

MODERNIZING WASHINGTON'S ENVIRONMENTAL HEALTH DISPARITIES MAP

Jennifer Sabel and Zoe Schneider

Presenters



Jen Sabel, she/her

Epidemiology Supervisor

Washington Tracking Network



Zoe Schneider

Spatial Epidemiologist

Washington Tracking Network

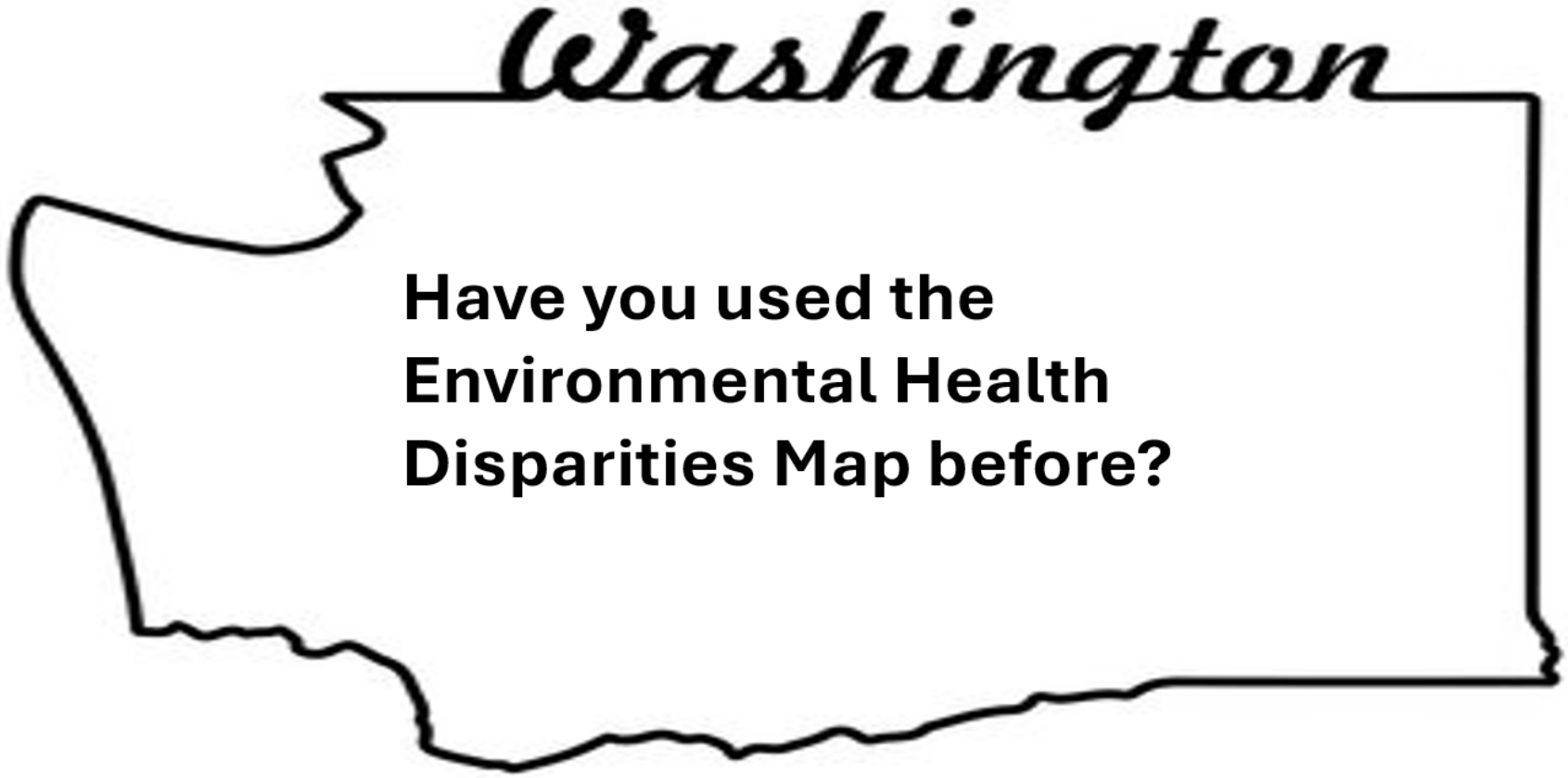
@WADeptHealth



Our Agenda

- Environmental Health Disparities Map Intro
- Centering Community and Tribal feedback
- Version 2.0 to 3.0 changes
- Practical Applications for LHJs
- Next Steps
- Early Themes from Public Comment Period

Photo Credit: Colville Chamber of Commerce


Washington
Have you used the
Environmental Health
Disparities Map before?



Environmental Health Disparities Map – Introduction & Background

What is the Map?

Washington Environmental Health Disparities Map (EHD)

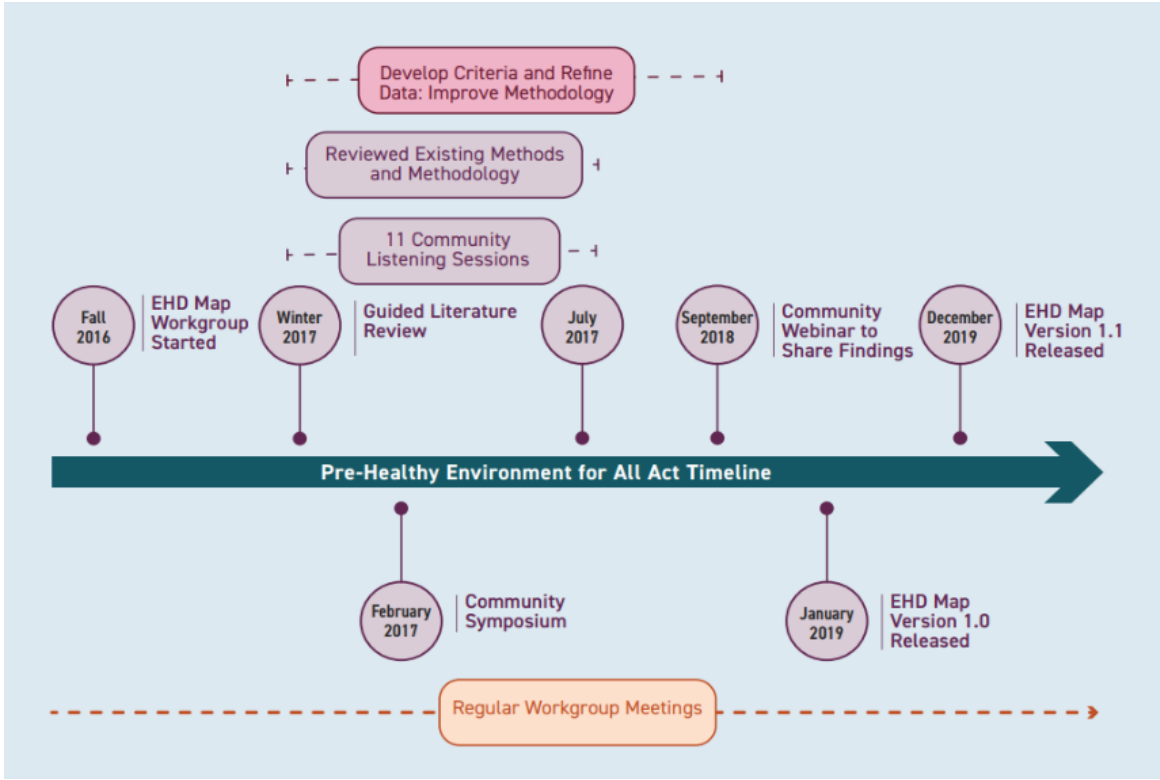
- An interactive tool
- Compares communities across Washington
- Shared on the Washington Tracking Network
- Has information on environmental risks & demographics



