March 2024

Oregon EJ Mapping Tool 1/1

Welcome Package

Welcome!

By Environmental Justice Mapping 1/1 Team: Hoang-Van Nguyen, Janine Salwasser, Myrica McCune, Ethan Sharygin, and Eric Main

Welcome Environmental Justice Council to your 1/1 appointments with the Environmental Justice Mapping Tool Leadership Team!

We look forward to orienting you to how mapping tools work and helping you understand key concepts to prepare you for upcoming Environmental Justice Mapping Tool decisions.

Let's learn together!

INSIDE

Objectives & Outcomes

We organized these appointments with the following objectives and outcomes in mind, and we look forward to helping you better prepare for future meetings.

Objectives:

1. Increase comfort level with mapping tools and the development process.
2. Introduce socioeconomic variables that have been used in similar projects and socioeconomic data available. Show an example of how an indicator can be selected and index can be created.
3. To ground EJC members on the types of decisions that the Council will need to make and how they fit within mapping tool development.

Outcomes:

1. To increase understanding of mapping tools and development process.
2. To improve understanding of domains, indicators, and indexes.
3. To introduce the decision points for the Oregon EJ Mapping Tool
4. To improve understanding of roles of mapping team working groups

Timeline

By Hoang-Van Nguyen

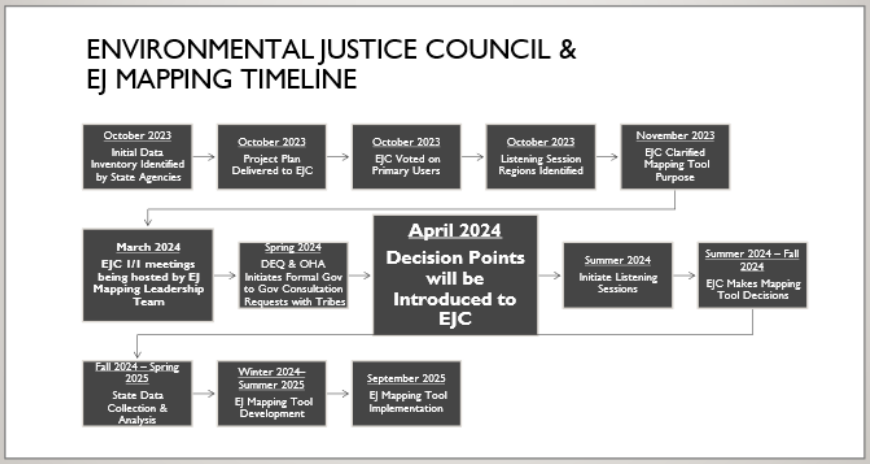
House Bill 4077 (2022) established the Environmental Justice Council (EJC) and their requirement to develop an environmental justice mapping tool by September 2025.

Sequential decision points will be introduced during EJC 1/1 meetings from March 21- March 27, 2024.

The next Environmental Justice Council meeting on April 11, 2024 will include the following decisions to needed to proceed with next steps:

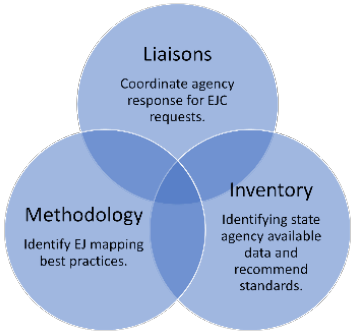
1. Deciding the first three regions for listening sessions.
2. Deciding the first two decision points.

Timeline Snapshot: Larger image available at the end of the document.



Working Group Roles

By Hoang-Van Nguyen, Eric Main, & Melissa Foltz



DEQ, OHA, DAS, OSU Institute for Natural Resources, and PSU Population Research Center form the Environmental Justice Mapping Tool Leadership team.

Liaison Team: These are liaisons to the EJC with representatives from 16 state agencies. They are led by Environmental Justice Council & Policy Coordinator, Hoang-Van Nguyen.

