

A scenic photograph of a calm lake surrounded by dense green forests. The sky is overcast with grey clouds. In the foreground, some tree branches with green leaves are visible on the left and right sides, framing the scene.

Community Engagement Core

Stakeholder Advisory Board Meeting

October 26, 2021



PACIFIC NORTHWEST CENTER

— for —

**Translational Environmental
Health Research**



Stakeholder Advisory Board Meeting agenda

Introductions	9:00-9:15
CEC and Center Update and Q&A	9:15-9:30
Community-initiated Pilot study Q&A	9:30-9:55
Break	9:50-9:55
SAB Development – Stakeholder Jamboard Breakouts	9:55-10:25
Wrap up & Evaluation survey	10:25-10:30



The Team



**Diana Rohlman,
PhD**
CEC Director
Oregon State University



**Jackilen Shannon,
PhD, MPH**
CEC Deputy Director
Director – Community
Outreach, Research &
Engagement Team
Oregon Health & Science
University



Kim Brown, MBA
CEC Program Manager
Oregon Health &
Science University



Emily Ho, PhD
IHSFC Director
Director – Linus Pauling
Institute
Oregon State University



INTRODUCTIONS

1. Name

2. Affiliation, where you are sitting right now

3. Ice-breaker – pick your preferred question

- **If you could have one superpower, what would it be?**
- **If you could invite one person to dinner, living or dead, who would it be?**

4. Tag next person

CEC Updates

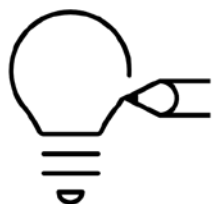




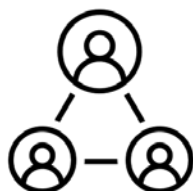
CEC FACILITATES ENGAGEMENT



- Enhance and expand stakeholder engagement across PNW.



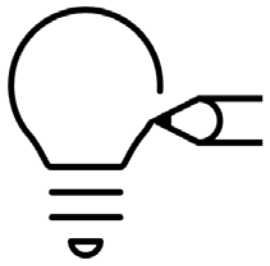
- Represent and identify emerging environmental health topics.



- Contribute to a network of expertise across stakeholders to foster collaboration and address environmental health concerns.



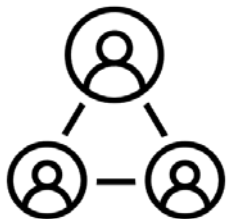
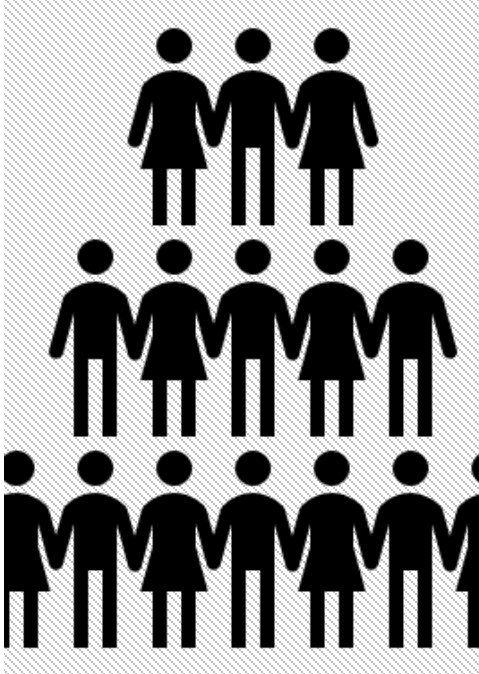
- Disseminate opportunities from stakeholders to scientists, and from scientists to stakeholders.