Mount Rainier
Photo Credit: jessleephotos.com

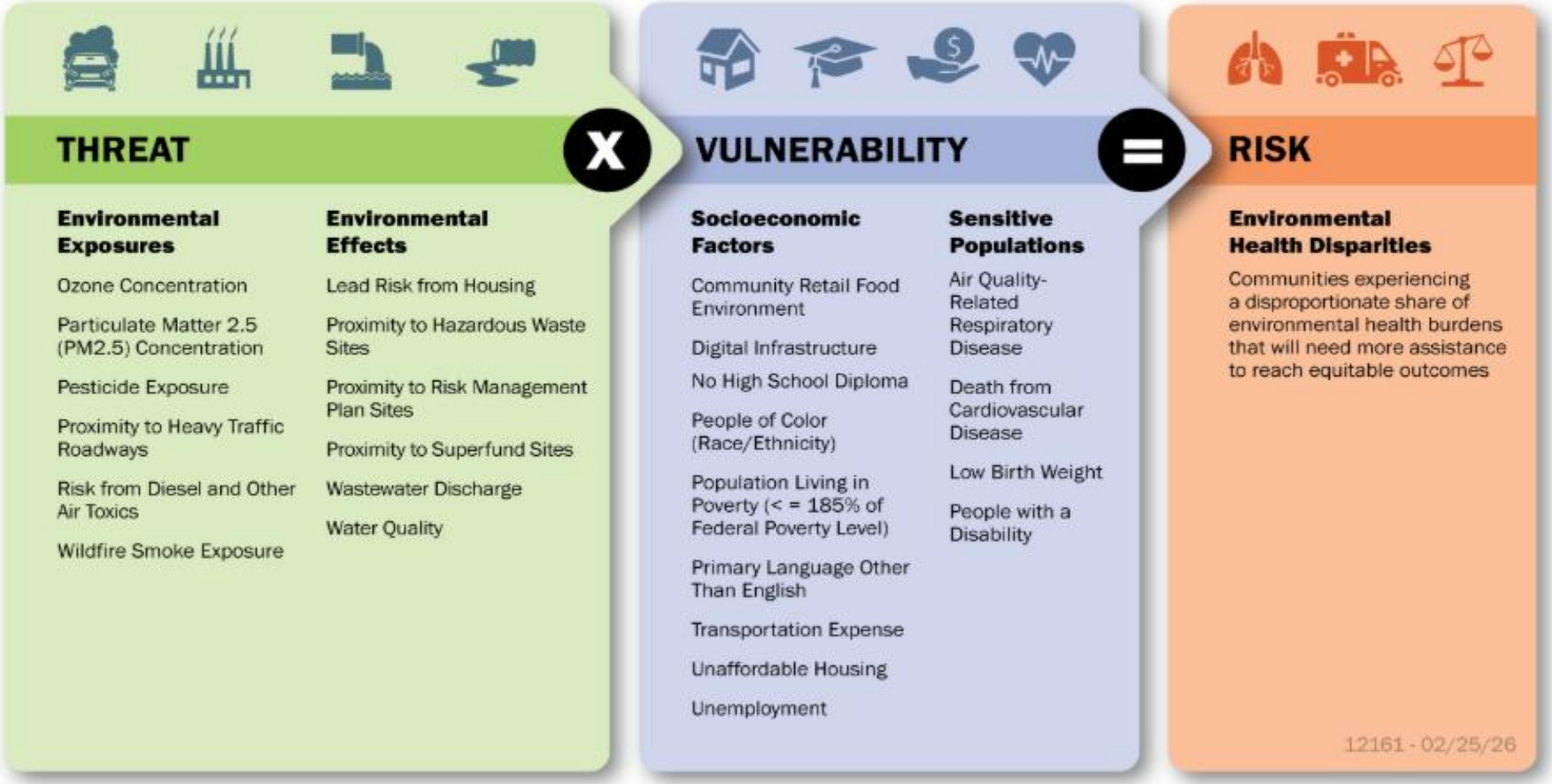
How Did the Map Get Created?

Acknowledgement to communities & Tribes that have been on the front lines of fighting for environmental justice leading to the creation of the EHD map.



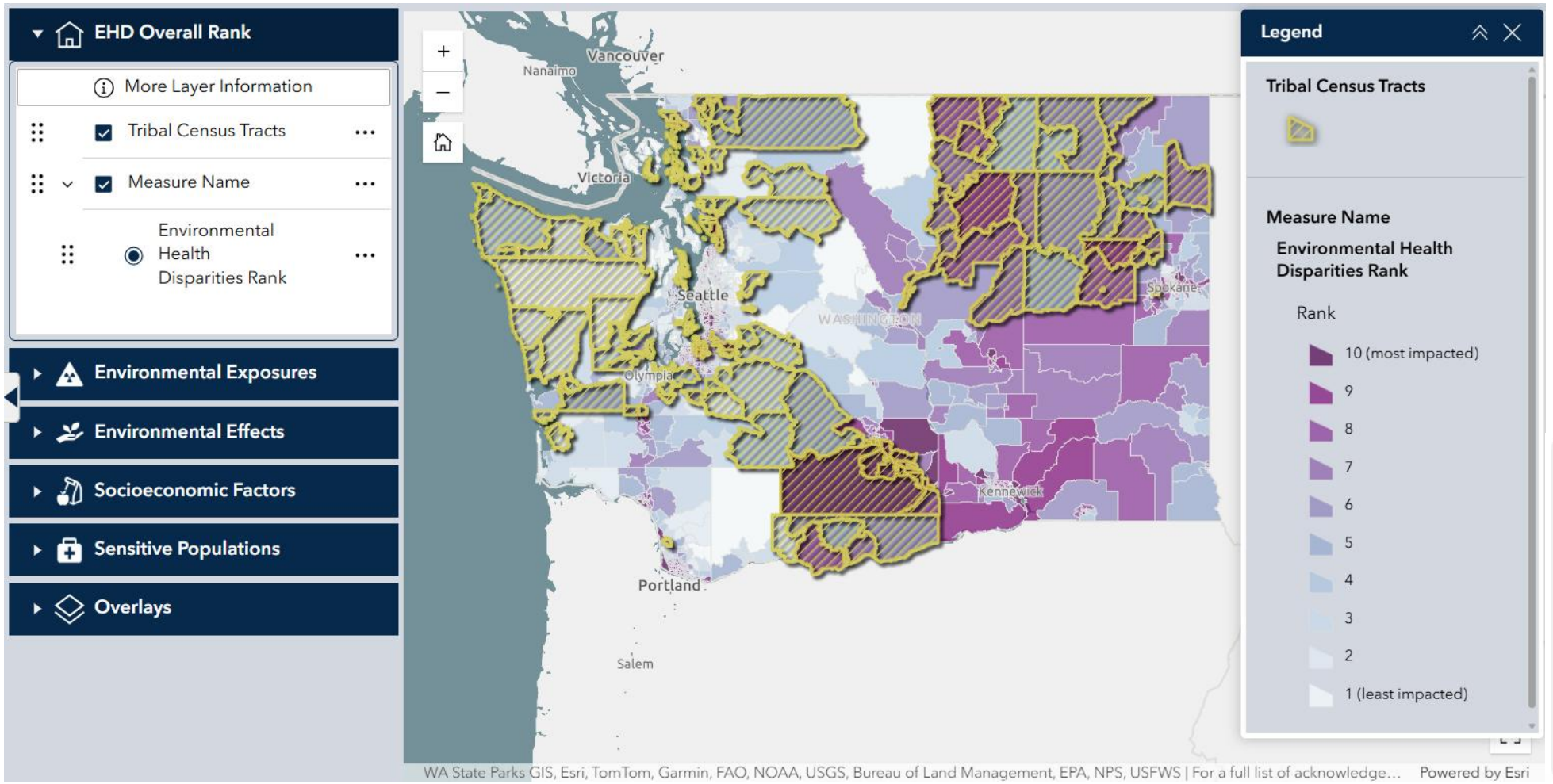
Washington Environmental Health Disparities Map

