



Oregon Toxics Alliance
West Eugene Industrial Corridor Environmental Health Project
2010-2011



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Introduction of Partner Organizations

Oregon Toxics Alliance and Centro LatinoAmericano

The 2010-2011 EPA Environmental Justice Small Grants award supports the work of two non-profit organizations to carry out the West Eugene Industrial Corridor Environmental Health Project. For over a decade, Oregon Toxics Alliance has taken a leading role to systematically challenge the root causes of toxic pollution in Oregon, to advance environmental justice and to provide direct-action to improve environmental health in communities. Established nearly thirty years ago, Centro LatinoAmericano is dedicated to the empowerment of the Latino community of Lane County by offering social services, access to community resources, and advocating for fair treatment. Its work provides assistance to low-income and Latino individuals in West Eugene facing challenges in environmental health, including cultural and language barriers and resources difficulties.

Together, these two organizations have undertaken the West Eugene Industrial Corridor Environmental Health Project addresses disproportionate air pollution from industrial and transportation sources in West Eugene, an area that is home to higher densities of low-income residents, many of whom are Latino families. According to the EPA, “environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.” This project has this goal for all communities and persons in West Eugene.

According to the 2010 environmental justice canvass conducted as an activity of this EPA-funded grant, residents of West Eugene believe they are disproportionately exposed to contaminated air pollution from nearby heavy industries, traffic, and idling trains. The contaminated air can cause a variety of illnesses such as asthma, cardiovascular disease and cancer. Indeed, the canvassing results suggest that residents in West Eugene are more prone to suffer from asthma than other Lane County residents. The local Latino residents and low-income residents are especially vulnerable since they have limited access to information and resources due to income limitations, lack of health care, disabilities, language barriers, and illiteracy.

Oregon Toxics Alliance (OTA) and Centro LatinoAmericano (Centro) have built a mutually respectful and engaged partnership over the course of this project. The two organizations have plans to maintain our collaboration indefinitely into the future. Examples of the way OTA and Centro have established a fair and egalitarian working relationship include:

- Share staffing hours for the project coordinator, Alison Guzman;
- Share staffing hours and office space for part-time project staff;
- Co-sponsor community events;
- Share grant funding and other financial resources;
- Print materials in both Spanish and English;
- Meet regularly to discuss the project, the work plan and the outcomes;
- Coordinate our individual strengths in community organizing and contacts.

- Mutually support our various community and institutional relationships;
- Meet jointly with elected officials, other NGO's, state agencies and commissions.

a) Project Process and Outcomes: An abstract or overview of the project in terms of its overall process and outcomes. Indicate which eligible activities and or EPA criteria were addressed and how these were fulfilled.

The West Eugene Industrial Corridor Environmental Health Project is responsive to the goals of the *Clean Air Act*, Section 103(b) (3) by initiating activities related to reducing, preventing, and controlling the environmental and human-made causes of air pollution, including climate-altering pollution, and addressing the health effects of such pollution in underserved communities. The processes we utilized to address the issues pertaining to air pollution and community health impacts began with gathering baseline data in focus groups, conducting a door-to-door canvass in the West Eugene Industrial Corridor, analyzing the canvassing data, holding community empowerment events and workshops and supporting community-based organizing and leadership development.

OTA and Centro addressed the following goals and outcomes:

1) Goal: Improve public health

Outcomes: Tens of thousands of Eugene residents learned about the project and the issues via radio and TV media coverage; 600 low-income and Latino households received toxic reduction information; over 325 households were directly contacted to discuss air pollution and health; over 50 people attended environmental health workshops; 2 community working groups were formed to promote leadership and encourage problem solving.

2) Goal: Decrease vulnerability to air pollution and impacts of climate change

Outcomes: Over 100 residents learned how to reduce waste, reduce vehicle emissions, and reduce their exposure to indoor and outdoor air pollutants; The County and the City are assisting OTA with outreach to Union Pacific Rail Road to decrease locomotive idling and related emissions; The Lane Regional Air Protection Agency is working with OTA to print Air Quality Complaint information in Spanish and to gather air monitoring data in the West Eugene community.

3) Goal: Engage Latino residents in Environmental Justice advocacy

Outcomes: Over 1000 Latino residents were reached through multiple outreach events and efforts; over 75 Latino households gained an understanding of potential sources of exposures to toxics and steps to reduce toxics; approximately 25 Latina mothers met take action to improve personal, family and public health in West Eugene; presented at 2 Latino Family Nights hosted by Bethel School District; 2 shows on the local Latino Radio station; published 3 project articles on this Environmental Justice project in the local Latino newspaper; approximately 5 Latino students at Willamette High School engaged in pollution reduction meetings and discussed forming a Latino Environmental Club.

4) Goal: Facilitate comprehensive understanding of West Eugene families' concerns about environmental health hazards by improving awareness amongst elected officials and media.