Methodology Team: This is a workgroup of technical experts from state and local agencies and academic partners led by OHA, Eric Main providing support regarding decision points.

Inventory Team: This is a workgroup of data experts from state agencies who will collect and analyze state agency data led by DAS, Melissa Foltz.

Background

By Hoang-Van Nguyen

DEQ, OHA, DAS, OSU Institute for Natural Resources, and PSU Population Research Center were designated as partners for developing the environmental justice mapping tool in HB 4077.

The EJC is also required to host six listening sessions throughout Oregon to learn about community concerns. The first listening sessions is expected to start in June 2024.

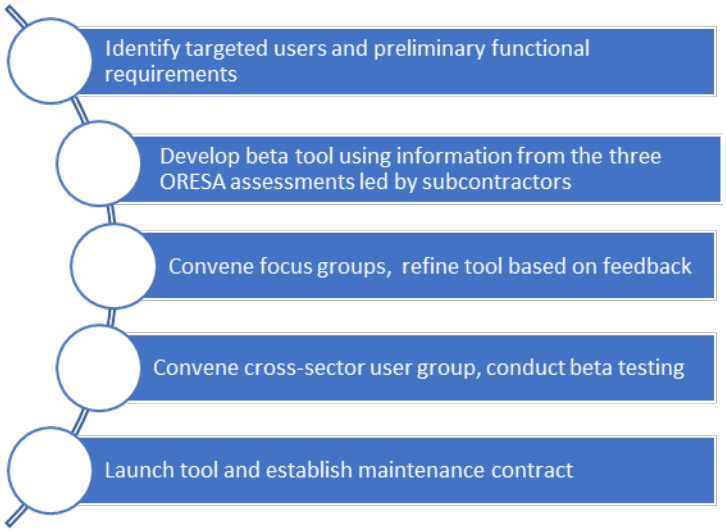
Food for Thought – ORESA

By Janine Salwasser & Myrica McCune

ORESA Tool Development Process

Oregon Renewable Energy Siting Assessment (ORESA) Mapping and Reporting Tool

- Funded by a $1.1 million U.S. Department of Defense (DOD) Office of Local Defense Community Cooperation (OLDCC) grant to the Oregon Department of Energy, working with the Department of Land Conservation and Development and INR. Maintenance funding has been provided by the Oregon Department of Energy.
- The tool development process is briefly summarized below, and described in more detail in the Tool's Process Summary Document.



Oregon CWPP Planning Tool

By Janine Salwasser & Myrica McCune

- The Oregon CWPP Planning Tool was funded by grants from USDA Forest Service with maintenance funding provided by Oregon Department of Forestry.
- Designed to support Community Wildfire Protection Plans (CWPP) by creating advanced reports summarizing the 2018 Quantitative Wildfire Risk Assessment.
- Social Vulnerability County reports were added in 2023 using SB 762 required dataset developed by OSU College of Forestry with input from agency partners.
- County level reports are available through this tool.
- Sample Social Vulnerability Report: Union County.

Oregon Explorer

By Janine Salwasser & Myrica McCune

Oregon Explorer is a partnership between Oregon State University Libraries and Press and the Institute for Natural Resources (INR) at Oregon State University. INR was established in 2001 by the legislature (ORS 352.808) to provide access to information to support natural resource decision making. Oregon Explorer houses 30 tools created by the team, and links to many other tools, documents, and publications developed by partners, or suggested as resources by our collaborators.

Food for Thought – Socioeconomic Variables

By Ethan Sharygin & Gilbert Montcho

The American Community Survey (ACS) is the premier source of information on the socioeconomic characteristics of communities across the nation.