Threat x Vulnerability = Risk

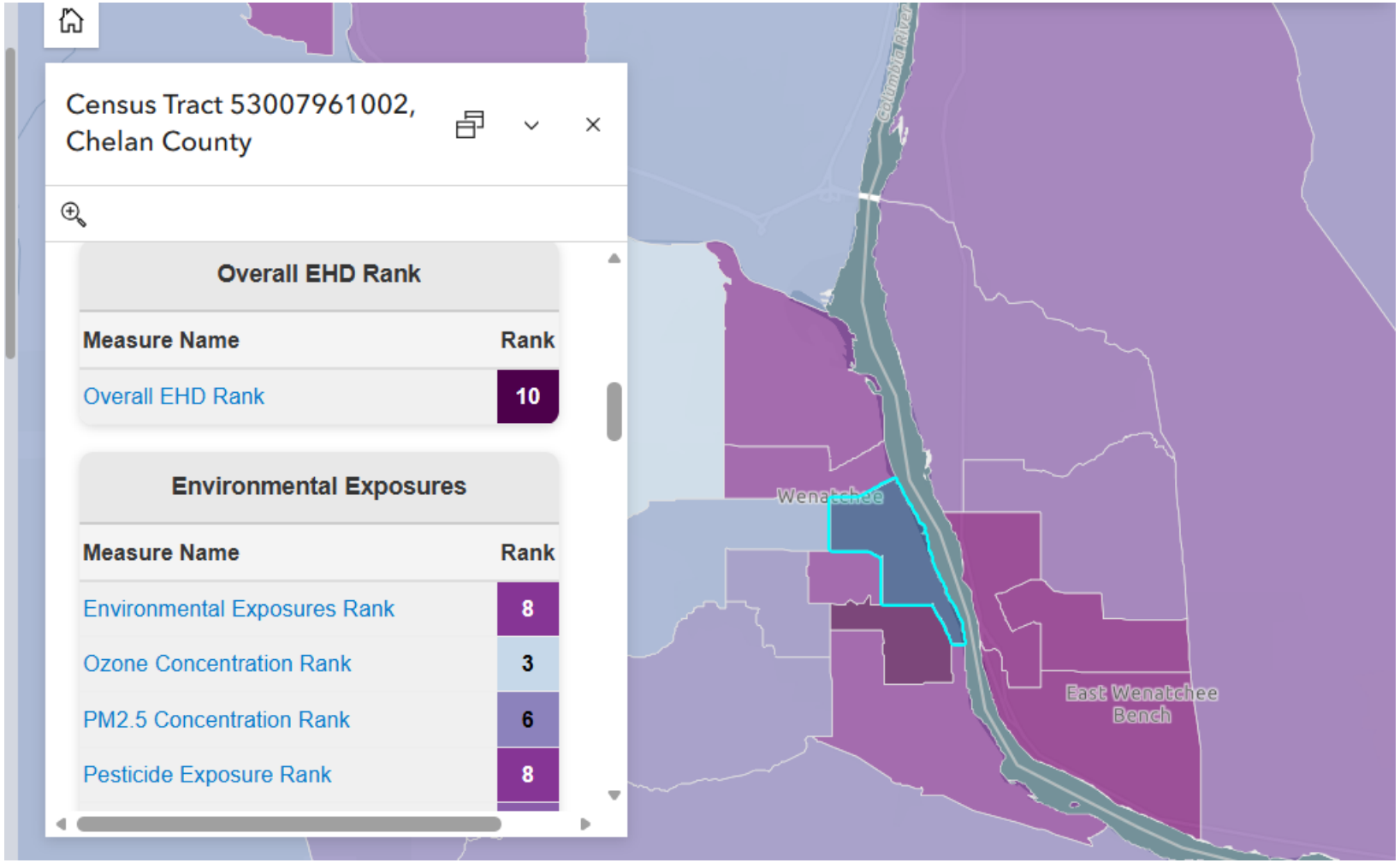


Pollution, cost of living, and other social conditions don't happen on their own. They combine with the ongoing impacts of racism, colonization, and other injustices to affect community health.

EHD Map – Version 3.0
www.doh.wa.gov/EHDmap



Using EHD Map to Identify Disparities





Centering Community and Tribal Engagement

Granite Mountain

Community and Tribal Engagement & EHD Map

HEAL Act Statute:

- Solicit feedback from overburdened communities and vulnerable populations
- In all regions of the state
- DOH must offer Tribal consultation

2025 Community Engagement Partners

COALITION BUILDING WITH COMMUNITY

Better Health Together ACH	Elevate Health ACH	Greater Health Now ACH	Shades of Motherhood Network	Southwest Washington ACH	Thriving Together Now ACH
8	6	17	Worked within their network	10	14

- We focused on identifying and working with communities that are highly impacted and historically minoritized within partner network
- Hosted 69 contracted and over 20 non-contracted community engagement sessions (reaching over 1,973 forward-facing community members)
- Hosted 8 (7-in person and 1 virtual) post community engagement listening sessions, round-tables or meetings.

Public Comment Period: June – October 2026

Monthly Engagement Sessions

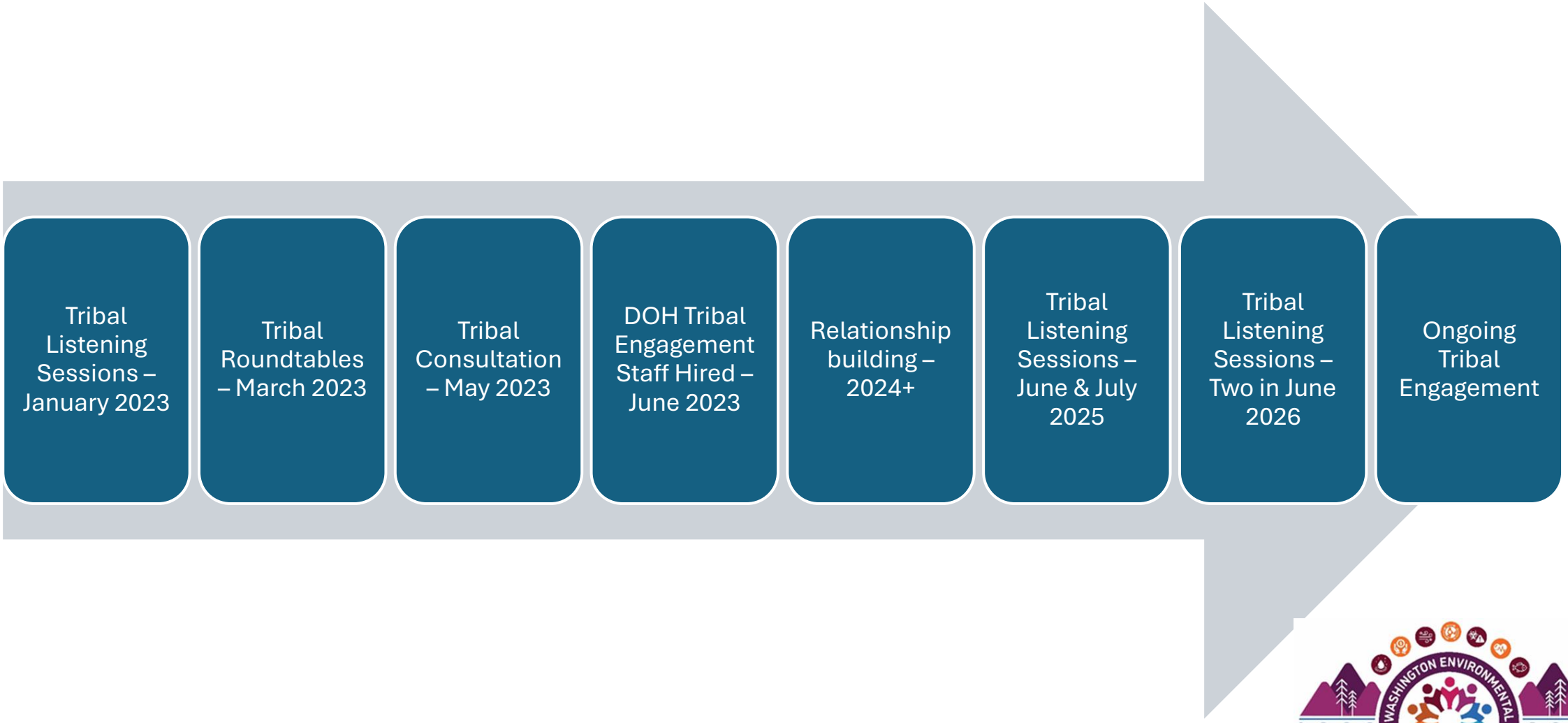
- June – Demo & Measures
- July – Overlays
- August – Adding external data
- September – V2 to V3 differences
- October – Process for adding additional topics

Office Hours

- 3rd Wednesday, 9 – 10 am
- Last Tuesday, 2 – 3 pm

Take the EHD Map Public Comment Survey

EHD Map Tribal Engagement Timeline





Version 2.0 to 3.0 Changes & Comment Period

Major Feedback and Goals for Version 3.0

1. Highlight Tribal lands as overburdened communities
2. Include more measures that represent concerns in rural communities
3. Add pollution measures to represent concerns other than air pollution
4. Update data from 2010 to 2020 census tracts
5. Move map to a platform to support more responsiveness to Tribal and community requests
6. Make the map communication materials more accessible to a broad audience



V3.0 New Measures



Pesticide Exposure



Wildfire Smoke Exposure



Water Quality



Community Retail Food Environment



Digital Infrastructure



Air Quality-Related Respiratory Disease



People with a Disability

Example Community Support for New Measures

From Okanogan:

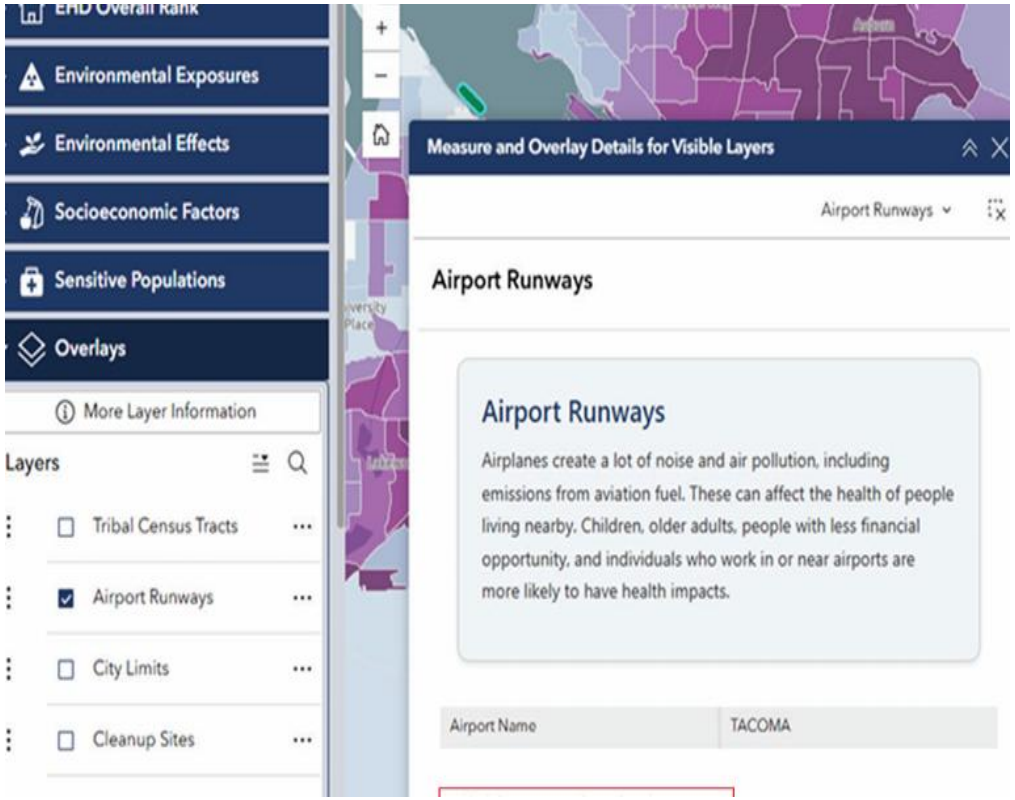
- “Food insecurity. Access to affordable, nutritious, high-quality food is lacking. We understand that DOH is working on a measure for this and look forward to more information and to ground-truth our region.. "