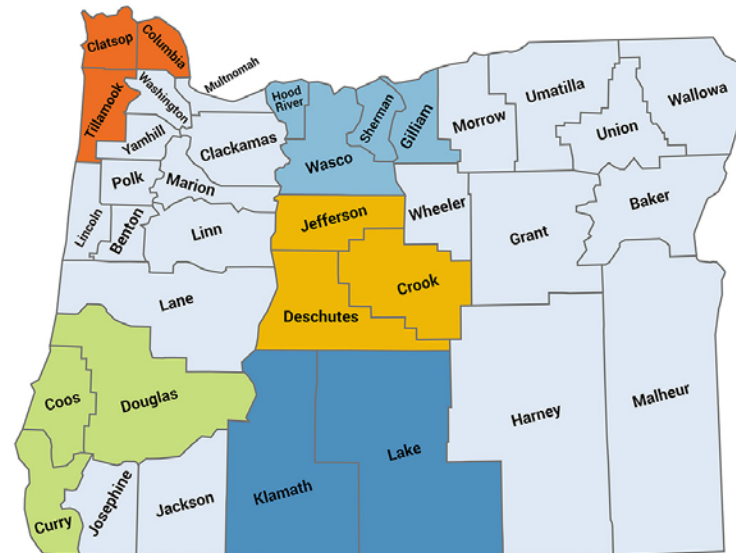
Stakeholder Pilot Project Reviewer

3 hr. time commitment

Q- Is this something you might be interested in or pass on to others?



Regional EH networking



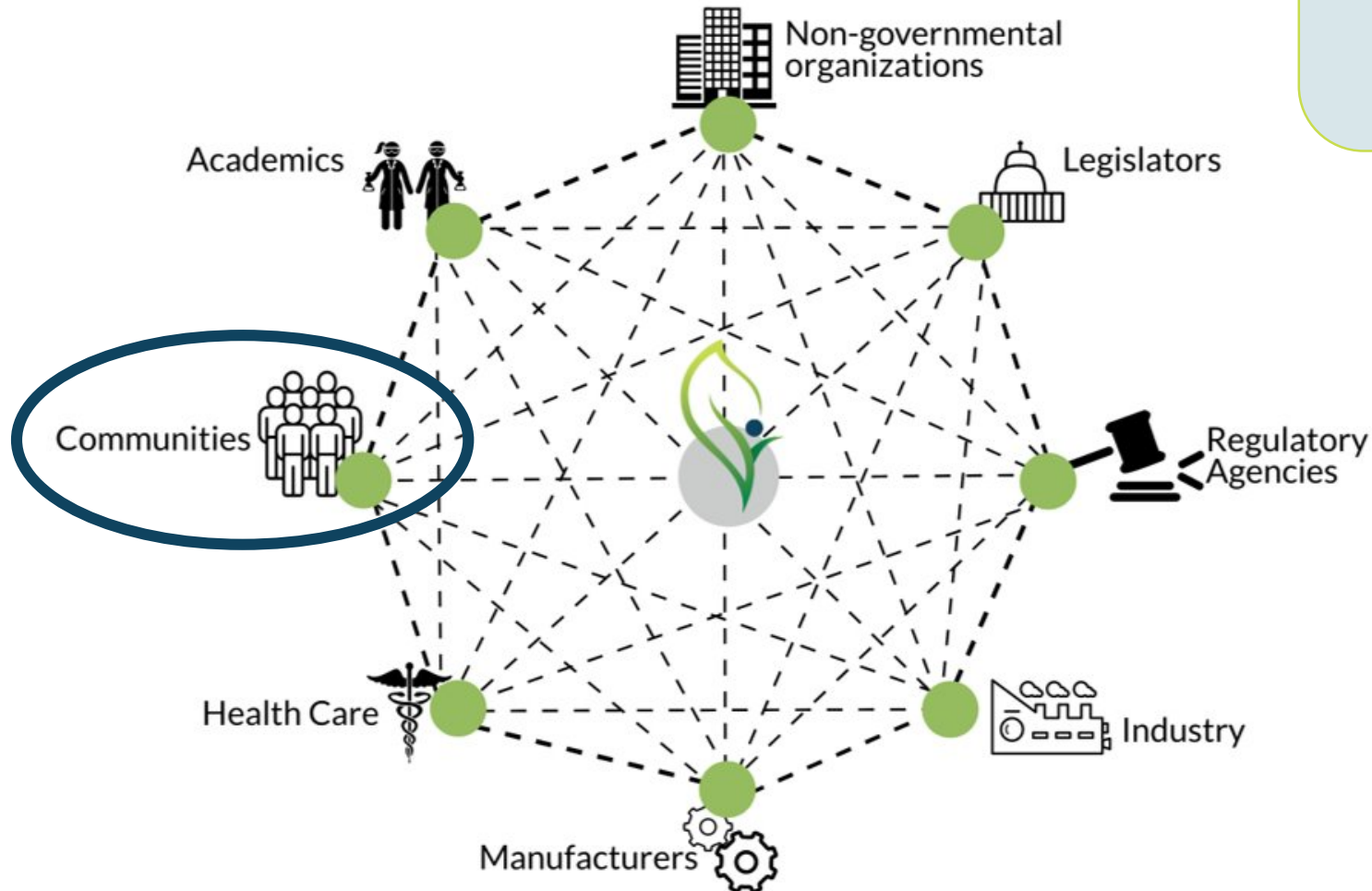
- Community Research Liaisons reaching out to community-based EH organizations throughout Oregon.
- Community Project Assistance - 5 consults



