4) Pollution in People Project**

-Erika Schreder, Staff Scientist, Washington Toxics Coalition

Erika is the lead author of the Pollution in People report. The project measured chemicals in the bodies of ten people living in Washington state. The project's goal was to use the information on body burdens to communicate the nature of the toxics problem by encouraging the participants to become spokespeople for this issue.

Samples of blood, hair and urine were collected from the ten participants and tested for a variety of toxic chemicals, including:

Phthalates – plasticizers and fragrance carriers
PBDEs
Heavy metals – lead, mercury, arsenic
PFCs – Teflon, stain protectors used on clothing and textiles
Pesticides – used in homes and agriculture
DDT and PCBs – no longer used in the US but still found in food
Other chemicals in consumer products

The results showed that all participants had toxic chemicals in their bodies. The participants had at least 26 and as many as 39 chemicals.

Study Highlights:

- All participants were exposed to PFOA, which is used to make Teflon and is a probable carcinogen.
- Carbaryl, an insecticide, was found in five participants and is toxic to the nervous system.
- Phthlalates were found in all participants. At least one, DEHP, poses a risk to the male reproductive system.

- PCBs were found in all participants and have impacts on the nervous system during fetal development.
- PBDEs, flame retardants, were found in all participants and are known to cause reproductive problems.
- Mercury was found in everyone, and three participants had levels above what EPA considers safe.

Erika said the study will be used to launch a Washington state campaign to reform toxics policy. Other states – California, Maine, Massachusetts, New York, Minnesota, Michigan, Oregon and Connecticut – are launching similar campaigns. Senators Brown and Finkbeiner recently wrote an op-ed in the Seattle Times supporting toxic chemical policy reform.

Erika said several problems need to be addressed immediately. Safety testing should be required before toxic chemicals are put in products, and a system should be created to assist companies to use safer substitutes.

Erika encouraged meeting participants to download the full report online at www.pollutioninpeople.org.

Questions and Answers

a) Were you able to correlate the levels of toxics with any health problems?
   Yes. For example, Karen Bowman has asthma and has very high level of PBDEs in her body.

b) Is there the potential of doing the same testing on the children of the study participants?
   Yes. There was a study like that done in Canada recently.
   The Oakland Tribune did an interesting story on PBDEs – the toddler involved in the study cited had the highest level.

**5) Puget Sound Partnership**

Kathy Fletcher, Executive Director, People for Puget Sound, and Martha Neuman, Puget Sound Partnership

Kathy and Martha explained that the Puget Sound Partnership is developing a Health Working Group to consider what health objectives can be included into the Partnership's recommendations to the Governor.

Kathy explained that in December 2005, Governor Gregoire announced a goal to restore the health of the Puget Sound ecosystem by 2020, and she established the Puget Sound Partnership to develop achievable objectives towards this goal. The Partnership is co-chaired by Governor Gregoire (delegated to Jay Manning of the Department of Ecology); Bill Ruckelshaus of the Salmon Recovery Funding Board; and Billy Frank, Jr. of the

Nisqually Tribe. Governor Gregoire initially appointed 10 people from political, nonprofit and private sector organizations. She has added four delegates from the legislature, one from each caucus. Now the group has 19 members. Martha Neuman is the lead staff to the Partnership.

Kathy said Governor Gregoire is emphasizing the need for a timetable and a focus on results.

Governor Gregoire charged the group to provide recommendations on the following tasks by November.

1. 2020 Action Agenda – Develop a systemic action agenda that will lead to the recovery of the Puget Sound ecosystem by 2020.
2. Public Involvement – Engage citizens, governments, the business and conservation communities and others in ramping up efforts to restore the Sound.
3. Organizational Structure – Recommend the best organizational structures and approaches to steward the Sound back to health and to protect it over time.
4. Funding – Review funding sources for protecting and restoring the Sound and set spending priorities to achieve the desired outcomes by 2020.
5. Science – Recommend how broad-based scientific knowledge should be organized and applied in order to inform policies and assist in setting/meeting goals.

Kathy added that a long-term communications strategy is needed to inform the public about the health of Puget Sound, and she reported results of public opinion surveys showing that 97% of people want to leave a healthy Puget Sound to future generations, but 75% thinks that the region is already in good or excellent health.

Kathy encouraged everyone to attend Partnership meetings, which are open to the public. She said 600 people have attended six meetings. Other meetings will be held in early September and early October.

