

Spokane County Environmental Health Assessment 2007 Report

Background

Since 2005, various entities in Spokane County have expressed interest in assessing the environmental health of the region. The Lands Council, a non-profit environmental advocacy organization, applied unsuccessfully for an EPA Community Action for a Renewed Environment (CARE) grant in 2005 and in 2006. CARE grants assist communities in identifying environmental health concerns, creating action plans and conducting activities to reduce community health risks.

In March 2006, Lands Council staff and Lyndia Tye, Director of Assessment and Epidemiology for Spokane Regional Health District, attended a conference hosted by NAACHO on the Protocol for Assessing Community Excellence in Environmental Health (PACE EH). PACE EH is an innovative tool that allows communities and local governments to identify environmental health issues, rank local environmental health concerns, and prioritize environmental health program activities. The PACE EH process mobilizes the community to take an active role throughout the entire assessment process.

Lyndia Tye and Amber Waldref, then Water Watch Director for The Lands Council, agreed that the PACE EH model would be useful for doing an assessment in Spokane County. Lyndia pursued and received \$25,000 in initial funding from the Washington State Department of Health to kick-start an assessment in 2007. The Lands Council was contracted to facilitate the community process.

Introduction

In January, 2007, The Lands Council and the Spokane Regional Health District began a year-long process to assess the environmental health of Spokane County. Amber Waldref of The Lands Council was designated as the lead facilitator of the process, responsible for recruiting community members to the table, using the PACE EH model to assess environmental health issues, running meetings and ensuring on-going communication, and documenting the process by posting meeting notes/agendas and products on an interactive blog.

The Lands Council and the Regional Health District brainstormed an initial list of participants or the type of participants to include and invite to the table. This rough list, which included over 70 individuals and groups, reached out to all areas and interests in the community. Invitees included county, city and state government staff, environmental experts, health experts, non-profit agencies, low-income advocates, elected officials, legal advocates, business, industry, neighborhood leaders, educators, and community activists. Those invited were asked to commit to one year of participation on an Environmental Health Assessment Team (EHAT). After about one month of recruitment, around 25 individuals committed to participating in the year-long process. (Please see attached initial EHAT list from 3.07). Over the course of the year, at least 5 participants decided to

drop the process for various reasons. (Please see “Lessons Learned”). New participants joined the team and the roster changed a bit by the end of the calendar year. (See attendee list from 11.07).

Defining the Process & Goal-Setting

At the first meeting in February 2007, the EHAT developed meeting and participation ground rules. The team agreed to work using consensus-based decision-making. By April 2007, the EHAT had developed a statement of purpose in order to structure and focus its conversation: “The EHAT is assessing the effect of human made and natural factors on physical (& mental) health in Spokane County.” (Mental health was kept in parentheses because team members only wanted to address mental health issues if there were data available to link environmental impacts on mental health).

The Lands Council and SRHD introduced the PACE EH model to the participants at the February and March 2007 meetings. Amber Waldref developed a handout that described the 13 step process and how the year would progress along these steps. At nearly every meeting during the year, Amber updated the handout, checking off the steps that had been completed and identifying the next steps in the process. (Please see attached PACE EH Framework handout with notes on completed steps in 2007).

One of the first main tasks of the team was to identify a list of environmental issues that each person thought may be putting risk to human health in Spokane County. (Please see March 2007 meeting notes). The issues were grouped into seven main categories: Built Environment, Land Use, Water Quality, Food, Indoor Environmental Quality and Toxics. The issues grouped above were used to help populate the issues provided to people in a community survey (via telephone) sponsored by the Health District (generalized survey to Spokane County). (The survey was created and implemented using different funds than the assessment). The EHAT used the data collected by these surveys and other data collected from surveys of convenience at neighborhood meetings to better understand the community’s environmental health concerns.

Identifying Environmental Health Issues

By the May 2007 meeting, the EHAT realized it had to narrow down the seven main categories of environmental health issues. The main reason was the limited amount of time of the assessment process (one year). Another reason was the number of people on the team and how much each person could realistically research into all the issues over the next four months. The team had some long and fruitful discussions about narrowing down the issues and how the issues identified by the team corresponded to the community survey results. Also, how to weigh perception of the community vs. documented facts and data. (Please see May 2007 meeting notes).

After much discussion, the team decided to narrow down its focus to four main categories: water quality, indoor environmental quality, outdoor air quality, and built environment. It was decided that toxics could be wrapped up into indoor environmental

quality and air quality. Land use could be discussed within the context of built environment. Safety and security of food received very low concern in the community survey and it was determined that these issues (as well as pest control and neighborhood safety) could be discussed if necessary within other topics. Four sub-groups were formed from the EHAT to begin researching the four main issues areas.