From Walla Walla:

- Digital Infrastructure: “I would like free internet for the community; there is an absence of internet (services) for cellular use. I worry about my husband because he has heart problems, and we don't have any cellular service where I work, and I always stress worrying about him."

Overlays? What is That?

- **Overlays are…**
  - Data layers that can be added to the map to provide additional context and visual support.
  - Do not contribute to a community's environmental health risk score (the rank).



New or Updated Overlays

New

Tribal Census Tracts

Climate Projections

Languages Spoken at Home

PM 2.5 Daily Concentration

PM 2.5 Annual Concentration

Ozone Peak Annual Concentration

New

Transportation Noise

Upgrade! Adding External Data

- Data can be added from:
  - ESRI's Living Atlas - livingatlas.arcgis.com
  - Washington Geospatial Portal - geo.wa.gov
  - Any other external open-data platform that host spatial datasets
    - Housing and Urban Development - hudgis-hud.opendata.arcgis.com
    - Your county GIS site - gis-kingcounty.opendata.arcgis.com



Documentation and Communication



1. Emphasizing concerns and priorities expressed by Tribes and communities in documentation for measures
2. Make documents accessible for wider Washington community understanding
3. Providing video and written tutorials for using the map and data
4. Translating materials into 9 languages (Arabic, Simplified Chinese, Chuukese, Korean, Spanish, Punjabi, Russian, Ukrainian, and Vietnamese)

Video Tutorials

Video: How to Use the Map

We hope this YouTube video tutorial series helps you use the EHD Map. It is also available in the following languages: العربية - Arabic (YouTube) | 简体中文 - Chinese Simplified (YouTube)العربية - Arabic (YouTube) | 简体中文 - Chinese Simplified (YouTube) | Fosun Chuuk - Chuukese (YouTube) | 한국어 - Korean (YouTube) | ਪੰਜਾਬੀ - Punjabi (YouTube) | Русский - Russian (YouTube) | Español - Spanish (YouTube) | Українська - Ukrainian (YouTube) | Tiếng Việt - Vietnamese (YouTube).

Series of 9 videos that highlight different aspects of using the EHD map - English

Increase Transparency Around Limitations

"This method assumes ozone levels are the same throughout each census tract. However, ozone can vary within smaller areas, especially in rural areas where census tracts are typically large.

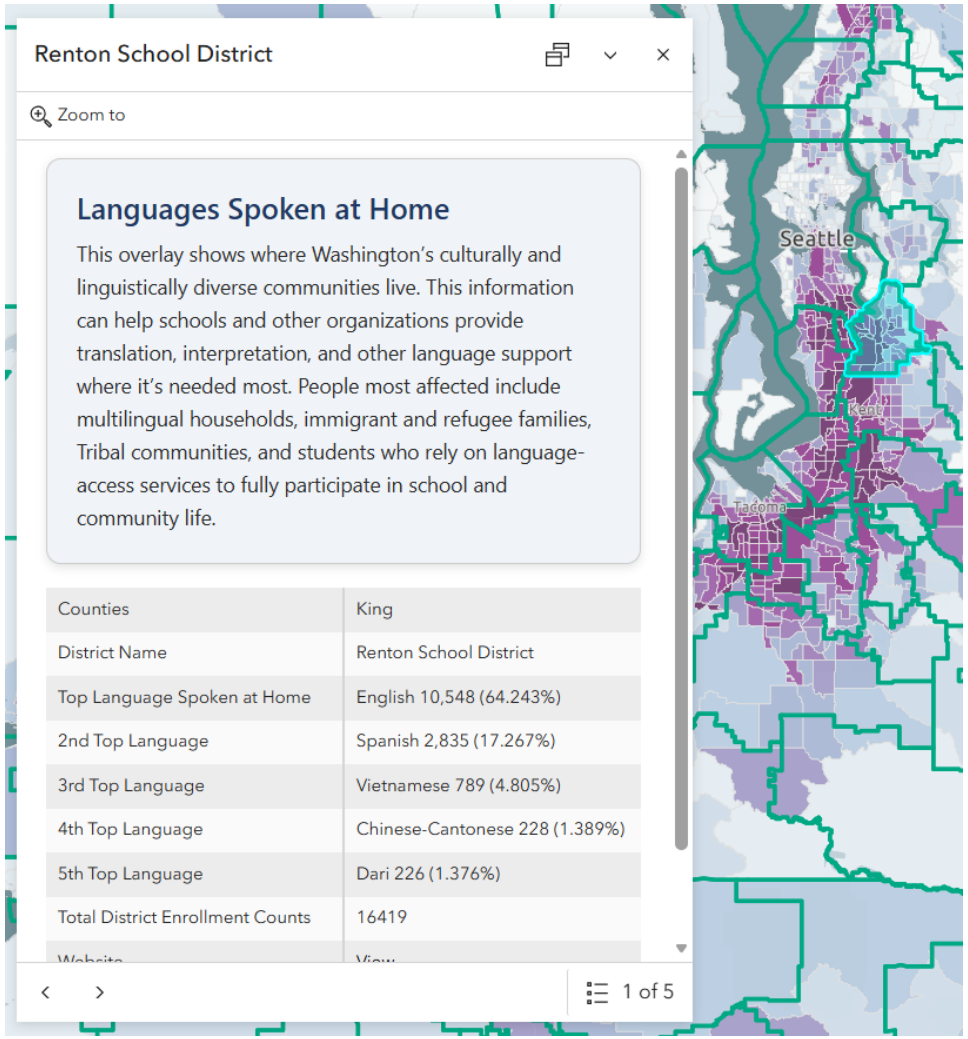
Because the same ozone level is used for the entire census tract, it might not reflect the true air quality in some communities. "

"This measure represents the entire census tract, not individual areas within it. These data should always be supplemented with local data and equitable engagement for more accurate insights."



Practical Applications

Community Engagement



- We want to host a community engagement and ensure that materials and the presentation is accessible. How can I use Overlays to prepare for my session?