Outcomes: Presentations of community concerns were made to 6 government organizations and more than 8 commissions/educational institutions to press for solutions to community environmental health vulnerability; 41 separate stories about the project and about issues of environmental health were aired on media outlets (radio, TV, social networking, blogs and newspapers)

The eligible activities required for the project and how they were fulfilled is listed in the Table I below:

Table 1: Project Activities and Outcomes

Seven Project Outcomes Highlights

- Over 70% of the households contacted in the canvas wanted learn more about the project.
- Distributed over 50 free Green Cleaning Kits to low-income and Latino families.
- Outreach to over 600 West Eugene households about air quality and environmental health.
- Established partners and relationships with over 10 new local organizations, officials, and agencies.
- Increased understanding and support for minority concerns and environmental justice amongst elected officials and agencies.
- Engaged Latino community leaders to participate in sharing the project results, including participants from *Madres Para la Salud*, a grassroots gathering of nearly 25 Latina mothers interested in environmental health.
- Engaged a wide range of public and private partners in ongoing environmental health initiatives, most particularly a new partnership with the Bethel School District.

(See Appendix A for description of activities)

The data show that proximity to industrial pollution and diesel particulate matter source impacts perceptions of air quality and livability. We believe this data points to the need for fence line air monitoring at the sites of the most egregious polluters.

Figure 1: Canvassing Sheet

(See Appendix B for a sample canvassing sheet)

Community Empowerment

Characteristics of the Impacted Community

Our work for this collaborative project confirmed that the West Eugene Industrial Corridor is an environmental justice community underscored by the neighborhoods environmental hazards' exposure, and limited capacity to participate in decision-making processes. We documented the following environmental justice characteristics:

1. Residents in the West Eugene Industrial Corridor are more likely to be low-income (<\$13,500) and/or Latino than in any other areas of the City of Eugene.

a. 12 percent of residents reached by our canvassing are Spanish speaking.* In comparison, 7.8% of all Eugene residents self-identify as Latino (U.S. Census 2010);

b. Since 2000, the Latino population increased 56% in Eugene (U.S. Census 2010). 12,200 Latinos reside in Eugene in 2010, many more than anticipated in population growth estimates.

c. The proportion of Latino students in the Bethel School District’s elementary schools ranges from 12% to 35% (Oregon Department of Education, 2010-2011 Student by Ethnicity Report).

d. Fairfield Elementary School, the school closest to center of the industrial corridor, has 35% Latino students, the highest percentage in the entire district (Bethel School District Enrollment Report, 2010).

* Note: We use the term “Spanish-speaking” as a proxy for Latino. Our questionnaire did not ask respondents to self-identify their ethnicity. Households whose members spoke in Spanish to a canvasser were counted as Latino household. Thus, our estimate of 12% Latino households is likely to be a low estimate because it doesn’t take into account Latinos who spoke English when they opened their door, or Latino households who did not responded to the canvassers at all.

2. Latino families experience cultural and linguistic barriers to accessing environmental health information and public health services.

a. Latina mothers reported lacking access to health information such as where to find health clinics, and how to make a healthier home environment for their children, especially children with asthma and chemical sensitivities.

b. Latino families lack information about community resources such as recycling, hazardous waste collection, and how to file an air pollution complaint.

c. A majority of Latino households canvassed were interested in getting more information about ways to improve environmental health. Not only are Latino families facing environmental information barriers, but we found that they are eager to learn more.

3. The West Eugene Industrial Corridor residents are overburdened by industrial air pollutants.

a. Ninety-seven percent of Eugene’s air toxics are emitted in West Eugene.

b. Residents have filed thousands of air quality complaints with the local air protection agency over the past decade.

c. West Eugene residents appear to have a higher rate of children’s asthma than other Eugene residents.

General Project Activities Timeline:

September – November 2010	Canvassing
November 2010	Community Forum: Shared results of canvassing
December 2010	Began presenting at various Neighborhood Associations
January 2011	Car Care Workshop
February 2011	Asthma Care Workshops
February – July 2011	West Eugene Community Action Group; Madres para la Salud; Partnerships

	formed with local school districts, businesses, etc.
February – July 2011	Results dissemination to various local and state-wide groups and organizations

The outcomes of the project centered on community empowerment and extensive outreach in the community. Outreach to the households took place during the canvassing and at several Neighborhood Associations, churches, schools, and businesses took place. OTA and Centro hosted a Community Forum to present the results of the canvassing. County commissioners, agency officials, neighborhood associations and residents attended the event. Finally, the project results were disseminated in numerous local and state-wide meetings, including the Environmental Justice Task Force, the Latino Health Equity Conference and the Oregon Commission on Hispanic Affairs.

In support of community empowerment, two community groups were formed: The West Eugene Community Action Group and the Madres para la Salud. Both groups were centered on learning more about environmental health risks in their communities and potential solutions. Hard work on the part of the participants increased empowerment in the community, and as a result of the project the community has become more aware of environmental health risk exposures, more willing to speak out to bring public attention to these problems, and more likely to work with friends and neighbors to take steps to solve issues.