Systems Frameworks

The PACE EH Process encourages the community to analyze environmental health issues using a systems framework. Amber used a powerpoint presentation (see Systems Framework tab) to explain the outline of the framework (as provided in the PACE EH workbook) to the full EHAT during the May meeting and groups began presenting their completed frameworks at the June meeting. This framework helped each sub-group identify the connections among health status, affected populations, exposure factors, environmental agents/conditions, contributing factors and behaviors, and public health protection factors for issues within each category of interest. For instance, two frameworks were created in the water quality sub-group – one for surface water quality and one for drinking water quality. (Please look over the attached Systems Frameworks).

During the summer months, when the sub-groups were completing their frameworks, The Lands Council got notice that it had received a US EPA CARE grant for \$71,000 that would run October 2007 through September 2009. This CARE grant would essentially use the PACE EH process to continue the community environmental health assessment and move into action and implementation. With the knowledge that additional funding had been obtained, the EHAT reevaluated its timeline for the year. The team did not want to sacrifice quality information gathering and analysis for a speedy process. The goal of completing the 13 steps of the PACE EH process was altered to achieving at least 11 steps by the end of 2007 – essentially, choosing priorities, but delaying action plans and implementation until 2008.

Issue Profiles

The next step in the PACE EH process was to complete “issue profiles” that would organize all the information in the systems frameworks, develop this information, identify data (or data gaps) for local environmental health indicators, identify state and national standards, identify actions already taking place in the community, and provide an initial “ranking” of the issue based on this information of low, medium or high.

In June 2007, guest speakers from DOH presented information on environmental health indicators to the full EHAT to provide clarity and help each sub-group identify local indicators for their environmental health issues. This presentation was very helpful in helping the EHAT to choose indicators and then locate corresponding data. For instance, an indicator of environmental health for drinking water may be the number of drinking water contaminant exceedences for the City of Spokane water system. The data for this indicator could be found by going to DOH (or by visiting the Spokane County Community Indicators website: www.communityindicators.ewu.edu).

All the issue profiles in the areas of Built Environment, Water Quality, Outdoor Air Quality and Indoor Environmental Quality were completed by November 2007 and presented by sub-groups or individuals within those sub-groups to the full EHAT. All together, nine issue profiles were presented (see attached Issue Profiles tab) and these were the issues or categories that the EHAT ultimately prioritized based on the rankings provided by the sub-groups. (See November meeting notes).

Data Gaps

As part of the assessment process, the EHAT worked on identifying local environmental health indicators for the issues it identified and relevant data sources. Here were some of those indicators and data gaps identified:

Outdoor air quality – Rapidly increasing vehicle miles could cause an increase in CO and other toxic levels in the air. EHAT identified minimal air toxics data (just one year of data collected by Clean Air Spokane). This toxics data needs to be looked at geographically, over time, with potential neighborhood pollution sources identified.

VOCs – There is little data available relative to morbidity and mortality rates due to exposure to VOCs. There was insufficient data to determine the total number of manufactured and mobile homes in the Spokane area.

Surface water/Ground water – Although ample data exists for surface and ground water quality for public water systems, private well sampling data for Spokane County is difficult to get. Individuals who sell homes on private wells must provide well sampling data to potential buyers, but this data does not always make it to the Health District and there is not a consistent record of samplings and failures. Any private well or septic sampling reported to the Health District is kept in paper form and not digitized for optimal searching. There is also little data collected to show correlation between surface water and ground water contaminants.

Mold – Data specific to mold in Spokane County is not readily available. Data desired would include numbers of houses in Spokane County that have mold problems and numbers of people treated for mold related health problems

Lead – A very low number of children in Spokane County have received blood lead testing, despite high percentage of older housing and low-income children in Spokane County. Increased screening is necessary to gain statistics. Also, low numbers of houses have been tested for lead. It was difficult to access lead pipe data. (Please note that The Lands Council recently received an EPA lead grant to increase child lead screening in urban neighborhoods in the city of Spokane. This project will help increase the testing data for at-risk children in our area).

Dioxins – There was a desire for increased monitoring to help track human exposures to dioxins in order to track data and assist in determining if dioxins are a health concern for

Spokane County. Healthy People 2010 provided no baseline data to determine number of exposed people or the overall impact of exposure on general community.