Discovery Index

Stakeholder "Community" Conversations

"We spend a lot of time responding to community members questions and we need to help them find answers."



"I'd like this to give me resources to answer our questions. Is our water safe? What is being put into our water? How do we protect people and animals?"

PILOT PROJECTS



Opportunities Pilot Projects

Upcoming

Application

Deadline

Eligibility

Deadline: Jan 15, 2022

Time-sensitive applications: rolling application



Focus on environmental health



Involves a Center investigator

- Oregon State University
- Oregon Health & Science University
- University of Oregon
- Other investigators eligible to join; email Dr. Molly Kile
 - molly.kile@oregonstate.edu



Basic, engaged, or translational research



\$20,000 base budget
+\$5,000 if using Center resources (zebrafish, CEC,
chemistry core, IHSFC)

West Eugene Air Toxics Exposure Study



Diana Rohlman (OSU) and Lisa Arkin (Beyond Toxics)



Diana Rohlman, PhD | Assistant Professor, Sr Research
College of Public Health and Human Sciences | PNW Center for Translational Environmental Health Research

BACKGROUND



- Environmental justice organization
- Over a decade working in West Eugene
- Member of Community Core team with the Oregon DEQ, LRAPA and OHA



- 31-acre wood treatment facility operating since 1943
- Situated in a mix of residential and industrial areas (residential areas within ¼ mile)
- Soil, air, and groundwater contamination previously reported
- Hundreds of reports since the 1970s filed with LRAPA

BACKGROUND

Table 4. Comparison of Median and Maximum Long-term (24-hour) Sampling Concentrations with Chronic Non-Cancer-Based and Cancer-Based Comparison Values

Note: Blank spaces indicate values were unavailable

Compounds	Concentration		Health Guidelines - Chronic	
	Median	Maximum	Comparison Value, Non-Cancer (EMEG)	Comparison Value, Cancer (CREG)
	[$\mu\text{g}/\text{m}^3$]	[$\mu\text{g}/\text{m}^3$]	[$\mu\text{g}/\text{m}^3$]	[$\mu\text{g}/\text{m}^3$]
Acenaphthene	0.33	1.0	Unavailable	0.91 ²
Fluorene	0.18	0.5	Unavailable	0.01 ²
Naphthalene	3.06	12.9	4 ¹	0.03 ³
Phenanthrene	0.17	0.3	Unavailable	0.91 ²
Total PAHs (BaP Equivalent) *	0.00068	0.0018	Unavailable	0.0009 ³

¹Agency for Toxic Substances and Disease Registry (ATSDR) Comparison Value Guidance and Naphthalene Toxicological Profile [9]

²Nisbet et al., Toxic Equivalency Factors (TEFs) for Polycyclic Aromatic Hydrocarbons (PAHs) [10]

³Oregon Department of Environmental Quality (DEQ) Air Toxic Benchmark for Naphthalene and Total Polycyclic Aromatic Hydrocarbons (PAHs) [11]

*Sum of individual Benzo[a]Pyrene equivalent concentrations for acenaphthene, fluorene, and phenanthrene, excludes naphthalene, Total PAH Concentration = Equivalency Factor_{acenaph} * Concentration_{acenaph} + Equivalency Factor_{fluorene} * Concentration_{fluorene} + Equivalency Factor_{phenanthrene} * Concentration_{phenanthrene}

PROJECT GOALS

Characterize the type and number of PAHs in the air in West Eugene.