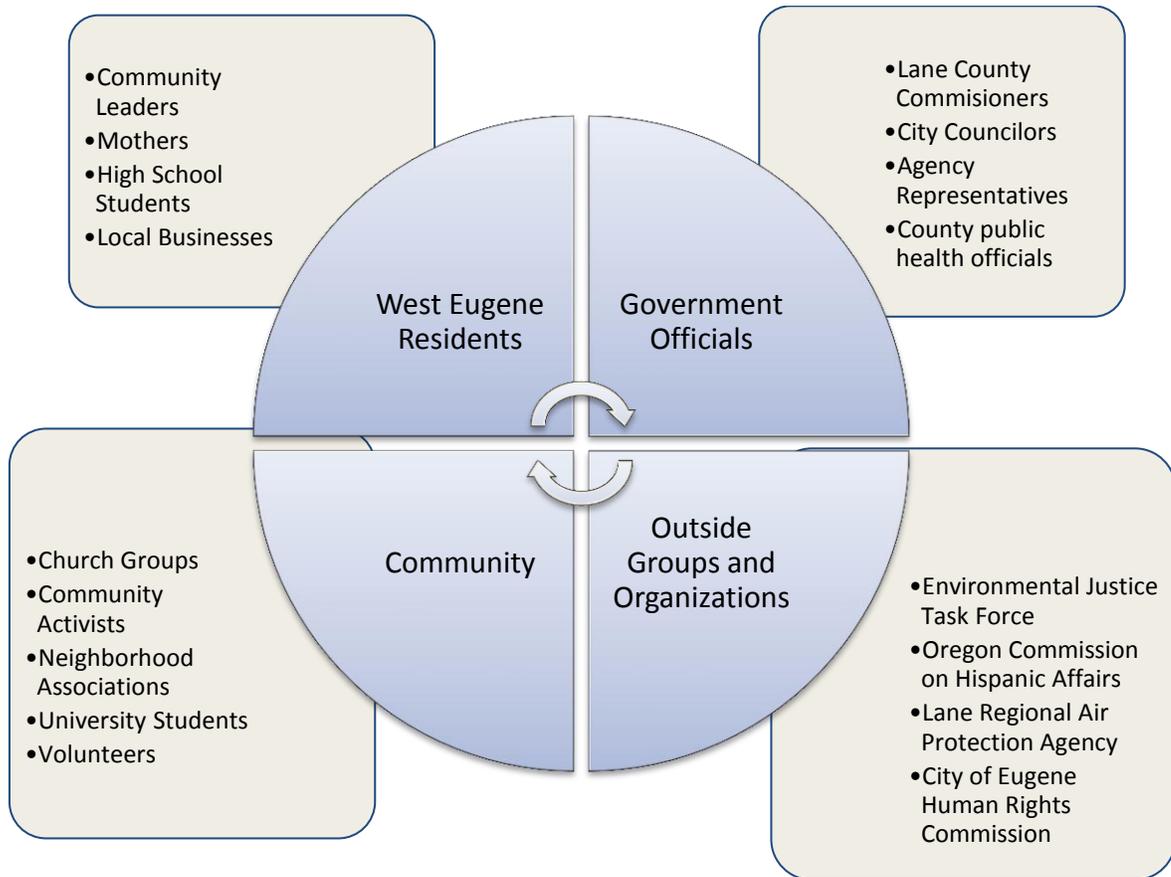
To address the lack of information resources, OTA and Centro provided community members with selected information in both English and Spanish supplied by organizations such as health departments, Lane County Hazardous Waste Center, and the EPA. During the car-care and asthma workshops, residents were able to attend and ask questions or discuss concerns and observations. We disseminated information via radio and printed bilingual media. Finally, OTA and Centro did outreach to individuals on a one-on-one basis to cater to the individual's concern and answer specific environmental health related questions.

b) Target Audience: Include information on the target audience, such as (local residents, community activists, businesses, etc) and demographics of the target audience

The target audience for the project consisted primarily of the low-income and Latino residents in the West Eugene Industrial Corridor. From the perspective of building community awareness and empowerment, the project focused mainly on families living near the industrial corridor who experience disproportionate exposure to nearby air emissions from industrial facilities. Many of these families live in low income homes- including apartments and mobile homes. Some families had very little access to Internet and other outlets for environmental health information. Local and federal population data statistics show that higher Latino populations live in the areas where we canvassed. Access to environmental health information in Spanish is very low in these areas.

Shortly after gaining momentum in outreach and community relationship building, OTA and Centro began sharing the canvass results with several organizations, groups, schools, and political officials. Through this process, OTA and Centro established new partnerships and relationships and gathered supporters, including community leaders and local community activists to help in the environmental justice aspect of the project.

Figure 2: Target Audiences



The target audience for the project can be categorized into four different groups: 1) Local residents; 2) Local Officials; 3) Local Community Supports and 4) Groups and Organizations.

Table 2: Specific Outreach Targets in West Eugene

<u>Local Residents</u>	<u>Local Officials</u>	<u>Local Community Support</u>	<u>Groups and Organizations</u>
Canvassing/Survey	Local City Councilors to West Eugene Neighborhoods	Migrant Education Program	Trainsong Neighborhood Association
House Visits	Lane County commissioners	Latino Business Network	Active Bethel Citizens
Participants/Attendees through workshops and events	Mayor of Eugene and local City Councilor Andrea Ortiz	Juventud Faceta (Latino youth support group)	West Eugene Community Action Group
Follow-up individual phone calls	Toxics Board, Sustainability Commission, Lane Regional Air Protection Agency	Churches: River Road Baptist Church – Spanish Group/ St. Mary’s Catholic Church	Madres para la Salud (Latina mothers group)

Local residents were the main target audience, since they were the biggest stakeholders the environmental justice project was focused on. They constituted mainly of community leaders, mothers, students, and church groups. Much emphasis was placed in developing focus groups and community meetings where they would be able to discuss and address their environmental health concerns and determine potential activities and solutions to lessen negative health impacts and invest in a healthier future for their families. Outreach was done to churches, especially where Latinos gathered as well as Latino youth groups in the local high school.