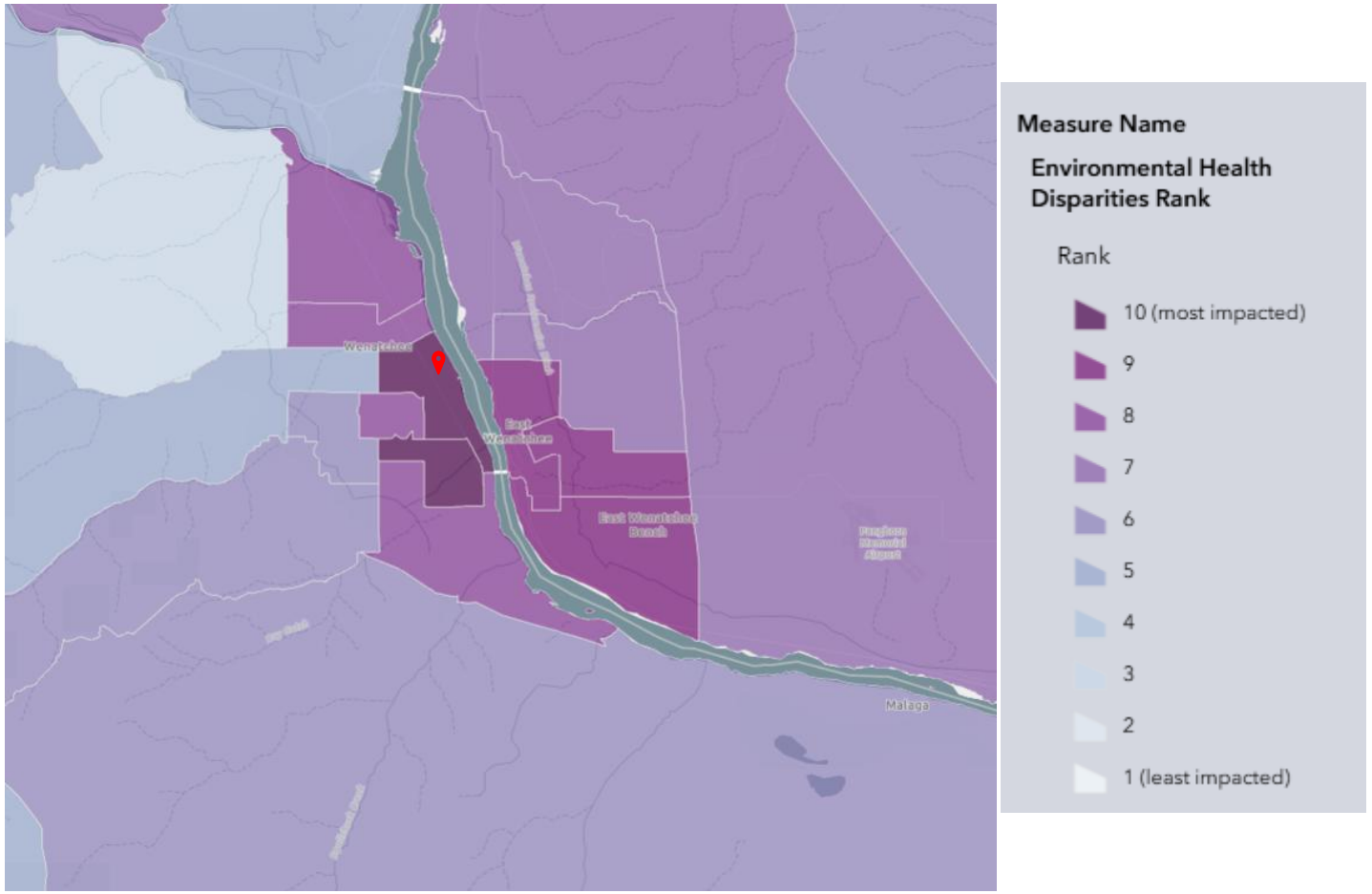
Languages Spoken at Home

This overlay shows where Washington's culturally and linguistically diverse communities live. This information can help schools and other organizations provide translation, interpretation, and other language support where it's needed most. People most affected include multilingual households, immigrant and refugee families, Tribal communities, and students who rely on language-access services to fully participate in school and community life.

Identifying Locations

- A local health jurisdiction wants to identify locations for community cooling centers.

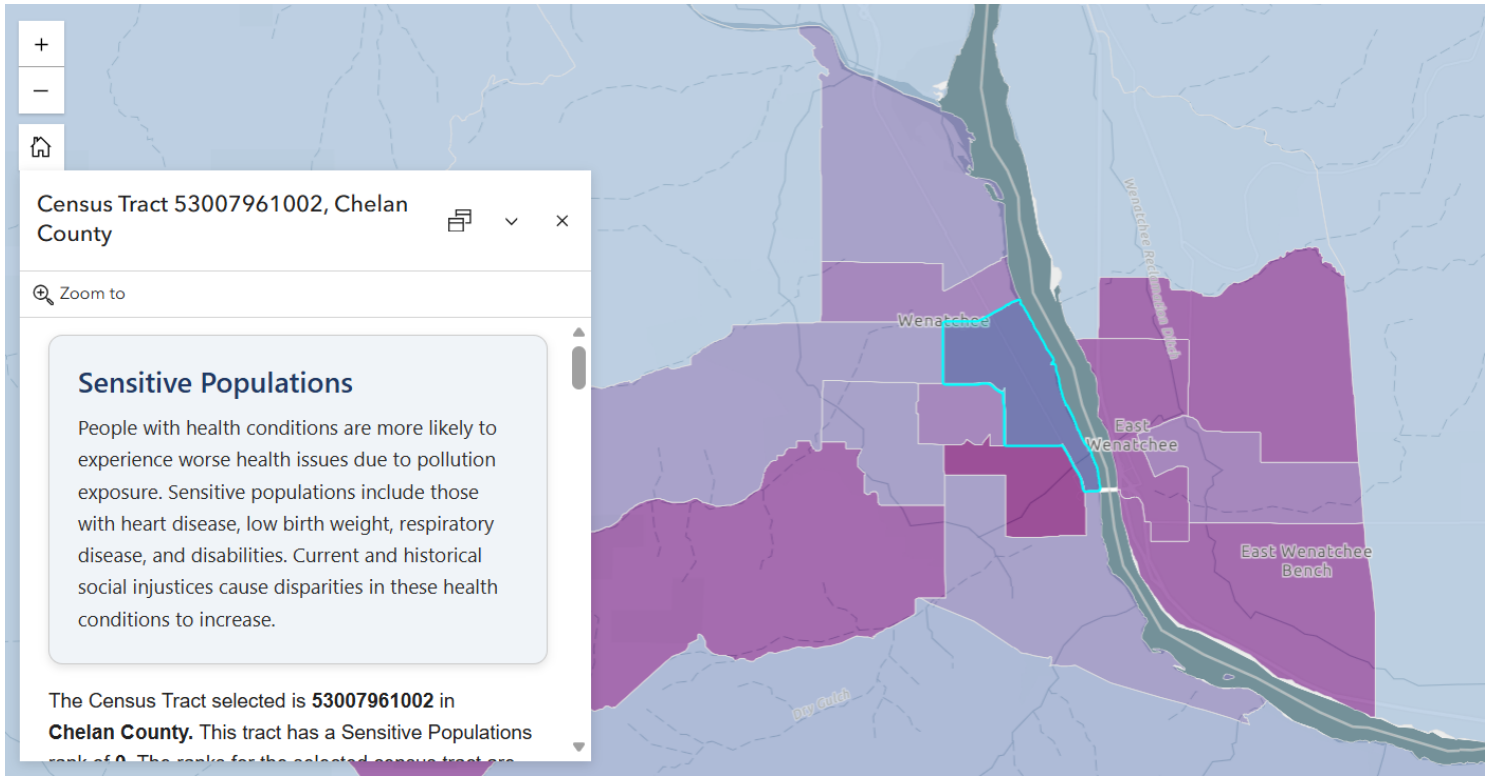
- Identify areas with existing population and pollution factors that impact people living there
- This is a good starting point for any analysis



Identifying Locations

- Looking at more specific data on the EHD map

- Sensitive populations theme – this averages the scores for cardiovascular disease, low birth weight, air quality-related respiratory disease, and population with a disability.
- The EHD map doesn't include any heat data when calculating these ranks, so this data might not be as useful for answering the question



Identifying Locations

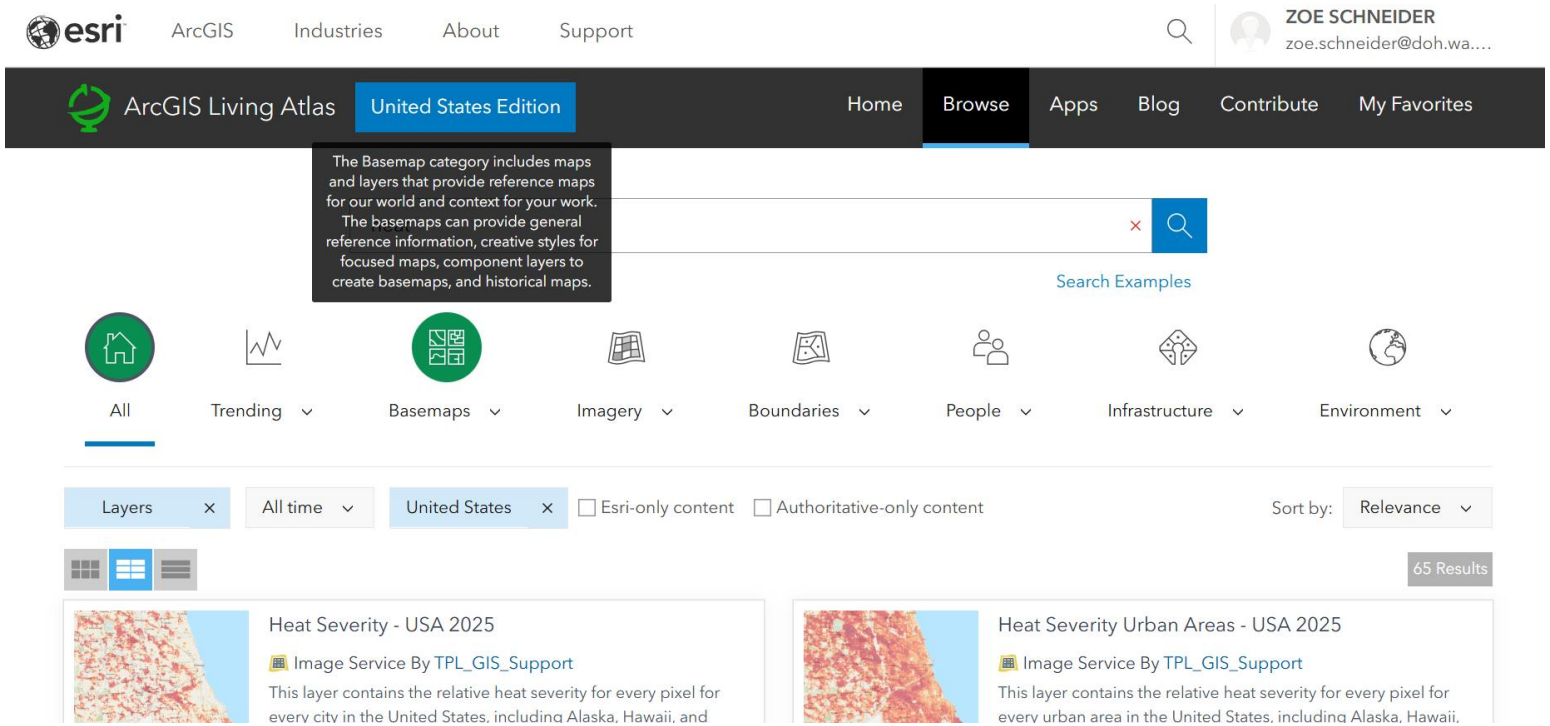
- EHD Map Overlays – these don't contribute to the EHD Rank, but they can provide useful information
- 2050 Climate Projection for annual extreme heat days
- This might be useful for long-term efforts, but it doesn't tell us what areas will be the most impacted in the next month