West Eugene, Oregon. Environmental Justice community.

History of concerns related to emissions from JH Baxter

Translate and evaluate environmental health literacy

Return air quality and individual chemical exposure data to study participants and the West Eugene community.



ODOR COMPLAINTS



HEALTH COMPLAINTS

(headache, nausea, dizziness, difficulty breathing, eye irritation)

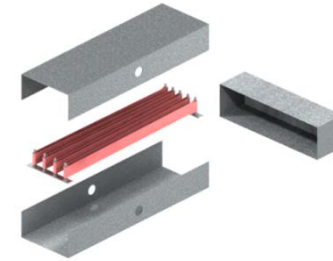


NAPHTHALENE

(2007 – identified elevated levels)

METHODS

Characterize the type and number of PAHs in the air in West Eugene



Deploy stationary samplers around the facility across all four cardinal directions for seven days.

Recruit individuals living within 1 mile of the facility to wear personal passive sampling wristbands for seven days.

Analyze all samplers for 63 PAHs.

- Analytic method includes the PAHs previously analyzed by SHINE
- Full list of analytes: <http://fses.oregonstate.edu/methods>



[CXC] Chemical Exposure Core

METHODS

West Eugene Air Quality Study Instructions

Thank you for agreeing to participate in our West Eugene Air Quality Study. For this study we are asking people to help us sample the air in West Eugene, OR. There are many ways to participate.

Wristband Only

Stationary Monitor Only

Wristband + Stationary Monitor

Important Information

This page includes information you will need to help complete this study. This study lasts **7 days**. This kit includes the following materials you will need:

Survey link (paper version available on request)

Frequently Asked Questions

Daily Activity Log

Get Started

Please fill out the online survey if you have not already done so. This information helps us understand more about the air quality near you, and helps us understand how to return your results to you. If, after reading more about the study, you do not want to participate, please let us know immediately and we will pick up the samplers at no cost to you.

https://oregonstate.qualtrics.com/jfe/form/SV_0TE8u86P6CP9DFA

If the URL does not work, or you prefer a paper version, you can request a paper version from Beyond Toxics.

Do not go to the next page until you have filled out the survey. This is important!

We greatly appreciate the time and effort you are putting in to this research. Please contact us with any questions or concerns.

Email Diana Rohlman at Diana.Rohlman@oregonstate.edu or Arjorie Arberry-Baribeault at aab@beyondtoxics.org

Passive Sampler Exposure Kit Using Silicone Wristbands

Thank you for agreeing to participate in our West Eugene Air Quality Study.

Silicone wristband in special air-tight bag

Return envelope

Frequently Asked Questions

Instructions

START

WEAR

RETURN

- Place the wristband on your wrist (right or left hand, your preference).
- Seal the bag and fill out the first two lines on the label.
- Wear the wristband for **7 days**.
- On Day 7, place the wristband in the original air-tight bag and fill out the label.
- Place all materials in the envelope and leave on your porch or return to Beyond Toxics.

Wristband ID: _____

Order/Time Off: _____

Order/Time Off: _____

We greatly appreciate the time and effort you are putting in to this research. Please contact us with any questions or concerns.

Email Diana Rohlman at Diana.Rohlman@oregonstate.edu or Arjorie Arberry-Baribeault at aab@beyondtoxics.org

Additional Resources

- Frequently Asked Questions: <https://www.oregonstate.edu/beyondtoxics>
- What is a passive sampling device: <https://www.oregonstate.edu/beyondtoxics>

West Eugene Air Quality Study Activity Log

Study ID: WEAQ_____

Start: ____/____/____ End: ____/____/____

Please fill out this daily activity log for each day of the study.