The second group of local officials served to be very useful as a target audience. The Lane County commissioners, Eugene city councilors, agency representatives and local county health officials were curious about the project and provided input on how best they could support the environmental justice aspect of the project. Examples of such inputs included potential partnerships for asthma education, air quality monitoring and community activities.

Shortly after analyzing the canvassing results and presenting to the local community, OTA and Centro began outreach to the third group, state-wide groups and organizations. An important element for the project was to ensure that the results and concerns were efficiently communicated to other state decision makers and support groups so that they become aware of the environmental justice project and all of the community issues associated with it. Outreach and inclusion to this target audience proved to be extremely useful for the overall support of the project due to the amount of knowledge, information, contacts, and networking exchanged in these meetings. Other Oregon NGO's view our project as a model for projects they might initiate in their own local communities. OTA and Centro hope to maintain relationships with all these groups and organizations to provide updates of the project and community-related improvements with regards to environmental health.

Finally, the fourth group, local support, was a target audience established as a result of the project's natural momentum of building recognition in the community. Many students from the local universities and events discovered the mission of the project and were keen on supporting the team. As a result, they helped in outreach and research. Many community activists, also interested in contributing to the project due to the environmental justice focus, became active participants and organizers and joined OTA and Centro to assist with the presentations to local agencies and organizations. Garnering local support in this way became essential in our community outreach to the local residents.

c) Findings Addressing Environmental Injustices: What findings or information were gained that could contribute to addressing environmental injustices

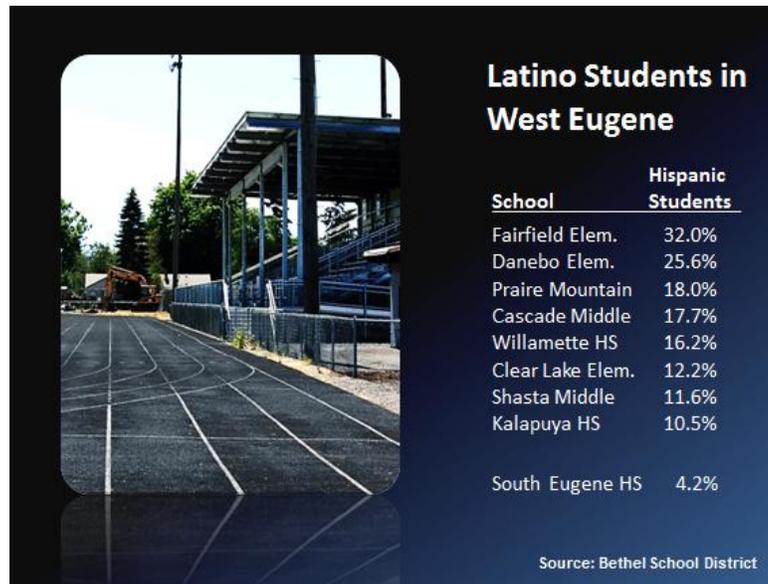
We gathered information by the following methods:

1. Canvassing 326 households in the local community.
2. Holding community forums.
3. Facilitating the West Eugene Community Advisory Group (WECAG).
4. Meeting individually with Latina mothers.
5. Organizing at community events (e.g., Latino Family Night, Fiesta Latina)
6. Working with the local school district's director of multi-cultural affairs.

1. Residents in these neighborhoods are more likely to be poor and/or Latino than in any other areas of the city of Eugene.

- a. Our canvassing data shows that at least 12% of residents in West Eugene are Latino, compared to an average of 7.8% for all of Eugene (US Census 2010);

- b. The school closest to the worst industrial polluters has the 35% Latino student population count.
- c. The Bethel School District reports that 12% to 35% of elementary school students are Latino (calculated per school). Please refer to the figure below for details.



2. These residents are unduly impacted by air pollution from industrial and transportation sources and may experience higher rates of illness.

- a. Sixty percent (60%) of all households in our survey detect polluted air;
- b. Sixty-six percent (66%) of Latino households reported detecting polluted air;
- c. Forty-eight percent (48%) of Latino households reported that their health problems get worse when they smell noxious air pollution (i.e., asthma, headache, coughing, nausea, etc.).
- d. 33% of the total respondents reported that at least one family member had asthma.
- e. Latino mothers report respiratory problems in preschool-age children at a rate of three out of four children.
- f. Residents report other symptoms they believe are directly related to air pollution such as nausea, vomiting, headaches, etc.

3. Latino families experience cultural and linguistic barriers to environmental health information and public health services.

- a. Latino mothers reported lacking access to information on how to recycle, where to find health clinics, or how to make a healthier home environment for children, especially children with asthma and chemical sensitivities.
- b. Latino families need education about asthma prevention and intervention. In fact, nearly 97% of the forty-five attendants at the asthma care workshops were Latino families.
- c. 74% of Latino households surveyed were interested in getting more information about environmental health.

- d. West Eugene residents also expressed frustration with lack of public transportation, lack of access to healthy food, excessive traffic due to poor traffic controls, and concern about the safety of planting gardens in polluted soils. These concerns, in addition to the problems of being overburdened by exposure to air toxics and higher rates of chronic illness are critical issues that will be necessary to address environmental justice and equity issues .

