EPA ANNUAL ENVIRONMENTAL JUSTICE PROGRESS REPORT FY 2019

https://www.epa.gov/environmentaljustice/annual-environmental-justice-progress-reports

EPA

ADMINISTRATOR FOREWORD

This year marks the 25th anniversary of Executive Order 12898 -- *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*. Since 1994, EPA has awarded more than $34 million in environmental justice grant funding to more than 1,500 communities. We remain committed to ensuring that environmental justice is integrated into EPA's program and activities to strengthen environmental and public health protections for low-income, minority, indigenous, and disadvantaged communities that are more likely to live near contaminated lands or be disproportionately impacted by environmental hazards.

I'm proud to present the *Fiscal Year 2019 Environmental Justice Progress Report*. Among our accomplishments, EPA made notable progress in accelerating the remediation of Superfund sites to address environmental risk. We also deleted all or part of 27 sites from the Superfund's National Priorities List, the largest number of deletions in a single year since FY 01 and a significant increase over the past few years. These milestones are in addition to the record progress we have made under this Administration.

We also provided substantial grant funding to help communities revitalize brownfields sites, recognizing that putting these properties back into use creates many economic and environmental benefits throughout communities. In FY 19, EPA provided more than $60 million in Brownfields grant funding to communities across the country to assess, clean up and redevelop underutilized properties.

EPA continues to deliver tools, technical assistance and meaningful engagement to economically distressed communities. In FY 19, our environmental justice and community revitalization offices worked across EPA programs and regions to deliver locally-led technical assistance to more than 30 communities. Those efforts included work in Opportunity Zones, which are economically distressed areas that may be eligible for preferential tax treatment to encourage new economic development and job creation.

This progress could not be accomplished without the dedication of staff across the Agency who work hard to help vulnerable communities become cleaner, healthier and more prosperous places to live, work and play. I look forward to working together with states, local communities, tribes and private parties as we continue the environmental and economic development work happening across the nation.

EXECUTIVE SUMMARY

Environmental justice (EJ) 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. The U.S. Environmental Protection Agency (EPA or Agency) is committed to assisting vulnerable and overburdened communities to become cleaner, healthier, and more prosperous places to live, work, learn and play. The Fiscal Year (FY) 2019 Annual Environmental Justice Progress Report shows how EPA is collaborating with partners, supporting communities, and ensuring that EJ is integrated into the work of EPA's programs and regional offices. EPA is also working to align programs, policies and investments to support economically distressed communities, including those in Opportunity Zones. All of these efforts help lift up vulnerable communities across the country.

A Cleaner, Healthier Environment:

- Selected 50 new small EJ grants recipients in FY 2019 to receive $1.5 million in grant funding, with half of the grants going to communities located in or impacting Opportunity Zones.
- Awarded $64.6 million to 149 communities with Brownfields grants, which will provide funding to assess, clean up and redevelop underutilized properties. 108 of the communities identified sites or targeted areas within Opportunity Zones. Awarded $46.19 million to support state and tribal response programs and continued to encourage the prioritization of sites in communities with the greatest need, including communities with EJ concerns.
- Ensured the safety of chemicals by strengthening the dust-lead hazard standards for floors and window sills to help reduce childhood lead exposure, closing a 30-year-old loophole to prevent or restrict certain asbestos products from being reintroduced into the market, and reviewing existing chemicals using a risk-based approach with a special focus on protecting vulnerable groups like children and workers.
- Awarded approximately $50 million in funding for Diesel Emission Reduction Act (DERA) projects with priority given to projects that engage and benefit local communities and applicants that demonstrated their ability to promote and continue efforts to reduce emissions after the project has ended in communities or populations that have faced or are facing EJ concerns. Awarded $29.4 million in targeted airshed grants that will reduce environmental and public health impacts in several communities throughout the U.S.

More Effective Partnerships:

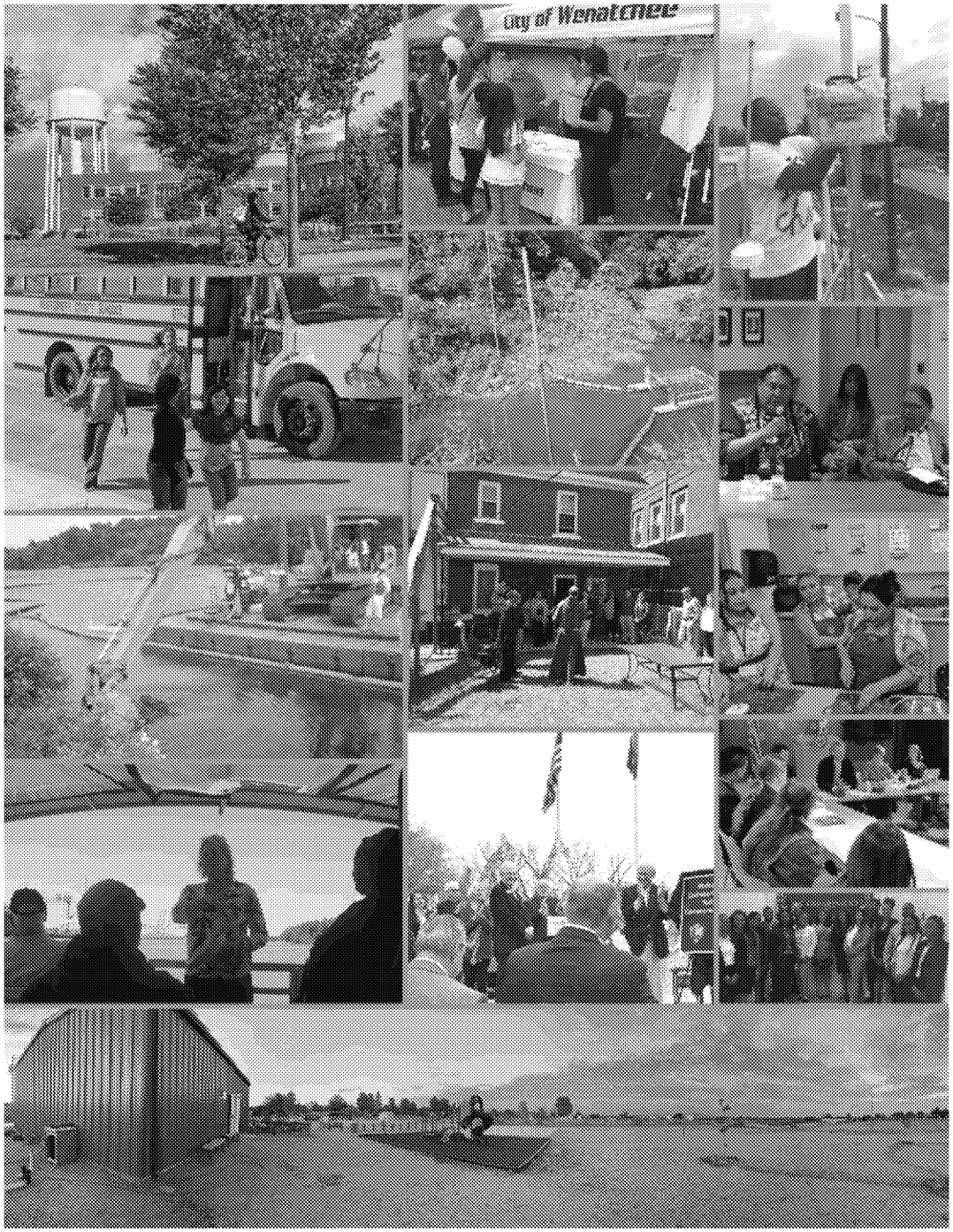
- Delivered technical assistance to more than 30 communities across the United States to help develop action plans and identify strategies to support reinvestment and reuse of existing community assets and infrastructure.
- Provided technical assistance to communities affected by Superfund sites so that they could meaningfully contribute to the cleanup process, including 43 communities that received Technical Assistance Grants (TAGs) and 37 communities that received support through the Technical Assistance Services for Communities (TASC) Program.
- Trained 33 graduates through the Superfund Job Training Initiative (SuperJTI), which is a job readiness program that provides training and employment opportunities for people living in communities affected by Superfund sites.

- Convened and supported the Interagency Working Group on Environmental Justice, which continued its natural disaster efforts, and created tools to help communities, including the NEPA Community Guide and the Guide to Finding Federal Assistance for EJ Efforts.
- Formed the Federal Interagency Interfaith Collaboration for Vulnerable Communities to enhance federal support for interfaith collaborations to address the needs of vulnerable and underserved communities.
- Collaborated with state partners to develop online trainings on approaches to integrate EJ in state policies and programs, reaching over 4,000 people representing government agencies in all fifty states, Puerto Rico, Guam and the District of Columbia.
- Released the Getting Risk Communication Right: Helping Communities Plan at Superfund sites report to lay out how EPA is working to improve risk communication and community involvement practices during the post-construction, long-term stewardship phase of Superfund site remediation.

Greater Certainty, Compliance, and Effectiveness:

- EPA's National Environmental Justice Hotline (Hotline) offers individuals and communities an accessible way to inform the Agency of environmental and public health concerns. It serves as a mechanism to promote the fair treatment and meaningful involvement of individuals and communities who experience or have the potential to experience adverse environmental and public health impacts in their residence and communities. The Hotline is responsive to community members who call or email to share their concerns. In FY 2019, EPA achieved a 97% ticket closure rate for the 742 inquiries received.
- Selected 2020-2023 National Compliance Initiatives that prioritize impacts on vulnerable communities and will consider EJ issues throughout this work. Performed 868 EJ screenings in enforcement work, which assures that EPA enforcement personnel working on a case are aware of the potential EJ concerns in a community.
- Provided trainings and technical assistance to approximately 40 states agencies and organizations, as well as local agencies and tribes, across all ten EPA Regions, on how to proactively address their civil rights obligations.
- Trained and/or engaged with approximately 12,350 community residents, conducted approximately 300 workshops and community forum activities that addressed local environmental and public health issues, and developed approximately 50 new partnerships between EJ grantees and local stakeholders. This resulted in forty-four underserved communities that felt the meaningful impacts of EJ funding received over the last two years. Twenty-nine of the communities were in predominantly rural states, with over 90% of the grantee organizations receiving their first EJ grant this decade.
- Conducted outreach, education and trainings on reducing and preventing childhood lead exposure and published Investigating Environmental Contamination: A Guide for Communities through partnerships with the Pediatric Environmental Health Specialty Units.