The issue of toxics has been raised in several meetings already. About 450 people attended the Toxics in Puget Sound Forum in April. Martha asked the group to consider how the toxics issue might relate to the various Partnership working groups that have been established on water quality and other issues. For example, sites around the Sound must be cleaned up. There are toxics in seafood. There is the issue of recontamination – runoff, air pollution, regulation strategies and prevention, which brings us to product legislation.

Heather added that there is a need to synthesize all the old data before they can get on with any new information and actions to come out of the partnership.

<u>Comments, Questions and Answers</u>

a.) Use the precautionary principle with regards to the issue of water quality and toxics analysis.

b.) The Partnership started very eco-oriented and I'm happy to see that public health is playing a role. I'd encourage having human health indicators, for example, a goal to cut asthma rates by 6% by 2020.

Kathy said the Partnership's responsibilities are mostly limited to the aquatic environment, and though it's possible to bring in air quality and asthma, it seems unrealistic the think that PSP will comprehensively address the whole ecosystem and human health.

c.) In regards to human health issues, what do you think about shellfish consumption?

Martha said the Partnership hasn't agreed on the working goals, but they are aiming for a fishable, swimmable Sound. They need to determine what key actions are needed to achieve this goal.

d.) We've burned people out with the bad news about the environment without telling them what they can do themselves. The Partnership should say what tangible things individual people can do.

e.) This may be the most important time for us to develop an agenda to clean up the Sound. I'd encourage everyone to go to the meeting in September and to speak openly.

f.) Health indicators might be a good way to bring home the importance of the Sound to people, and health departments might be good groups to work with.

g.) It's important to take an ecosystem approach rather than just focusing on the waters, and I encourage you to take that broader perspective. We should relate the water to the land and to human health. We do need health indicators, but only a portion of a particular health outcome is environmentally attributable. So perhaps we could set an objective of reducing the rate of a disease by the environmentally attributable fraction.

h.) There has been a lot of talk about restoring the ecosystem – making the Sound fishable, drinkable, swimmable – and that's important, but let's also look at promoting a healthy ecosystem. Health is more than just a restoration. Has there been any consideration of looking at health as a positive concept?

Kathy said it is being looked at that way. Restoration is important because it conveys the sense that we have a damaged environment that needs to be healed, and that moves us away from minimizing damage to a healing framework. We're trying to move in a positive direction.

i.) We should look at the role of consumer products in causing pollution. How do we stop companies from putting toxic chemicals into our products and the environment?

j.) We have an opportunity to think about visioning to 2020, with the ultimate goal of chemical reform. The question is, how can we frame our outcomes and actions to address emerging threats that we don't know about yet? Human health indicators are a great idea. We need to make sure we know the linkage and the environmentally attributable fractions. Showing some clear health endpoints and pairing them with toxics would make them more meaningful.

k.) How can we link this project with the goal of having Washington become the healthiest state in the nation? And there is an overarching need for governance on Puget Sound – let's make sure Public Health has a seat at that table.

l.) Public health is very important. How can we make these outcomes important to the individual and the community? We need to have an awareness campaign – people are so surprised that we have this beautiful body of water that is sick or dying or dead. People need to know what *their* part of it is. Is there anyone from Public Health at the table?

Kathy said no one from Public Health is currently there.
Martha said the health issue did not get dealt with, and that's part of the reason she and Kathy have come to this meeting.

m.) Elise and Kate have offered Brad Ack an economic analysis on the environmentally attributable fraction of diseases for the Puget Sound region based on population statistics. There's also the economic benefit of cleaning up the Sound to consider.

n.) Where is the money going to come from to implement the recommendations?

Kathy said the Partnership has been asked to recommend a funding strategy along with everything else, and that's hard to do when the other recommendations aren't set yet. The work on funding got a late start.

o.) You need to show the economic benefit of a healthier Sound.

p.) Adopt the Precautionary Principle as a decision-making model so you don't have to constantly prove a thing is bad.

q.) Washington needs to move toward a state income tax. We have such a regressive tax structure.

r.) Tax breaks and incentives are a common interest around the Partnership. Are there any ideas on this relative to toxics?

There's the TURI model from Massachusetts.

s.) Before we start talking about getting more money, the more practical piece is determining the effectiveness of the funds that have already been spent. Mitigation is a very ineffective way of trying to solve environmental impact problems, especially in the Puget Sound area.

Elise thanked Kathy, Martha, Jamie and Erika for their presentations and Steve for his update. The CHE-WA Steering Committee will meet on July 18th, as will the Environmental Justice Working Group. Please let Elise know if you would like to be on these conference calls.

**Next Meeting – Wednesday, October 25th, time and location to be announced.**