Environmental justice is not only about addressing the environmental health concerns disproportionately faced by communities of color and low-income communities, but is also ensuring that all communities have access to culturally appropriate information and empowerment programs and activities. A project finding was a general lack of information resources for Spanish speakers, as well as low-income and elderly residents without internet access. To address this finding, OTA and Centro provided community members with selected information in both English and Spanish supplied by organizations such as health departments, Lane County Hazardous Waste Center, and the EPA. During the car-care and asthma workshops, attendees were able to ask questions or discuss concerns and observations. We disseminated information via radio, TV and printed bilingual media. Finally, OTA and Centro did outreach to individuals on a one-on-one basis to cater to the individual's concern and answer specific environmental health related questions.

As an outcome of the finding that this community has less access to appropriate information, and in support of community empowerment, two community groups were formed: The West Eugene Community Action Group and the *Madres para la Salud* (a group of approximately 20 Latina mothers). Both groups were centered on learning more about environmental health risks in their communities and potential solutions. Since their formation, WECAG and *Madres* have held regular meetings to discuss the concerns of air pollution in their community and the importance of improving community health, especially for school-aged children. Hard work on the part of the participants increased empowerment in the community, and as a result of the project the community has become more aware of environmental health risk exposures, more willing to speak out to bring public attention to these problems, and more likely to work with friends and neighbors to take steps to solve issues.

The right to have equal access to healthy air, clean water and potable soil is a central tenet to achieving environmental justice. This project demonstrated that the community in West Eugene is lacking these basic rights. Most of the residents have been battling the disproportionate exposure to air toxic emissions by modifying their everyday habits in ways that simply aren't necessary or "normal" for other Eugene residents. For example, many of the families in our project report that they must shut their windows and doors during certain times of the day in order to not breathe in noxious odors from a nearby industrial. Many residents avoid outdoor activities such as bicycling or playing in their own yards during the summer because of foul air. Several families expressed their desire to move away from the area in order to avoid becoming sick. Some mothers claimed that polluted air emissions near their homes triggered their child's asthma attacks. A common desire residents expressed was the wish to improve their quality of life and not have to worry about the future health of their children.

Working in the Latino community to address environmental justice issues proved to be incredibly effective. This project demonstrated that involving Latino mothers as prominent participants in the major project activities was important to building lasting trust in the community, which helped gain more interest and support from the Latino community.

To address mistrust and other cultural sensitivities in all aspects of the project, we ensured that our team of surveyors and relevant volunteers were fluent in Spanish. We note, however that the

door-to-door canvassing in the Latino community was necessarily the best way to reach as many Spanish speakers as we initially hoped. True, our canvas efforts resulted in 12% of the total households we spoke to were Spanish-speaking, which matches the US Census estimates for 2010. However, we believe that Latino residents may have felt reluctant to answer their door bells because they were worried about encountering immigration services, census workers, and landlords. However, once the results were collected, and outreach was done by visiting Latino mothers in their homes, schools, churches, and holding focus groups, interest and involvement from the Latino community began to build from there.

In the process of addressing disproportionate air toxics exposure in West Eugene, we found other environmental justice problems surfaced that had never been explored. We believe that when one Environmental Justice problem exists, it is likely that other pressing EJ concerns are present. We found that:

- West Eugene is considered to be a Food Desert (poor access to food);
- West Eugene has a higher obesity rate than other areas of Eugene;
- There are no County (free) health care centers in West Eugene;
- West Eugene residents are less likely to have backyard gardens (food security);
- Access to public transportation is lacking (which is related to additional traffic congestion);
- Bike lanes are few;
- There are less trees throughout West Eugene (a global warming factor)
- Bethel and Trainsong neighborhoods have many brownfield sites.

This project resulted in the finding that residents of West Eugene's Industrial Corridor are exposed to 97 percent of all the air pollution in Eugene. On average, over 3,000 pounds of harmful air toxics are released into these neighborhoods' air every day of the year. In comparison, other areas of Eugene receive an average of 2 pounds of air toxics per day (See below table). Air pollutants the community is being exposed to include the following¹:

- Napthalene
- Benzene
- PAH-POM
- Formaldehyde
- Toluene
- Carbon Tetrachloride
- Butadiene
- Perchloroethylene
- Fine Particulate Matter
- Carbon Monoxide, Sulfur Dioxide and Nitrogen Oxide

As you can see from the figure below, schools in West Eugene are located in close proximity (within 2 miles) from an industrial site.

¹ *Lane Regional Air Protection Agency- Air Toxics Monitoring and Siting Issues Report 2009



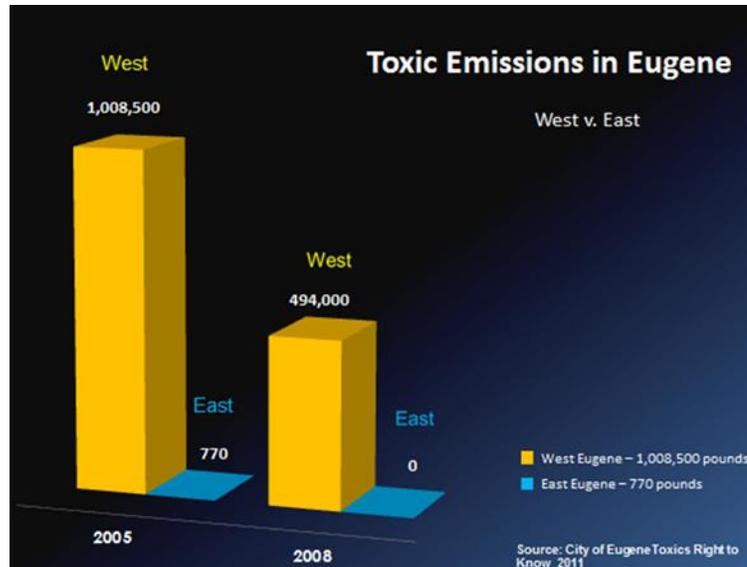
Table 3: Toxics Report for the City of Eugene, 2005 and 2008.