EPA will continue to deepen its commitment to protect the health and environment for everyone across the United States. For more information on EPA's EJ efforts, resources, and tools, please visit the Office of Environmental Justice website (https://www.epa.gov/environmentaljustice). To receive regularly emailed updates on federal resources, tools, and trainings related to EJ, please sign up for the EJ Listserv.


City of Wenatchee

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INTRODUCTION

EPA is committed to protecting the health and environments of all people living in the United States. Low-income, minority, tribal, and indigenous communities are most often impacted by environmental hazards or most likely to live near contaminated lands. The Agency focuses its EJ efforts on better protecting and working to improve these vulnerable and overburdened communities.

EPA is the lead agency for the implementation of Executive Order 12898 - Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations[1] (EO 12898). EPA defines EJ as 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[2]. EJ is fundamental to EPA's mission.

SECTION 1 – A Cleaner, Healthier Environment

EPA's EJ work aligns with the Agency's strategic goals and core mission. As part of these goals, the Agency works to ensure the rule of law and fair process, so that everyone in the United States has the same degree of protection from environmental and health hazards. This work is accomplished through EPA's national programs and Regional offices,[3] along with several EJ efforts that are led or co-led by OEJ through the Agency's EJ Program.

EPA NATIONAL PROGRAMS

This section highlights how EPA national programs provide certainty on EJ.

LAND

Superfund Technical Assistance

The Superfund remedial program provides independent technical assistance services and programs to communities to help people better understand technical issues related to cleanup and key considerations for a site's future use. With this assistance, communities are then in a better position to share their concerns and priorities with EPA.

- In FY 2019, EPA supported 43 Technical Assistance Grants (TAGs), which allow non-profit organizations to acquire technical advisors to help communities interpret and understand technical information about their site.
- The Technical Assistance Services for Communities (TASC) Program provides scientists, engineers and other professionals to communities to explain and review technical information related to Superfund work so that they may meaningfully participate in the cleanup decision-making process. In FY 2019, EPA provided TASC support to 37 Superfund communities, including Navajo Nation communities within six abandoned uranium mine impacted areas.

Community Involvement Coordinators and the Community Involvement Training Program

The Superfund program has developed a series of community involvement tools and techniques as well as a Community Involvement Handbook to train EPA community involvement staff on best practices for risk communication. The Superfund program holds monthly calls with Community Involvement Coordinators (CICs) to share information and best practices for community involvement work and hosts the national Superfund Community Involvement Training Program every other year to provide training in the areas of EJ and cultural competency to ensure that we are engaging effectively with the communities we serve. Since the start of the Superfund Task Force in July 2017, EPA's CICs have:

[1] https://www.epa.gov/laws-regulations/summary-executive-order-12898-federal-actions-address-environmental-justice
[2] https://www.epa.gov/environmentaljustice
[3] https://www.epa.gov/aboutepa/epa-organization-chart

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- Held or participated in more than 2,140 public meetings and 4,025 in-person meetings or interviews with community members living near Superfund sites.
- Distributed more than 1,250 factsheets, mailings, postcards, advertisements, or newsletters that reached more than 200,000 people living near Superfund sites.

Superfund Community Involvement University

Community involvement is a key component of the superfund decision-making process, and EPA strives to provide communities with access to the tools and information they need to strengthen early and meaningful participation. EPA's Community Involvement University is a training platform to support Superfund site cleanups by providing EPA CICs and other EPA staff with the necessary skills, techniques, and practices to engage the community in the Superfund process.

Redevelopment of the Former Sharon Steel Superfund Site in Region 8

After extensive engagement with community members and other stakeholders, the vision for redevelopment of the former Sharon Steel Superfund site is being realized with construction beginning in November 2018 and the official ground-breaking ceremony attended by EPA, state, and local government officials as well as members of the community, the developers, and other stakeholders. The site, located in an overburdened community south of Salt Lake City, Utah, in the Salt Lake Valley, had been made uninhabitable following decades of industrial usage that left the land barren and polluted. When completed, redevelopment will result in affordable housing, jobs, and other community benefits.

The redevelopment is being modeled after the successful redevelopment of the neighboring Midvale Slag Superfund site. That site, now known as Bingham Junction, is home to over 2,100 housing units (including low and medium-income housing), light rail transportation access, over 1,600 new jobs, an employee-owned supermarket, and Bingham Junction's Riverwalk Park, providing the community with enhanced access to the Jordan River. EPA worked with state agencies, the City of Midvale, local citizens, developers, and the site owners to link the cleanup with revitalization and redevelopment goals.