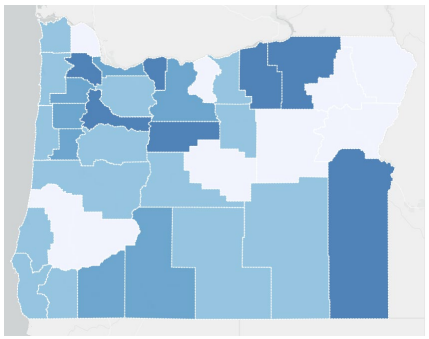
The ACS covers topics ranging from employment, income and poverty, race/ethnicity, age, vehicles owned, disability status, and many more – hundreds of thousands of unique data points are published about all state residents. Responses are collected from between 20,000-30,000 Oregon households each year, making it the largest survey of its kind.

Every ACS data point is available for various geographic scales and time periods, with the least availability at small scales or specific years due to sample size constraints. Data availability changes over time, as questions are censored to protect privacy, or added to reflect evolving public policy needs.

Census Geography Type:	Number of Geographies Included	Availability for 1-year period	Availability over a 5-year period
Nation	1	100%	100%
State	52	100%	100%
Metro. area	939	97%	100%
County	3,222	59%	100%
County Sub.	36,529	3%	100%
Place/City	32,186	7%	100%
ZIP codes	33,774	0%	100%
Tracts	85,396	0%	100%
Tribal Areas	704	5%	100%

Indicators & Indexes

By Ethan Sharygin



Many index projects have been developed by various stakeholders to measure resilience or vulnerability to a variety of environmental or social stressors. Selected examples include:

The Social Vulnerability Index (SVI) combines 16 U.S. census variables to help local officials identify communities that may need support before, during, or after disasters.

The Environmental Justice Index (EJI) combines 36 environmental, social, and health factors across 10 domains into scores that describe the impacts of environmental injustice on health.

The Baseline Resilience Indicators for Communities (BRIC) combines 49 indicators related to ability to prepare for anticipated natural hazards, adapt to changing conditions, and withstand and recover rapidly from disruptions.

EquityMap Explorer

By Ethan Sharygin & Gilbert Montcho

The EquityMap Explorer is a tool in development by Population Research Center to facilitate visualizing environmental and socioeconomic endowments or vulnerabilities and exploring how spatial patterns change depending on which domains and variables are selected to identify EJ communities. The tool currently contains county, tract, and city level data for the 16 component data series that are used in the CDC Social Vulnerability Index (SVI), and will soon expand to include socioeconomic and environmental variables used in other related EJ index projects.

Food for Thought – Upcoming Decision Points

By Eric Main

The 10 decision points for the Environmental Justice Council are based on best practices for building composite indices used to identify communities experiencing disproportionate environmental burdens, health and social disparities, and community benefits and opportunities.

The Methodology Team vetted the decision points below for Council consideration and will take direct Council feedback in evolving the subsequent decision points.

The decision points include:

1. Domain selection
2. Geographic units
3. Geographic comparisons and community designations
4. Domain/indicator weighting
5. Domain aggregation
6. Data standardization
7. Indicator selection
8. Sensitivity analysis
9. EJ community threshold
10. Visualizations

EJC April 2024 Decision Points

By Eric Main

The Environmental Justice Mapping Tool Leadership Team will request the Environmental Justice Council to decide on the first two decision points during their April 11, 2024 meeting.

Decision point #1: Domain selection

Why are indicator domains important?

Domains are used to:

- Group indicators by type,
- Control their level of importance,
- Show what indicators are most important for the EJ score.

Decision point #2: Geographic units

Why are geographic units important?

- They highlight population similarities within a community.
- If the population is too small, the social and economic data is less likely to be accurate.
- Determine data formatting and availability.