Year	West Eugene Toxics Data*	East Eugene Toxics Data*
2005	Annual: 1,008,500 lbs. /year Daily: 3,000 lbs. /day	Annual: 770 lbs. /year Daily: 2 lbs. /day
2008	Annual: 494,000 lbs. /year Daily: 1396 lbs. /day	Annual: 0 lbs. /year

*City of Eugene Toxics Data are submitted by industries with air toxic emissions to the Office of the Fire Marshall who then compiles and publishes the data on the Toxics Right to Know website accessible at

<http://www.eugene-or.gov/portal/server.pt?space=CommunityPage&control=SetCommunity&CommunityID=715&PageID=1868>

As seen in the figure below, areas in West Eugene is exposed to significantly higher toxic air emission to other areas on Eugene.



d) Description of Evaluation Measures and Results: Description of evaluation measures and results. Include evaluation tools where applicable

Oregon Toxics Alliance and Centro LatinoAmericano took a Monitoring & Evaluation approach based on the following principles:

- To learn from community members, to recognize that their own solutions and inputs are of great value;
- To ensure that experiences are shared and that problems are analyzed from different perspectives;
- To involve all groups in the community; and
- The “outsider” is a facilitator, not a lecturer or instructor.

Table 4: Tools and Purpose

Tools	Purpose
Environmental Justice Identification	To build the capacities of the community planning group to identify their problems, analyze the causes, determine possible solutions and decide on actions.
Community planning	To build the capacities of communities to formulate plans to address identified problems. The plans include elements as sub-activities, resources, actor’s time frame.

Planning, implementing, and tracking of the project took into consideration the livelihood and coping mechanisms of different groups in the community to identify options and strategies for environmental justice action within these various groups. This was reached through focus group discussions and qualitative analysis of canvassing results. We then began planning project

activities in a calendar format, such as workshop and training activities, community outreach, and school events.

Tasks were assigned to various OTA and Centro staff, community members and volunteers to ensure that what has been planned will be carried out. Selected community members held specific duties such as research on testing and community networking opportunities. OTA and Centro's management team oversaw the implementation of tasks and duties.

This project served as a catalyst to involve low-income and Latino residents in environmental health research and community action. Social isolation, economic hardship, unemployment, and lack of affordable health care play a role in creating a more serious, systemic problem among low-income and Latino immigrant families in West Eugene, Oregon. The issue of environmental and social inequities is a low priority for elected leaders. As a result, low-income and Latino residents will likely remain excluded from local environmental health solutions. This project addressed the problems of disproportionate pollution exposure and poor health outcomes in low-income neighborhoods with significant numbers of underserved environmental justice residents. This project also strived to welcome low-income and Latino residents as new activists and leaders to support community efforts to build healthy families and neighborhoods and contribute to the environmental movement in Oregon. The specific outcomes of this project provided the following benefits for residents:

1. *Community-based Advocacy*: Strengthened the partnership between Centro, a Latino human and social services organization, and OTA, an environmental health organization for the purpose of mobilizing resources in the community to empower all residents in the West Eugene Industrial Corridor to take action to reduce health risks associated with exposure to air pollution.
2. *Environmental Education*: Gathered information about the self-identified environmental health priorities of low-income and Latino residents and disseminate knowledge to all partners, and invite self-assessment of data derived from door-to-door respiratory disease symptoms surveys and air quality tracking.
3. *Environmental Equity*: Provided education, career development and decision-making opportunities within the impacted community, as well as raise awareness in the larger community about environmental equity.
4. *Environmental Stewardship*: Advanced environmental stewardship in the local context using community-based activities as tools to improve understanding of environmental health risks and the community priorities; share this knowledge with decision-makers in the Eugene-Springfield metropolitan area.

The following tables provide insight on the project objectives, outputs, and outcomes and approximate date target was reached.

Monitoring and Evaluation Chart

(See following page)

Results

e) Dissemination of Project Results: Plans for dissemination of project results in terms of method of dissemination and target audience (ie conference presentations, educator networks, community forums, etc)

A systematic approach was conducted to establish and articulate the project's area of influence. Priority was given to individuals and groups who are directly and adversely affected in the project area. Please see the table below to see specific organizations and associations who invited Oregon Toxics Alliance to present project results through conferences, community forums, educator networks and meetings.

The first step in planning for the dissemination of the project results was to determine who our audiences would be and determining their key groupings and sub-groupings. We therefore identified three categories of audiences: a) Local Community Groups and Affiliations; b) Environmental Justice organizations; and c) Organizations and Individuals to which strategic partnerships could be established. From this approach flows a more in-depth look at organization group interests, how they can produce changes in the EJ community and to what degree, and what influence they could have on the project.