Brownfields Program

EPA's Brownfields Program[4] empowers states, communities, and other stakeholders to work together to prevent, assess, safely clean up, and sustainably reuse contaminated properties. Revitalizing brownfield sites and putting these properties back into productive reuse creates many economic and environmental benefits throughout the community. The Brownfields Program makes grant funding and technical assistance resources available to communities for assessing and cleaning up brownfields, capitalizing revolving loan funds for brownfields cleanup, and providing environmental job training. In FY 2019, EPA's Office of Brownfields and Land Revitalization[5] accomplished the following:

- Awarded 149 communities with Brownfields Multipurpose, Assessment, and Cleanup grants. The 151 grants totaling $64.6 million will provide communities with funding to assess, clean up and redevelop underutilized properties. Of those selected to receive Brownfields grants, approximately 40 percent are first time recipients, and 108 of the communities identified sites or targeted areas within Opportunity Zones.
- Awarded $46.19 million to support state and tribal response programs[6] and continued to encourage the prioritization of sites in communities with the greatest need, including EJ communities.
- Continued to support Environmental Workforce Development and Job Training (EWDJT) grantees. The purpose of the EWDJT Grant Program is to recruit, train, and place unemployed and underemployed individuals with the skills needed to secure sustainable employment in the environmental field. The EWDJT Grant Program also ensures that

[4] https://www.epa.gov/brownfields/overview-epas-brownfields-program
[5] https://www.epa.gov/brownfields/types-brownfields-grant-funding
[6] https://www.epa.gov/brownfields/state-and-tribal-brownfields-response-programs

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residents in communities historically affected by economic disinvestment, health disparities, and environmental contamination, including low-income, minority, and tribal communities, have an opportunity to reap the benefits of revitalization and environmental cleanup.

Cleveland, Ohio: The "Forgotten Triangle" and the Opportunity Corridor

Over the last 15 years, Brownfields resources have focused on Cleveland neighborhoods within the "Forgotten Triangle" and Opportunity Corridor. About 40% of the properties within this district are abandoned, including many brownfields and vacant homes. Residents have been living in extremely poor conditions with dilapidated infrastructure. Working in concert with the City of Cleveland and the State of Ohio and a range of nonprofit and neighborhood partners, multiple brownfield resources have been brought to bear on this district, resulting in significant, ongoing improvement.

Beginning in 2010, an EPA-funded Brownfields Area-Wide Planning project gathered community values and priorities. This resulted in a focus on: reuse of properties along the Opportunity Corridor; job creation; community amenities; access to transportation options; and redevelopment of blighted brownfields. Multiple EPA funded site assessments have focused on blighted brownfield properties coupled with reuse opportunities. Several local employers, Orlando Baking and Miceli's Dairy, have expanded their operations onto brownfields properties with financial assistance from the state of Ohio, the Small Business Administration and EPA. Brownfield redevelopment in the Forgotten Triangle has focused on food. Examples include Green City Growers, which seeks to create neighborhood wealth and provide healthy food options in the neighborhood, and Rid-All Gardens, which focuses on food growing and pathways to employment and health.

The construction of a 3.1-mile Boulevard (the Opportunity Corridor) through the neighborhood began in FY 2019. The boulevard is designed to bring opportunities to the residents of this impoverished area through investment in a multipurpose trail, green infrastructure, job training and job creation. Total ongoing neighborhood investment from public, private, and nonprofit sources totals well over $170 million to date. These initial investments position the community for additional cleanup, employment, and quality of life improvements. This district is within an Opportunity Zone.

AIR

Near-Port Community Capacity Building Pilot Projects

Figure 1: Boat tour of port in Savannah, Georgia.

EPA's Office of Air and Radiation (OAR), in partnership with OEJ and Regional Offices, continued to deliver on-site technical assistance services to ultimately enhance environmental performance of ports and to improve environmental conditions for nearby communities during FY 2019. Under this partnership, the Near-port Community Capacity Building Project[7] marked another significant milestone in FY 2019 as closing activities were conducted for pilot projects located in four U.S. cities: New Orleans, Louisiana; Savannah, Georgia; Seattle, Washington; and Providence, Rhode Island.