Identifying Locations

- We can search for extra data in ESRI's Living Atlas and add that information to the EHD map as a custom overlay
- See our tutorials for more information on how to do this!

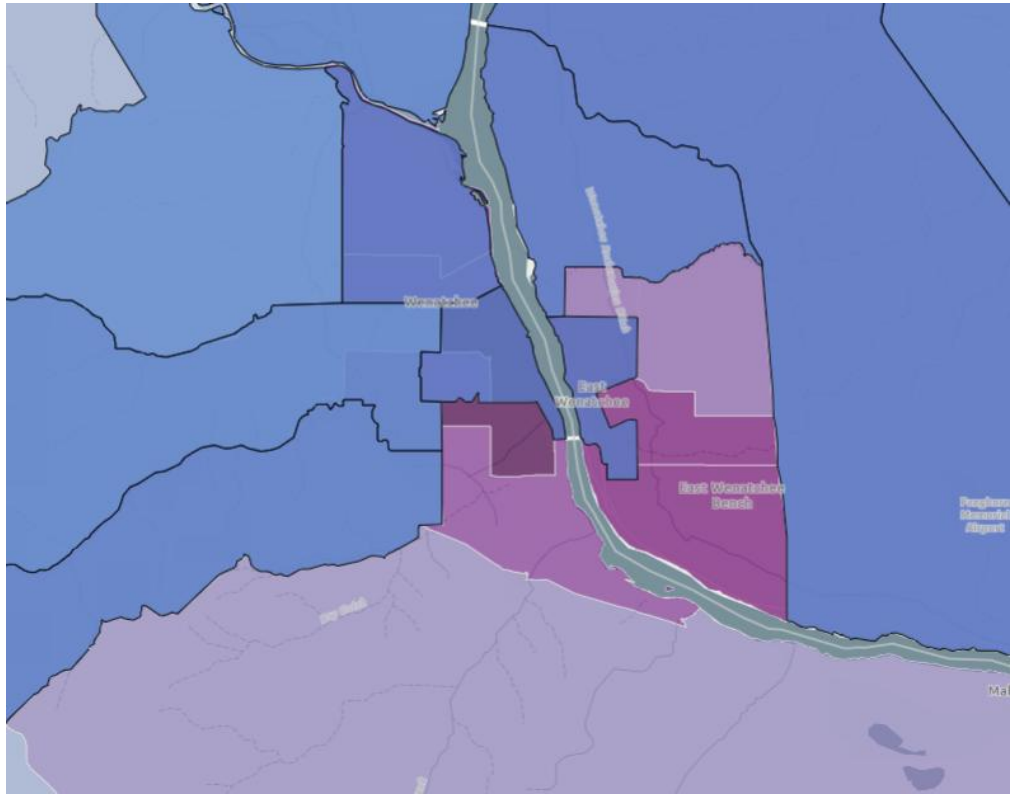
- Search key words like:
  - Heat
  - Cooling Center
  - Temperature



Identifying Locations

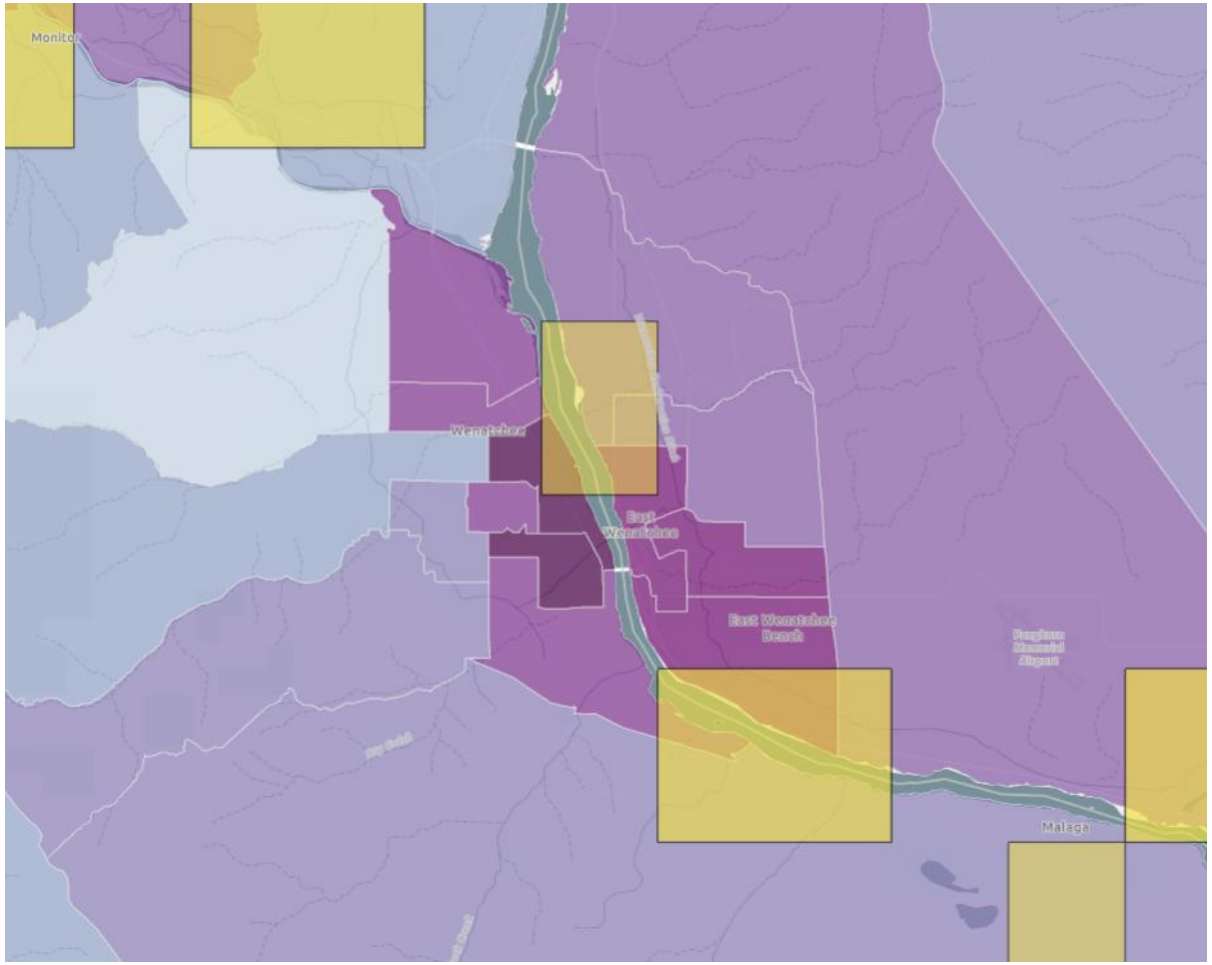
- First step - look for data specific to cooling centers

- The Opportunity Project has created a cooling center index – blue areas indicate a score higher than 80% of other census tracts in Washington
- This is based on high summer average surface temperature, the percent of the population over 65, and the percent of houses without a vehicle