Figure 3: Project Dissemination

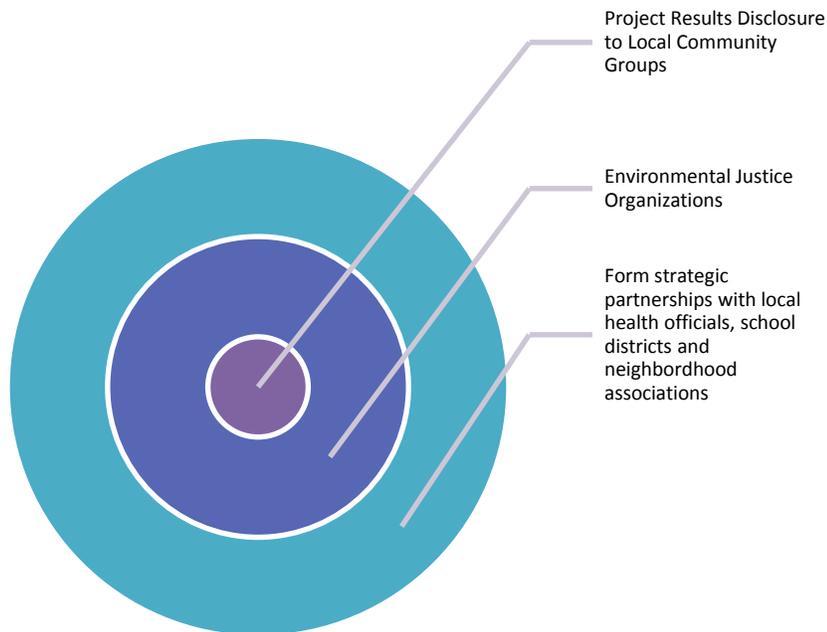


Table 5: Outreach List

Local Community Groups	Environmental Justice Organizations	Partnerships
Trainsong Neighborhood Association (West Eugene, Fall 2010)	Coalition Against Environmental Racism (University of Oregon, 5/6)	Lane Regional Air Protection Agency (Springfield, 6/7)
Active Bethel Citizens (West Eugene, 5/18)	Madres Para La Salud (West Eugene, Feb-July 2011)	American Red Cross (West Eugene, 2/26)
Migrant Education Program (West Eugene, 12/6)	Bring Recycle (Lane Community College, 3/22)	City of Eugene Sustainability Commission (Eugene, 3/17)
Latino Business Network (West Eugene, 12/14)	Northwest Environmental Health Conference (Portland, 2/11)	Lane County Public Health Department & Elected Officials (Eugene, 5/17)
Juventud Faceta (West Eugene, 2/4)	Environmental Justice Task Force (Portland, 5/6)	Bethel School District (West Eugene, Fall 2010; Spring 2011)
River Road Baptist Church-Spanish Group (West Eugene, Fall/Spring)	2011 Latino Health Equity Conference (PSU, 5/12)	Oregon Commission on Hispanic Affairs (Salem, 6/29)
Various local businesses in West Eugene (West Eugene, Fall/Spring)	City of Eugene Human Rights Commission (Eugene, 5/17)	
West Eugene Community Action Group (West Eugene, Jan-July)	Northwest Toxics Community Coalition (Seattle, 5/20-21)	

f) Problems encountered: Were any problems encountered that prohibited the completion of the project goals or objectives? If yes, how were they overcome?

Project objectives were met or exceeded in every instance except two, and these proved to be secondary to the overall goals of the project. The first problem centered mostly on outreach challenges to local businesses. As illustrated in the Monitoring & Evaluation tracking sheet, the project targeted outreach to 25 local businesses and to further engage 10 local businesses in pollution reduction activities, Although outreach was made to 25 local businesses, only about half agreed to partners on environmental awareness projects, and out of those, only a handful committed to adopting pollution reduction programs in their business plans.

Many businesses were hesitant to jump on board right away with the program. It is probable that partnerships may require more than the project’s 1 year period to adopt pollution reduction programs and other environmental awareness plans in their business activities. Had the project been extended another 2 -3 years, this challenge would most likely be overcome since business relationships take time to develop.

The other challenge encountered was the partnership with the Lane County Hazardous Waste Center to collect and properly dispose of 250 pounds or more of hazardous wastes. OTA and Centro did, as planned, engage and encourage West Eugene households in hazardous waste education and clean-up efforts. However, the Lane County Hazardous Waste Center placed limitations on the project that proved to be a challenge due to the following reasons:

- Disposal times were limited to “by appointment only” so had to be planned for in advance;
- The “Hazardous Waste collection facility was located over 7 miles away from West Eugene and was difficult to get to;
- The County decided against collection sites close to or within West Eugene; It was against their policies to organize neighborhood hazardous waste pickups;
- Would-be participants had to present a coupon (designed by the Lane County Hazardous Waste Center) - the coupon was not clear, left off the phone number for making appointments and had many grammatical and typographical errors in Spanish;
- The County originally set a limited period of one month for when households could dispose of their hazardous waste. Later that period was later extended, however the change was difficult to communicate to the community because the coupons specified the original month and could not be re-printed;
- The phone-number to make the appointment was only located on one page (page 14) of the Lane County Hazardous Waste Center Booklet;
- The Booklet did not contain a map of the location in the Lane County Hazardous Waste Center Booklet, which proved to be a problem for those who did not understand directions or had limited access to internet;

Despite the above limitations however, positive outcomes resulted from these efforts. Due to the interest of the women’s’ focus groups, the Lane County Hazardous Waste Center donated 50 free green cleaning kits to OTA and Centro staff to be distributed in various project-related trainings and workshops. Furthermore, this opened up further community involvement in indoor-air pollution topic ideas which resulted to *Madres para la Salud*, which consists of Latina mothers interested in environmental health.