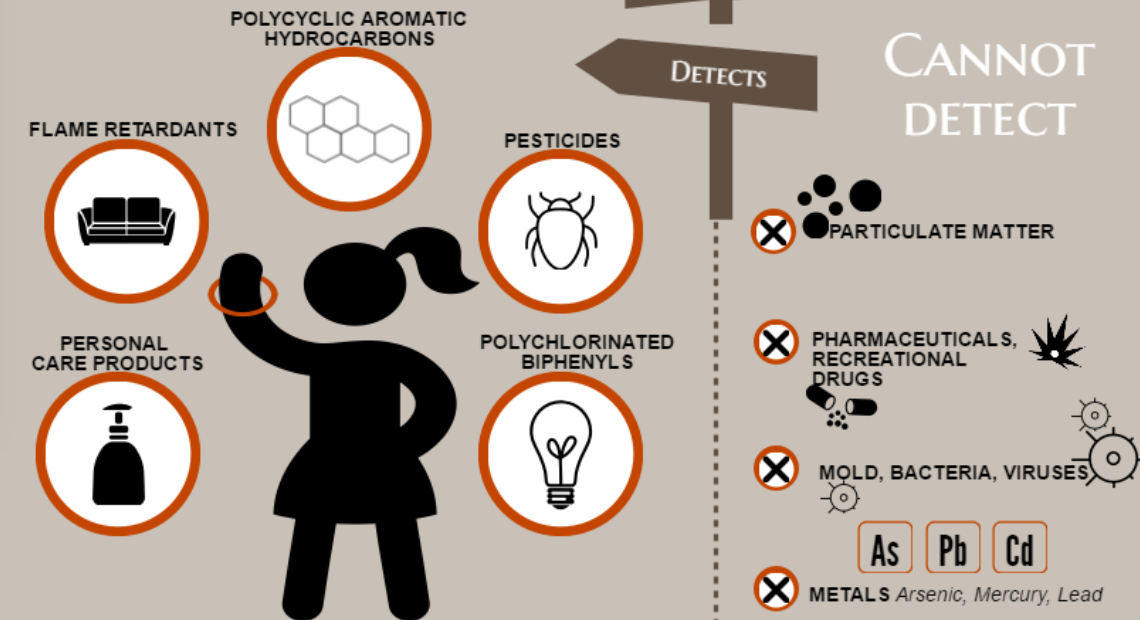
If you have any questions, please contact us:
Telephone: (541) 357-6577

CONFLICT OF INTEREST STATEMENT Kim Anderson and Diana Rohlman have a conflict of interest related to this study. These researchers own or are related to someone who owns a company that provides services related to the silicone wristbands.