The Near-port Community Capacity Building Toolkit[8] was created and revised based on direct feedback from pilot project participants and insights from testing in real world situations. In addition, comments from a broad array of stakeholders provided input on the tools which lead to newly revised versions of these resource tools. Case studies chronicle a host of activities such as the stakeholders' journey to building durable

[7] https://www.epa.gov/community-port-collaboration-and-capacity-building/pilot-projects-port-and-near-port-community
[8] https://www.epa.gov/community-port-collaboration-and-capacity-building/pilot-projects-port-and-near-port-community

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partnerships and capturing the achievements of EPA's first of its kind Pilot Project Opportunity for near-port communities and port authorities and businesses. In addition, a myriad of supplemental resource materials emerged from the specialized training, port facility and community tours, leadership skills development workshops, and facilitated dialogue that occurred during the pilots. The near-port communities, port officials, and businesses who participated and prioritized EJ concerns, continue to build upon the strong foundations established through the pilot projects. Highlights of a few achievements include:

- **Establishing a Community-Based External Advisory Committee**: A committee established to participate in the hiring of a port executive.
- **Air Quality Improvement Action Plan**: A plan created for near-port communities to advocate for changes and work with surrounding entities.
- **Establishing a Collaborative Working Group**: A group composed of port businesses, terminal operators, city and state governments, community organizations, and others who collaboratively determine objectives and prioritize investments to improve environmental performance and community conditions.

Diesel Emissions Reduction Act (DERA) Grants

In FY 2019, OAR continued its goal of meaningfully improving critical source funding dedicated to focusing improvements for communities experiencing EJ concerns. EPA is continuing to prioritize ports and goods movement diesel emissions reduction projects that replaces or retrofits engines with newer, cleaner parts or models that reduce particulate matter, as well as other pollutants such as nitrogen oxides.

This effort includes providing grant funding under the DERA. Since this funding started in 2008, EPA has always prioritized projects in non-attainment areas, areas with air toxic concerns, areas that receive a disproportionate quantity of air pollution from diesel fleets (ports, rail yards, distribution centers, etc), and projects that engage the affected communities. Many of these projects fund cleaner diesel engines that operate in economically disadvantaged communities whose residents suffer from higher-than-average instances of asthma, heart and lung disease.

In addition to soliciting applications for projects that significantly reduce diesel emissions and exposure, in FY 2019, priority was given to projects that engage and benefit local communities and applicants that demonstrate their ability to promote and continue efforts to reduce emissions after the project has ended, especially any communities or populations that have faced or are facing EJ concerns. Approximately $50 million in DERA FY 2019 grants were awarded for projects in and around ports and airports, at intermodal transportation hubs, and in areas confronting disproportionate diesel exhaust.

Targeted Airshed Grant Program

The targeted airshed grant program[9] provides competitive grants to air pollution control agencies to reduce air pollution in non-attainment areas that EPA determines are the top five most polluted areas relative to ozone, annual average fine particulate matter ($PM_{2.5}$), or 24-hour $PM_{2.5}$ National Ambient Air Quality Standards[10] (NAAQS). These non-attainment areas have also shown to frequently have EJ concerns.

EPA most recently awarded targeted airshed grants that will reduce environmental and public health impacts in the following communities:

- **Fairbanks, Alaska:** $4 million to replace wood-burning appliances with cleaner alternatives.

[9] https://www.epa.gov/grants/air-grants-and-funding
[10] https://www.epa.gov/naaqs

- **San Joaquin Valley, California:** $6,369,750 to replace older model diesel agricultural tractors with those that meet the latest emissions standards and to replace 2009 or older model year diesel trucks with 2017 or newer model year trucks.
- **Los Angeles South Coast Air Basin, California:** $3,184,875 to replace older model diesel school buses in the Los Angeles Unified School District's fleet.
- **Los Angeles, San Bernardino (West Mojave), and Riverside (Coachella Valley) Counties, California:** $3,184,875 to replace 36 diesel and gas airport shuttle buses with battery-electric models manufactured in the South Coast.
- **Logan, Utah:** $6,369,750 to replace old diesel trucks with significantly less polluting models and wood-burning appliance change-outs to reduce residential wood smoke
- **Provo, Utah:** $3,184,875 for wood-burning appliance change-outs to reduce residential wood smoke.
- **Salt Lake City, Utah:** $3,184,875 for wood-burning appliance change-outs to reduce residential wood smoke.

Asthma Program

OAR continued to provide outreach and capacity building through technical assistance and training of federal and state and local agencies, community-based asthma programs, health practitioners and tribes on the reduction of indoor asthma triggers for approximately 1,000 people during FY 2019. During one session in collaboration with the Department of Housing and Urban Development, participants learned how proactive infrastructure and partnership strategies have led to improved asthma and other health outcomes particularly in Dallas, which could serve as a model for other communities. In other sessions, participants learned lessons from efforts to build capacity and explore sustainable funding for asthma in-home environmental interventions in tribal communities and how programs around the country are collecting, analyzing and using data to support and demonstrate real results in children with uncontrolled asthma and the difference data makes in sustaining asthma programs for long-term success.

WATER

Financing Critical Investments to Improve the Nation's Water Infrastructure

EPA engages in activities that advance the nexus between EJ and safe drinking water by partnering with states, public water systems, tribes, laboratories and water sector stakeholders to assist public water systems in delivering safe drinking water and working to improve drinking water infrastructure across the United States. Of the approximately 50,000 community water systems that supply drinking water to approximately 310 million people, the vast majority (81%) are small community water systems that serve fewer than 3,300 people. Many of these small drinking water systems and tribal systems serve disadvantaged communities, and often struggle with financial resources, aging infrastructure, lack of economies of scale, management limitations and lack of qualified and experienced operators and personnel. For these reasons, the key activities noted below focus on small community drinking water systems and tribal drinking water systems.