Built environment – There was a lack of data to compare Spokane to other like communities in regard to walkability, bikeability, and more/less sprawl. Also, hard to find data that connected planning choices (providing more sidewalks or bus routes) with increased/decreased health impacts like obesity/diabetes. The built environment contains many factors from land use planning decisions to transportation choices to personal nutrition, making it difficult to measure and monitor.

Choosing Priorities for Continued Action

At the November 2007 meeting, the EHAT was tasked with narrowing down, once again, the list of environmental health issues facing Spokane County based on the ranking and prioritizing criteria provided by PACE EH in order to have a focused list from which to begin action planning. PACE EH suggests first ranking issues based on criteria such as geography, magnitude, location of the problem, sensitive populations, specific health risks and trends. The EHAT attempted to follow this criteria and each sub-group created a ranking at the bottom of its issue profile of low, medium or high. In the presentation of the issue profiles and the discussion of “prioritization”, it soon became clear that the participants used some other common criteria when suggesting a ranking. Several sub-groups looked at both the health risks and the lack of data to help them rank their issue. That is, they would rank an issue higher if the health risk was great, but if little local data existed. (See the issue profile for “Lead”). Also, most sub-groups considered current community action on issues and whether or not increased action was warranted. That is, they would rank an issue lower if there was a well-developed community plan already being implemented with positive environmental health results.

Thus, while PACE EH recommends a two-step ranking and then prioritizing process, the Spokane County EHAT essentially created a one-step process using the criteria listed above and taking into account current (positive) community activity and the desire to NOT duplicate efforts already in place. After reaching agreement on the high, medium and low rankings, the EHAT prioritized the issues that were ranked high or medium on the board. (See November 2007 meeting notes). There were five issues that were ranked high, medium or low: mold, lead, built environment, outdoor air quality and carbon monoxide monitoring. Each member of the team then prioritized two of the five issues that remained. The two issues that received the most support were built environment and lead. This prioritization process was not meant to take any of the environmental health issues identified “off the table.” Instead, the goal was to provide guidance for those who will be involved in action planning to help focus their efforts in 2008.

Lessons Learned & Next Steps

PACE EH for the most part was an excellent process for leading a community environmental health assessment. The model is both meant to be structured, yet have room for flexibility. The Spokane County EHAT did make changes during the course of

the year to the process when necessary, as documented in this report. The most difficult part of the assessment process was narrowing down issues over the course of the year. It would have been impossible to do adequate research into local indicators and data for all the environmental health issues initially identified by the EHAT. This was probably the most difficult aspect of the process that we all struggled with. Also, because it was a true community process, the amount of effort put into information gathering on EH issues was a product of each individual's commitment of time and energy to the process. Thus, some issues probably fell to the wayside because there simply were not enough people on the team or time for the team (just one year) to address them all – much different than if this was an in-house, agency-lead assessment.

A community process is always tenuous because it depends so much on the individual time and effort of people with full-time jobs and lives away from the process. EHAT participation did wane about halfway through the year. The most common reason for community members leaving the team was that it was too “process-oriented.” Many of the community members came to the team because they had a passion or expertise around a certain issue or community problem. Many of these folks felt their time was not being well-spent creating systems frameworks or issue profiles because they already had preconceived ideas or knowledge about various environmental problems and they wanted to get down to action right away. Hopefully, these people will want to get re-engaged in the coming year when action plans and implementation become the focus. Overall, however, the members of the EHAT who stayed consistent throughout the year bonded and looked forward to getting to know more about each other at each meeting. We shared a lot of laughs and there was rarely any grandstanding or sensitivity about whether or not someone's “issue” was prioritized over others. The commitment by the 15 core members of the team was quite impressive!

As the assessment process continues into 2008 using CARE grant funds, the partnership between The Lands Council and the Spokane Regional Health District will also continue. The Lands Council plans to sub-award funds to SRHD in order for its staff to continue participating and helping to guide the process over the next two years. At the December 2007 EHAT meeting, the Lands Council staff who will be facilitating the process asked for feedback into how the action planning should commence. The EHAT agreed that the two top priorities of “lead” and the “built environment” will require the participation of very different players in the community and the input of a variety of same and new participants. Both the “process” and “tasks” for the next phase of the assessment process will begin to take shape in the first months of 2008. Hopefully, with the help of many parts of the community, the work of this assessment will result in many positive environmental health impacts for the residents of Spokane County.

This report was written by Amber Waldref at The Lands Council, facilitator of the 2007 Environmental Health Assessment Team. Please contact her at 509-209-2407 or awaldref@landscouncil.org with any questions. Also, you may contact Lyndia Tye at the Spokane Regional Health District at lye@spokanecounty.org or 509-324-1508.