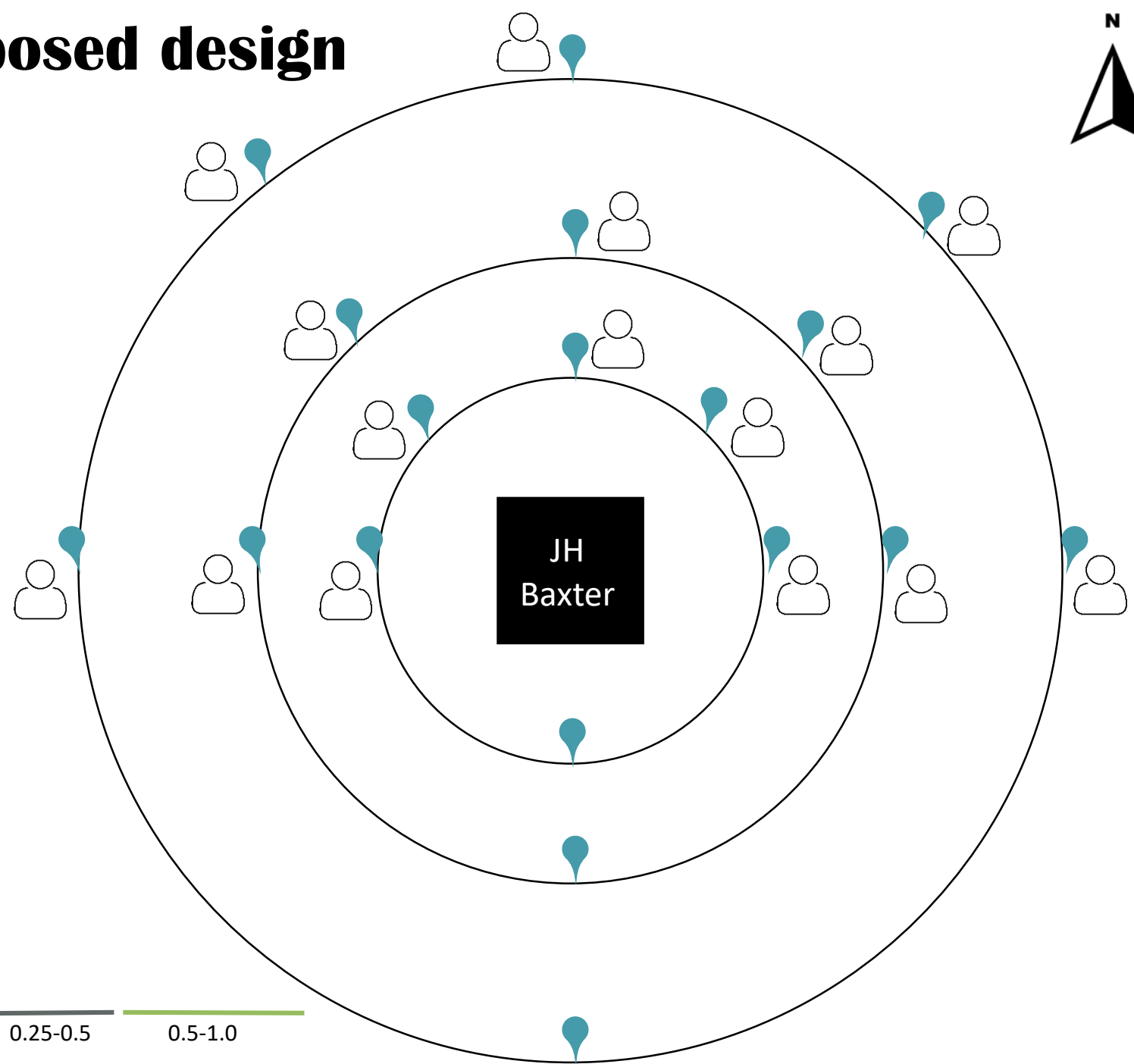
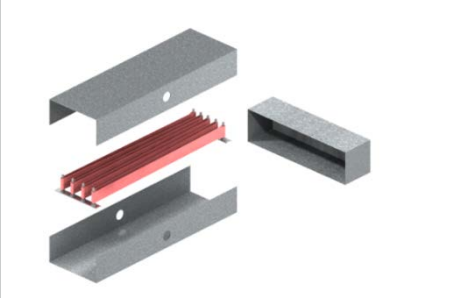
PASSIVE WRISTBAND SAMPLER



WHAT DOES IT DETECT?