- EPA released a request for applications (RFA) for $15 million for training and technical assistance grants. Grants will be awarded in early 2020.

- Recipients from previous years include the National Rural Water Association, the Rural Community Assistance Partnership, and the Environmental Finance Center Network. EPA has provided more than $87 million in grants to nonprofit organizations to provide training and technical assistance to the country's small drinking water utilities.

- In FY 2019, EPA's Drinking Water Infrastructure Grant Tribal Set Aside (DWIG-TSA) funding level was $22.5 million. EPA's Tribal Direct Implementation Public Water System Supervision Funds were $6.3 million in FY 2019, including a $454,000 grant to the Navajo Nation. These funding mechanisms support drinking water infrastructure improvement efforts and direct implementation of EPA's Public Water System Supervision

program, respectively. Since 2009, EPA, working with state, federal, local, and tribal partners, provided over 81,000 American Indian and Alaska Native homes with safe drinking water and more than 63,000 homes with modern wastewater management.

EPA's Urban Waters, National Estuary and Trash Free Waters Programs

EPA supports the goal of EJ integration throughout the Agency's place-based and issue-based partnership programs.

For the second consecutive year, the Urban Waters Program (UW) and OEJ collaborated to provide funding for place-based projects through the 2019 Environmental Justice Small Grants Request for Proposals. OEJ and UW Small Grants Collaboration committed $300K toward a total of $1.5 million for 10 projects across the country. These projects will take place in underserved communities across the nation and work on issues such as building resiliency to flooding, working with youth to build skills in restoration and green infrastructure planning, water quality monitoring, public education and outreach. In addition, UW and the Wetlands Protection and Restoration Program fully or partially funded 24 Five Star and UW Restoration grants in FY 2019. Of those grants, 21 (88%) were awarded to projects that will be working to restore natural habitat, improve water quality, providing training and education in restoration in underserved communities across the country.

Each of the National Estuary Programs (NEPs) has a Comprehensive Conservation and Management Plan (CCMP) establishing priorities for activities, research and funding to protect and restore coastal estuaries. Prior to FY 2019, four of the twenty-eight NEPs included priorities and actions that support EJ and working with underserved communities in their CCMPs. The NEPs made significant progress in integrating EJ in FY 2019, doubling the number of CCMPs with EJ goals and actions from four to eight including the Galveston Bay Estuary Program, Santa Monica Bay National Estuary Program, Indian River Lagoon National Estuary Program, Partnership for the Delaware Estuary.

EPA Webcast, Green Infrastructure: A Triple Bottom Line Approach to Environmental Justice

On May 15, 2019, EPA's Office of Wastewater Management hosted the webcast "Green Infrastructure: A Triple Bottom Line Approach to Environmental Justice" as part of their ongoing Green Infrastructure Webcast Series. In this webcast, speakers from EPA Region 8 and Camden County Municipal Utilities Authority discussed how the implementation of green infrastructure practices can provide environmental, economic, and social benefits to the communities that need them the most. Regional and local initiatives highlighted the ways in which green infrastructure can address stormwater pollution, equalize access to environmental protection, and create a healthier environment in which to live and work. Over 500 attendees from federal, state and local government agencies and universities.

CHEMICAL SAFETY AND POLLUTION PREVENTION

The Office of Chemical Safety and Pollution Prevention (OCSPP) is committed to advancing EJ principles to protect human health and the environment. OCSPP reviews pesticides and other chemicals for potential risks, with a special focus on more vulnerable groups such as children and workers. To accomplish this, OCSPP engages with stakeholders to ensure the Agency is using sound science and thoughtful decision-making to meet the needs of communities. For example, OCSPP works to protect children from lead poisoning and pesticides; ensures farmworkers are protected from workplace hazards; educates schools on strategies to prevent pests and reduce pesticide use; and implements regulations to ensure the safety of chemicals in the marketplace. Below are examples of this work in FY 2019:

- **Protecting the Safety of Farmworkers:** OCSPP works to ensure that farmworkers are protected from workplace hazards by evaluating risks to workers that apply pesticides. The Agency also analyzes data to assess risk to people who re-enter areas that have been treated with pesticides. In July 2019, OSCPP met with the National Environmental Justice Advisory Council (NEJAC) to discuss potential exposures to farmworkers and their families,

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non-English speaking farmworkers, the Agricultural Worker Protection Standard,[11] and the Revised Certification Standards for Pesticide Applicators[12]. This collaborative discussion allowed the Agency to better understand community issues and to make appropriate changes to protect overburdened communities.