Identifying Locations

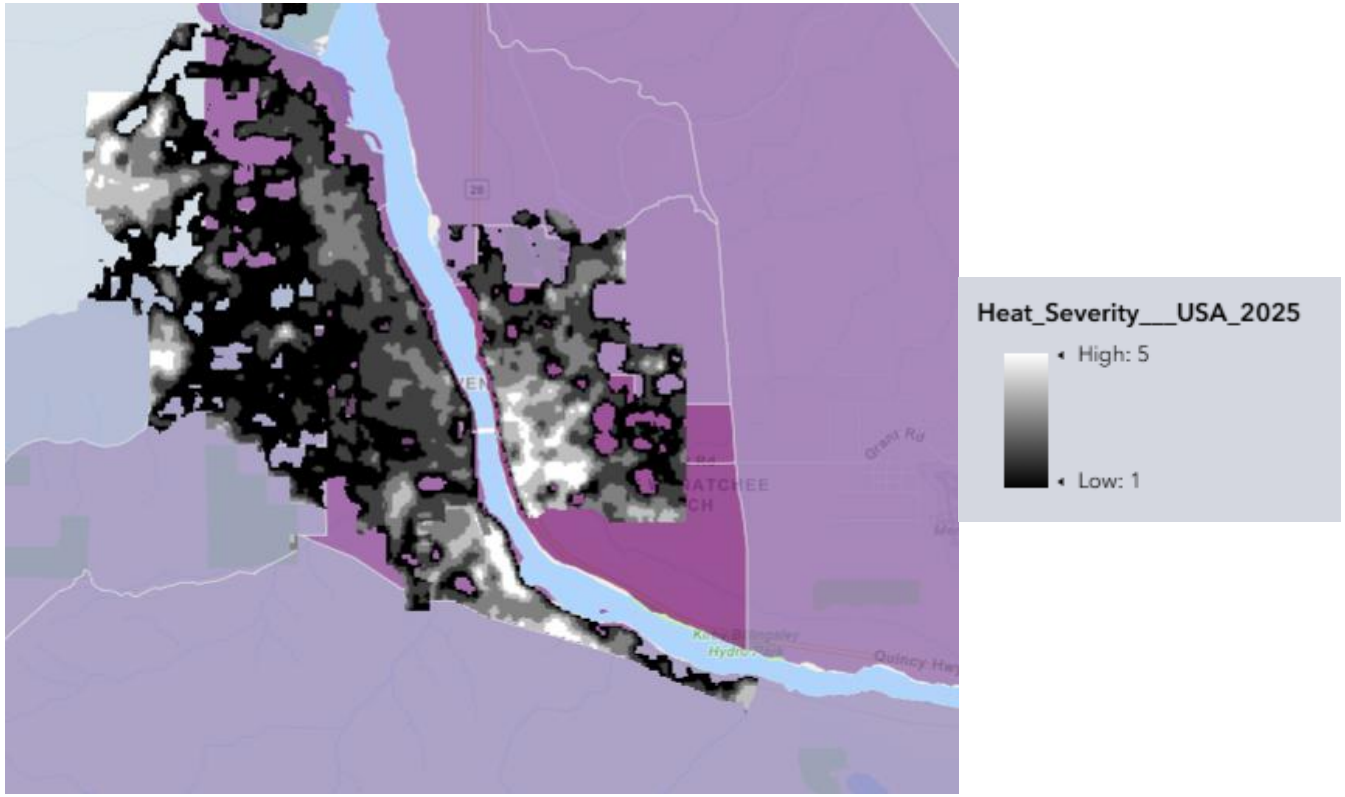
- We want more up-to-date data
- National Weather Service's 3-day forecast, filtered to show areas with a maximum temperature above 70



Identifying Locations

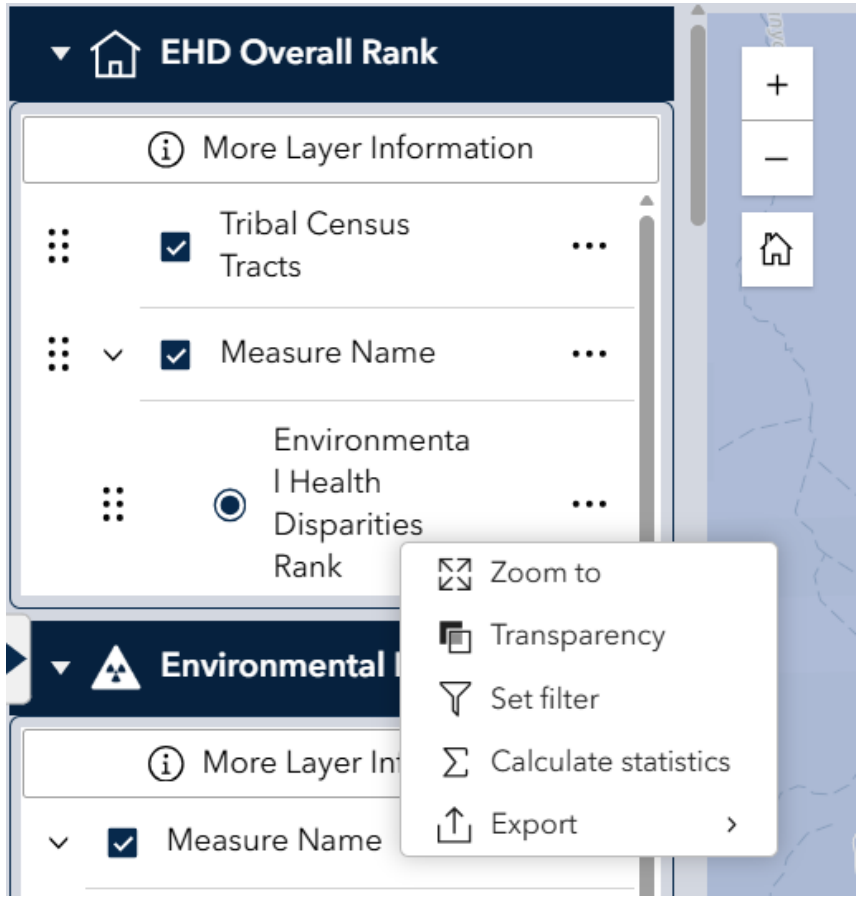
- More specific data would be nice – census tracts have a lot of variation

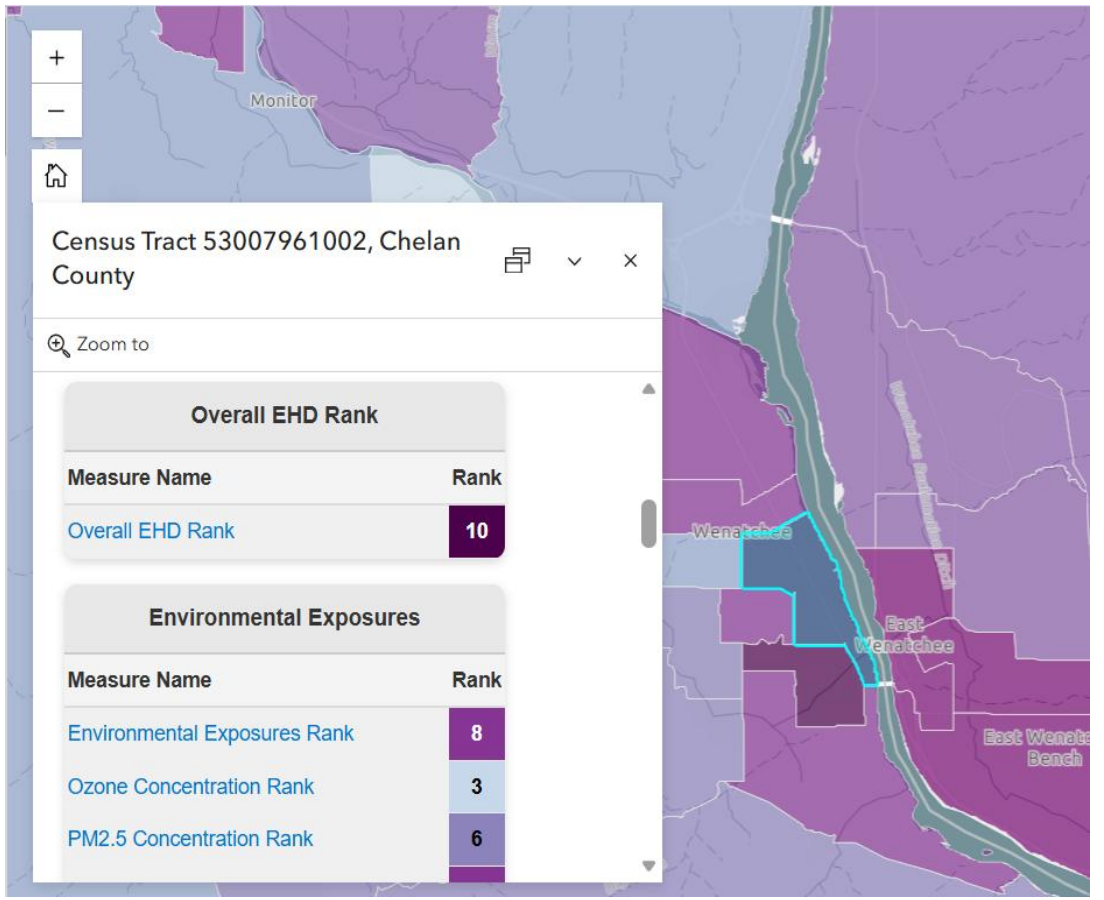
- Trust for Public Land's Heat Severity Index – white areas indicate temperatures much higher than the city average



Identifying Locations

- Download data for your own analysis!