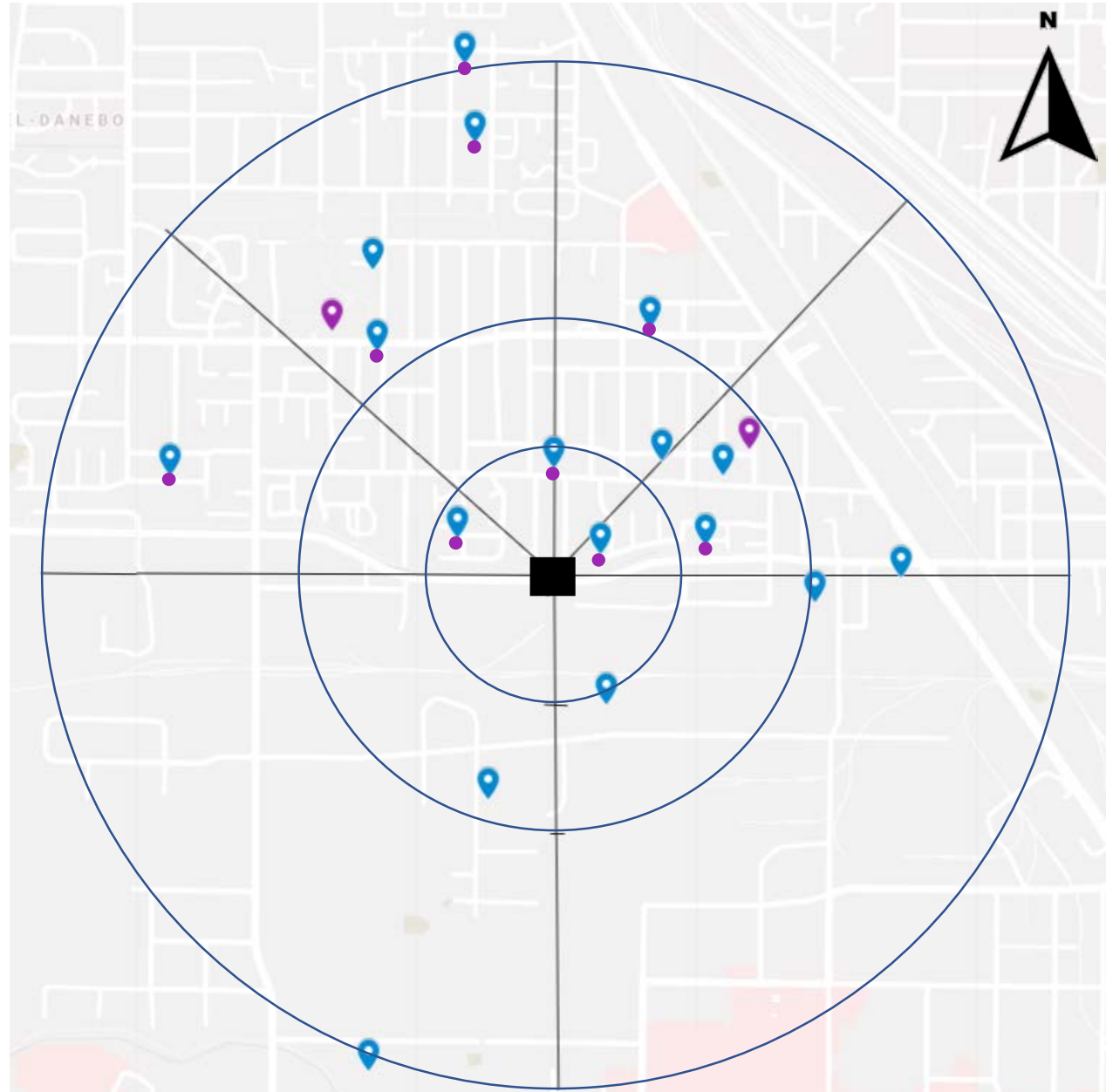
Proposed design



Final design

Stationary monitors
(blue)

Wristbands (purple)



October 11, 2021

Field deployment

- 2 Beyond Toxics staff trained and out in the field
 - Support provided by CXC – Team 2 led by Dr. Lane Tidwell
- Trip blanks utilized
- 17 stationary locations deployed
 - One site deployed in triplicate
 - Samplers deployed ~1 meter above ground
- 15 silicone wristbands disseminated