- **Healthier Schools through Integrated Pest Management:** OCSPP worked to educate schools to take advantage of all appropriate pest management strategies to protect our children, teachers, and administrators from potential chemical exposures. Integrated Pest Management (IPM) is an environmentally friendly, common sense approach to controlling pests. IPM principles and benefits focus on pest prevention and using pesticides only as needed. To find out more information, visit the Introduction to Integrated Pest Management [13] webpage.
- **Technical Assistance to Explore Potential Factors for Disparities in Childhood Blood Lead (Pb) Levels:** OCSPP coordinates an intra-agency workgroup to examine potential environmental and demographic factors and scientific information associated with elevated childhood blood lead levels. This team provided inter- and intra-agency technical assistance to explore potential approaches to identify concentrated geographic areas with the most overburdened communities where lead exposure is highest and the development of potential EPA data for mapping projects.
- **Strengthening Lead-Based Paint Regulations:** In June 2019, the Agency strengthened the dust-lead hazard standards for floors and window sills. These standards apply to most pre-1978 housing and child-occupied facilities, such as daycare centers and kindergarten facilities. In FY 2019, EPA has also initiated action on a proposed rule to consider associated changes to post-abatement clearance levels, and to this end is conducting related health, exposure, and economic analyses. Lead dust can be a major source of lead exposure in children, and this action is an important step to reduce exposure to lead sources among children. This OCSPP work directly supports the December 2018 Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts[14].
- **Ensuring the Safety of Chemicals in the Marketplace:** OCSPP is implementing the Toxics Substance Control Act (TSCA) to ensure the safety of chemicals in the marketplace to protect human health and the environment. EPA has increased transparency by identifying a comprehensive list of chemicals that are actively being manufactured, processed, and imported. In addition, as one of the many ways the Agency is upholding the science standards of TSCA, each of the existing chemical risk evaluations must be peer reviewed. The Agency has held the first three public meetings of EPA's Science Advisory Committee on Chemicals, the body that will be reviewing the first 10 chemicals to undergo risk evaluation. The Agency will use the scientific advice, information, and recommendations from the committee, as well as public comments, to inform the final risk evaluations. A variety of stakeholders, including EJ organizations and tribes, are participating in this process. To learn more, visit the TSCA Scientific Peer Review Committees[15] webpage. See Risk Evaluations for Existing Chemicals under TSCA[16] for an overview of how EPA conducts risk evaluations of chemicals under TSCA.
- **Protecting the Public from Exposure to Asbestos:** In April 2019, EPA ensured that asbestos products that are no longer on the market cannot return to commerce without the Agency evaluating them and putting in place any necessary restrictions or prohibiting uses. The uses under this rule were not already prohibited under TSCA and could have returned to the market at any time. In addition, EPA is undertaking a risk evaluation to review the limited ongoing uses of asbestos. If EPA finds unreasonable risk, the Agency will take prompt action to address those risks. To learn more, visit the EPA Actions to Protect the Public from Exposure to Asbestos[17] webpage.

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[11] https://www.epa.gov/pesticide-worker-safety/agricultural-worker-protection-standard-wps
[12] https://www.epa.gov/pesticide-worker-safety/revised-certification-standards-pesticide-applicators
[13] https://www.epa.gov/managing-pests-schools/introduction-integrated-pest-management
[14] https://www.epa.gov/lead/federal-action-plan-reduce-childhood-lead-exposure
[15] https://www.epa.gov/tsca-peer-review
[16] https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/risk-evaluations-existing-chemicals-under-tsca
[17] https://www.epa.gov/asbestos/epa-actions-protect-public-exposure-asbestos#2019finalrule

- **Educating EPA Staff on Tribal Concerns:** In September 2019, the OCSPP partnered with the National Tribal Toxics Council to hold two national training sessions to educate EPA management and staff on environmental issues of concern to tribes. The first training educated Agency risk assessors on tribal lifeways and associated exposure scenarios. This opportunity allowed EPA staff the chance to ask questions and discuss various data needs. A second session provided tribes an opportunity to educate staff on Per-and Polyfluoroalkyl Substances issues in Indian country. Over 150 EPA attendees used these two engagement opportunities to ask questions and hold an open discussion with tribal partners.

ENFORCEMENT

EPA's Selection of 2020-2023 National Compliance Initiatives Prioritizes Impacts on Vulnerable Communities

The Office of Enforcement and Compliance Assurance (OECA) continues to strengthen the integration of EJ into the Agency's enforcement program. In selecting National Compliance Initiatives (NCI) this year, OECA prioritized compliance and enforcement efforts where violations affect vulnerable communities.[18]

For example, the NCI on *Creating Cleaner Air for Communities by Reducing Excess Emissions of Harmful Pollutants from Stationary Sources* will focus on reducing emissions of both volatile organic compounds (VOCs) and hazardous air pollutants (HAPs). The NCI will focus on significant sources of VOCs and HAPs that have a substantial impact on air quality and that may adversely affect vulnerable populations or an area's attainment status. Another NCI, *Reducing Risks of Accidental Releases at Industrial and Chemical Facilities*, continues the Agency's focus on reducing the risk of accidental releases to communities, including vulnerable communities, located near facilities that make, use, and store extremely hazardous substances. And while it is not a separate, enforcement program-led NCI, reducing lead exposure is a high priority; OECA will contribute to the Agency's overall efforts to address lead exposure as outlined in the *Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts.*