Actual project expenses were close to the proposed budget target. As shown on the attached Budget Sheet there are little differences between the quarterly forecasted federal cash needs (defined by the budget proposal) and quarterly actual expenses (based on the total monthly EPA payment request sent throughout the duration of the project). The following are anticipated outcomes with regards to budget:

In the area of environmental justice communities, contribute to the data collection and analysis of a preliminary survey in the low-income and minority neighborhoods in West Eugene to strengthen community participation and promote alliances among different health actors and Lane County resources.

In the area of use of public funds earmarked for community infrastructure, contribute to the use of mechanisms for allocating public funds towards developing community resident groups to establish effective participatory mechanisms.

In the area of environmental justice, put into practice activities leading to local community empowerment amongst low-income and Latino neighborhoods, provide environmental health education, and promote the inclusion of low income and Latino residents in activities and extend the positive impact of public resource allocations.

In the area of community training, design basic manuals or guides in outdoor and indoor air pollution so that other interested groups can replicate the methodology and promote environmental health in community efforts.

In the area of public health and equal access, hold asthma care workshops in area that had never received such services, and promote environmental health concepts through community-based media sources to expand the scope of our outreach.

g) Benefits gained from program: What benefits were gained from the program?

Our efforts have helped build important leadership in the community. The West Eugene Industrial Corridor Environmental Health Project has led to various new opportunities for community participation and a variety of interesting and promising results. The local governments, NGOS and agencies, Environmental Justice organizations and the business community have all expressed interests in supporting the project. Relationships have been established and are gaining momentum for further establishments in the near future. Decision-makers have become more aware of the environmental justice issues in West Eugene and are brainstorming and/or gaining control of ways to provide information, support and implement selected projects.

Perhaps one of the most successful outcomes of the project was the involvement of community residents coming together to address the issue that low-income and minority populations are disproportionately being impacted by air pollution. Historically, regulatory agencies have treated air pollution exposures as a series of isolated, unfortunate incidences that may or may not be traceable to a particular polluter. We believe that, as a result of this project, It has become clear to the community as well as to local government officials that chemical trespass is a pervasive community problem that may be the root cause for higher rates of illness.

Our environmental justice project also sought to encourage minority and poor residents of West Eugene to stand as full members of our local community, and reject unequal exclusion from participation in local government decisions. This is a central focus of our environmental justice work stemming from a claim on the part of local government and a local agency that there was no environmental justice community in West Eugene. They argued that air toxics had no greater impact in West Eugene than in the higher income sections of the City. The data we collected in the course of this project show that their statement is inaccurate. This project has shown that the “experts” were not the only keepers of legitimate knowledge and that the community itself must be consulted on the future of their environmental health. Thus, OTA and Centro have supported ongoing focus groups and community meetings, creating a stronger network of empowered residents around environmental health issues.

In the summer of 2011, the WECAG, for example, presented their action plan and report to the local city officials, commissioners, and committees. Residents whose primary language is Spanish bravely came forward to speak about their experience with air pollution and family health. These new clean air advocates also continue to report back to their neighbors and neighborhood associations. Through these presentations, project participants articulated the local environmental health concerns with consistency and provide suggestions of how to raise further awareness and find solutions to improve community health. The benefit from community empowerment is the sharing of much needed knowledge and encouraging self-reliance.

h) EPA's role: How could EPA have been more effective in assisting you with this project? For example, were EPA's priorities and directives in the solicitation notice clearly stated?

EPA's role was effective in that they provided environmental justice and environmental health resources to a community that has been marginalized for their concern about community health. EPA's priorities sets a standard for local governments and agencies to also recognize and assist vulnerable communities where they had previously turned "a blind eye."

EPA staff in Region 10 were helpful to point the project leaders in the direction of environmental justice networks, publications resources and model projects to encourage our own growth as leaders in this field. OTA and Centro were able to connect to other environmental justice communities in California, which enabled us to build our resources and have successful case studies available to us. Relationships were established and ideas formed, so much so that we hope to include these new relationships in upcoming projects and events.

Most importantly, the EPA Environmental Justice program ensures that the community has equal access to information and knowledge sharing. Through this capacity building outlet, community members are more likely to participate in the decision-making process and thus become more successful advocates for environmental health outcomes.

Canvassing Results

The data in the following charts showing the pollution type versus neighborhood are the results of responses to the canvas question "Do You Detect Air Pollution?" In Chart 1, respondents could simply answer Yes or No. They were also given the opportunity to provide more details if they wished. A majority of the people who detect air pollution also chose to provide more information about what they thought was the source of the air toxics. Their responses are tabulated in Chart 1.

In Chart 2, we grouped the responses by canvassing site (neighborhood location). We discovered that the concentration of residents' concerns about air toxics came from the Trainsong neighborhood and the streets around the Peterson Barn Community Center (which is the same neighborhood as Fairfield Elementary School).

(See following pages)