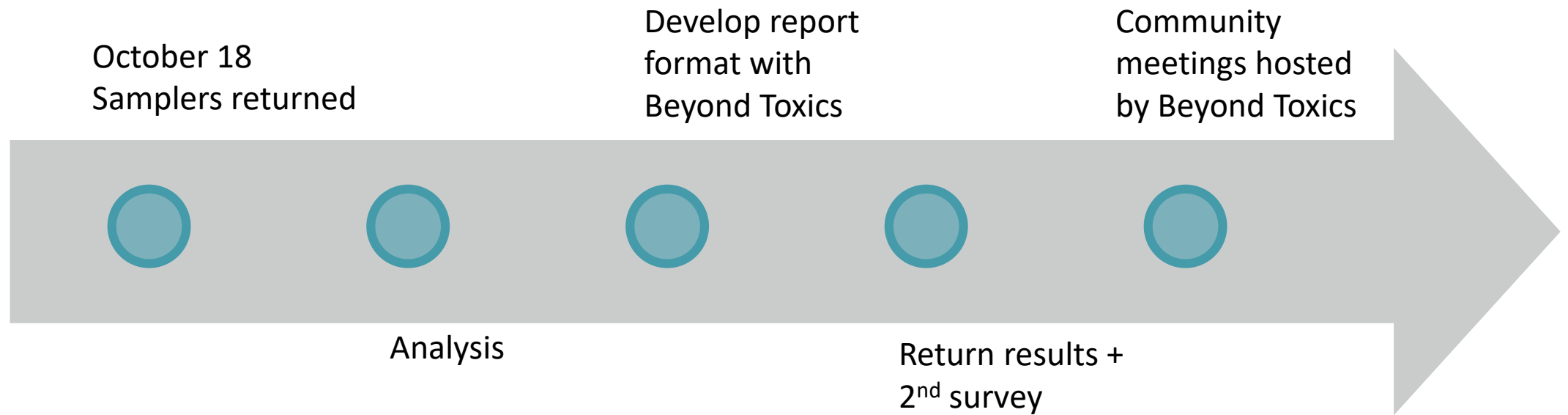


JH Baxter

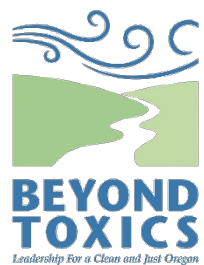
Train tracks

Freight yard

NEXT STEPS



ACKNOWLEDGEMENTS



Beyond Toxics

Lisa Arkin – Executive Director (Co-Principal Investigator)

Arjorie Arberry-Baribeault

Eric Burdette

Mashal Rahmati

Xitlali Torres

Ana Molina

Chemistry Exposure Core

Kim Anderson – Director

Pete Hoffman – Assistant Director

Lane Tidwell

West Eugene participants – thank you for your time and dedication to this study

Funding was provided through the Pilot Projects Program of the Pacific Northwest Center for Translational Environmental Health Research at Oregon State University. The Center is supported by the National Institute of Environmental Health Sciences, grant number P30 ES030287.



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Klamath County Public Health Pilot Project

*Downtown Portland during 2020 wildfires.
~Wikipedia Commons.*

Wildfire smoke exposure and infant health

Klamath County

High rates of:

- Infant mortality
- Preterm birth
- Low birthweight

Concern over prenatal exposure to wildfire smoke



*Bootleg fire, Oregon.
~New York Times.*



QUESTIONS?



5 Minute Break
Please be back
@ 9:55

SAB STRUCTURE





"Mad Lib" Charter Development

1. CEC wants input from members and affiliates on the guiding document (e.g., commitment, composition, stakeholders, new members).
2. Complete over next 6-12 months
3. Share DRAFT
4. Delphi decision making

The background of the slide features a photograph of the Oregon Health & Science University (OHSU) campus. A large, modern glass-walled building is the central focus, situated on a hillside. To its left, there are other multi-story buildings with brick and concrete facades. In the foreground, a cable car system is visible, with two cars suspended from cables. The hillside is covered in lush green trees. A dark gray diagonal shape overlays the bottom left portion of the image, containing the title text.

CEC Stakeholder Advisory Board Evaluation

OHSU Evaluation Core | PNW-CTEHR
Presented by: Amy Wilson, MPH



Evaluation Background and Purpose

- External evaluation
 - Conducted by OHSU Evaluation Core
- Purpose: evaluation of Center's Community Engagement Core (CEC)
 - Includes CEC-specific evaluation efforts, and cross-work throughout the Center

SAB Evaluation Focus

- Better understand **strengths and challenges** in participating in the SAB
- **SAB representation**
 - Research interests, areas of expertise
 - Who should be included in SAB? Who is missing?
- **Identify opportunities for improvement** for Center
- Measure **changes in SAB engagement** over time
- Measure **changes in SAB membership/affiliation** over time







SAB Evaluation Activities

- Biannual surveys



- Future interviews



Community Engagement Core: Stakeholder Advisory Board Survey

Please help us improve the CEC Stakeholder Advisory Board, and better understand your research interests by taking this short survey. The survey will take about **5 minutes**.

Questions?



Please check email for most recent SAB Survey!

We will follow up with survey results.



Jamboard Activity



15 minutes

STAKEHOLDERS ON THE SAB

1. Break out into 2 groups
2. Discuss how you define Stakeholder Groups
3. Understand where you fit
4. Identify who is missing



WRAP UP AND NEXT STEPS



SAB NOTES, SLIDES,



NEXT MEETING
April 2022



DISCOVERY INDEX - Community Conversations



EVALUATION

Amy will be sending a survey right now by email

THANK YOU!