Identifying Locations

- This data is never a substitute for local knowledge and engagement
  - What do staff members who worked on this project the previous year remember?
  - Have any surveys been done of people who visited cooling centers in the past?
  - Can you reach out to community members who are the most impacted by high heat to ask for feedback?

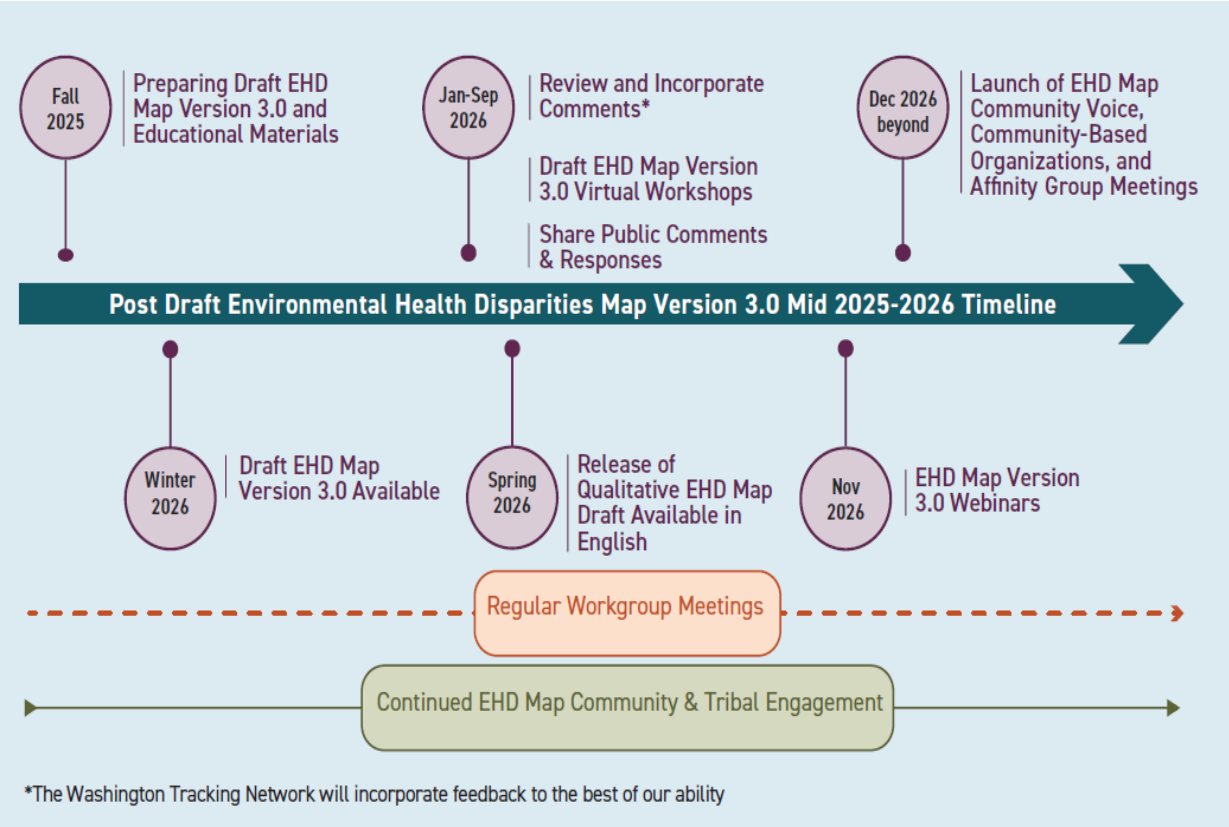




What's Next?

Next Steps, Step by Step

- Public Comment Ends October 31st
- Review Public Comment Feedback
- Incorporate Feedback
- Release Final V3.0 map & responses to public comment
- Create Opportunities to Learn and Use the New Map



Early Emerging Themes

Additional language translations: Marshallese.

Measure requests: Drinking water contamination. Proximity to Bus Access Points. Proximity to Healthcare Facilities. Workplace chemical harm sites. Proximity to data centers.

Overlay requests: Community housing layer. Substance use treatment facilities. H2A (Temporary Agricultural Worker Program) location tracker. Flock camera locations. Data Centers.

Description of how model works

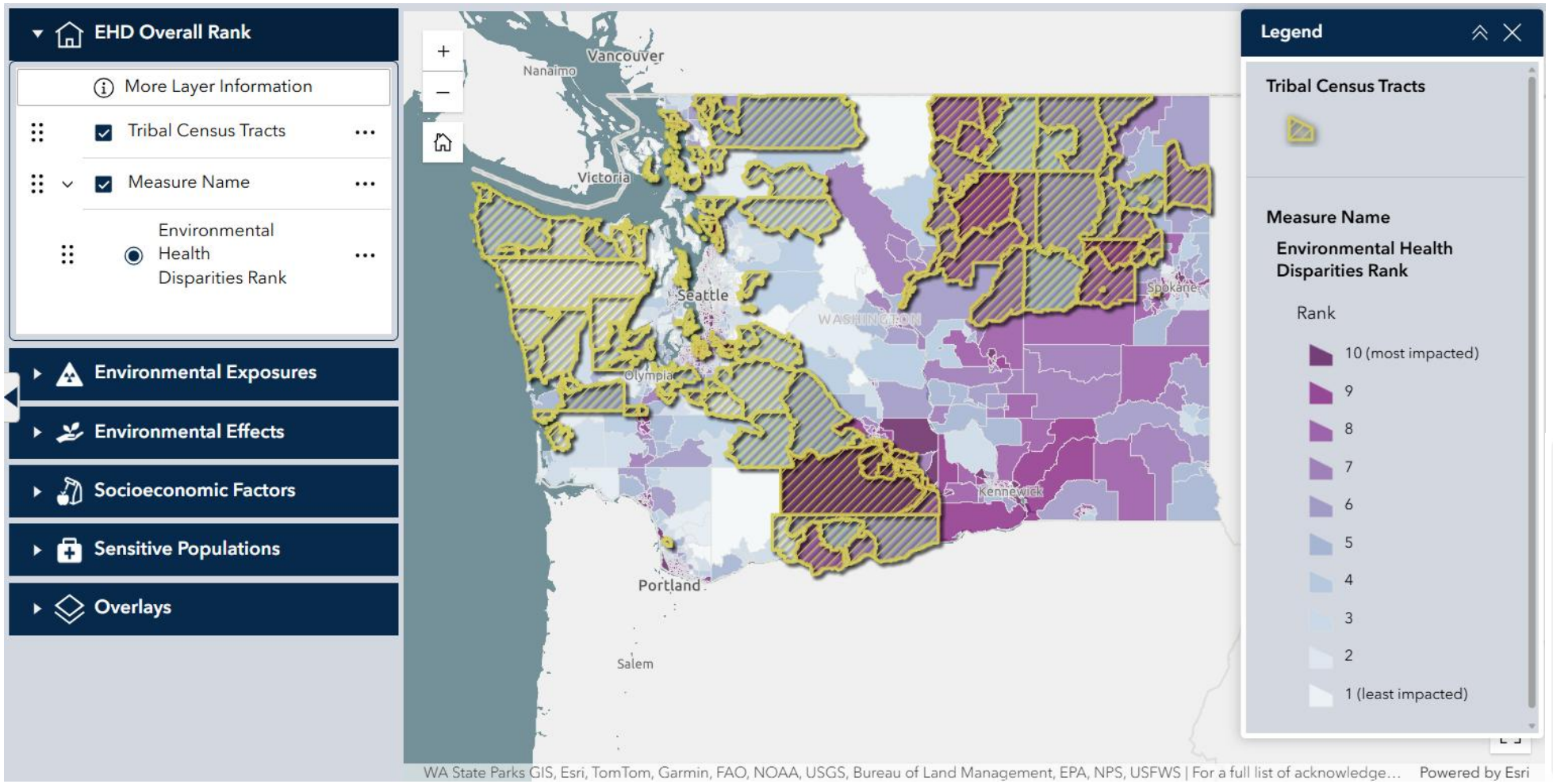
Explanation of changes in community ranks from V2.0 to V3.0

Qualitative EHD Map

- Participants feel like their experiences are valued
- Recognize information not readily incorporated into the EHD Map
- Reflect feedback by county area
- Reflective of current lived experience(s)
- Give opportunity for HEAL agencies to review community feedback
- Provide communities with another tool to self advocate

"In terms of education, are there other indicators that could be measured. Literacy levels, or how information should be shared."

EHD Map – Version 3.0
www.doh.wa.gov/EHDmap



Questions?

Jennifer Sabel
Jennifer.Sabel@doh.wa.gov

Zoe Schneider
Zoe.Schneider@doh.wa.gov

Environmental Health
Disparities Map Team
EHDMap@doh.wa.gov

@WADeptHealth

Washington State Department of HEALTH

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