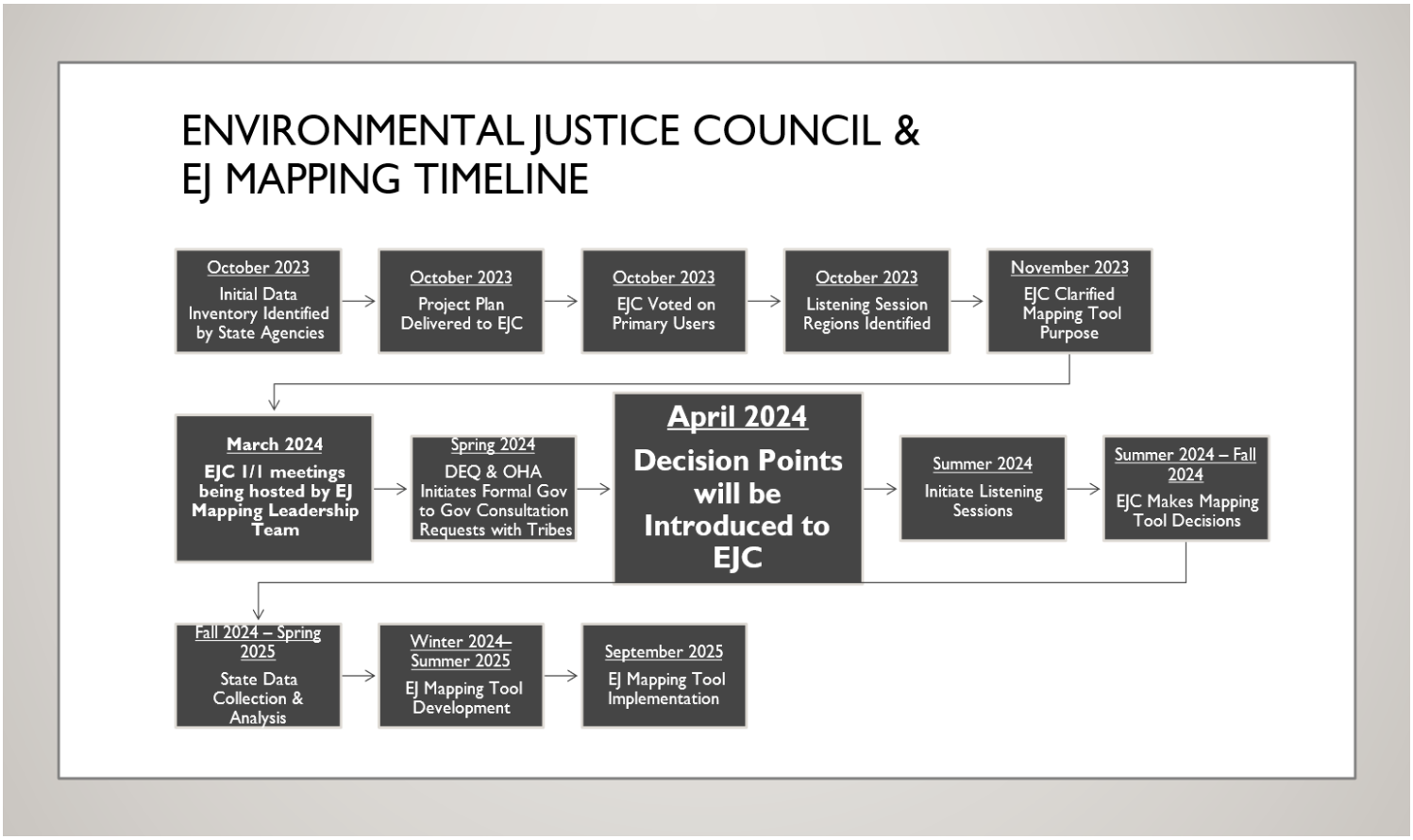
Listening Session Connection

By Eric Main & Hoang-Van Nguyen

Listening sessions will be with hosted in Oregon communities and tribal communities to collect information about their lived experiences within their environment. The goal is to understand environmental burdens and benefits and their influences on human health and quality of life.

This information is essential to the Environmental Justice Mapping Tool project since it will guide how we identify environmental justice communities, so they have better opportunity to receive governmental funding to improve their lives.

REFERENCE



Regional Solutions Locations