As OECA headquarters and Regions implement the NCIs and EPA's core enforcement work, we will consider EJ throughout, by reviewing all new cases to determine whether they may affect overburdened communities, structuring the resolution of enforcement actions to correct noncompliance, and communicating with affected communities. In FY 2019, EPA performed 868 EJ screenings in enforcement work. These EJSCREEN reviews assure that EPA enforcement personnel working on a case are aware of the potential EJ concerns in a community and allow OECA to gauge how much of its enforcement work is being done in areas with potential EJ concerns. In FY 2019, EPA took 619 enforcement actions in communities identified with potential EJ concerns through EPA's EJ Screen process.

Promoting Justice for Victims of Environmental Crimes

In FY 2019, EPA continued to expand efforts to ensure the inclusion of EJ principles into criminal enforcement efforts. As part of these efforts, EPA collaborated with the Department of Justice (DOJ) to stand up a formal Environmental Crime Victim Assistance Program to ensure the rights of environmental crime victims. Environmental crimes can happen anywhere, and victims of these crimes often are found in overburdened and vulnerable communities adjacent to or near industrial facilities, oil refineries, chemical manufacturers, power plants, and incinerators, as well as demolition and renovation sites.

Under the effort, the Office of Criminal Enforcement, Forensics, and Training and DOJ's Environment and Natural Resource Division have begun to address the unique issues confronting federal investigating and prosecuting agencies including identifying, notifying, and finding relevant and available services for the underserved population of federal environmental crime victims as required under the Victims' Rights and Restitution Act (VRRA), 34 U.S.C. § 20141, and the

[18] For FY2020-FY2023, the national enforcement and compliance assurance program will focus on priority areas that align with the FY2018-FY2022 Agency Strategic Plan, providing states and tribes with additional opportunities for meaningful engagement, and enhancing the use of EPA's full range of compliance assistance tools. https://www.epa.gov/sites/production/files/2019-06/documents/2020-2023ncimemo.pdf

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Crime Victims' Rights Act (CVRA), 18 U.S.C § 3771. Under the VRRA, an environmental crime victim, like other crime victims, is someone who has suffered direct physical, emotional, or financial harm as a result of the commission of a federal crime that EPA investigates.

SCIENCE

Contaminated Sites, Natural Disasters, Changing Environmental Conditions and Vulnerable Communities: Research to Build Resilience Request for Applications (RFA)

In FY 2019, EPA's Office of Research and Development (ORD) issued a Request for Applications (RFA) through the Science to Achieve Results[19] (STAR) grants program that asks the scientific community to propose transdisciplinary research with an approach that integrates the following questions: (1) How may natural disasters or changing environmental conditions cause elevated exposure risks to contaminants that may impact vulnerable communities located nearby? 2) What are the major contributing factors or modifiers that may exacerbate the impacts to vulnerable populations (children and elderly) in impacted communities? and (3) How can research specifically help communities build better resilience against the problems and issues identified above? The RFA is aligned with EPA's EJ goals in addressing the health and well-being of the underserved communities that are often located near a potentially risky contaminated site or containment facility.

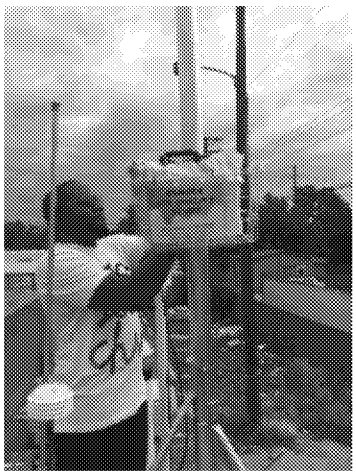

Figure 2: Groundwork Denver community members deploying and retrieving particulate matter (PM) air pollution monitors.

Engaging Citizens in Elyria-Swansea and Globeville Neighborhoods In Air Quality Monitoring (Science To Achieve Results Grant)

In FY 2019, ORD grantees awarded under the Air Monitoring for Communities RFA worked in collaboration with Region 8 to learn how communities can use low-cost air quality monitors to understand their exposure to air pollution and support the ability of communities to make informed decisions through effective knowledge translation about air quality. Participants are receiving data about their exposure to both indoor and outdoor air pollution, and various data outputs, formats and coaching support are being evaluated for their effectiveness in supporting behavioral modifications to decrease exposure to air pollutants. The ambient monitoring portion of this project is providing information to community members about the neighborhood's outdoor air quality, including air quality changes associated with the I-70 expansion project.

- The air quality monitoring study was conducted over three consecutive seasons (summer 2018, fall 2018, winter 2019) in the North Denver neighborhoods of Globeville and Elyria-Swansea which are areas with EJ concerns. Specifically, fine particulate matter ($PM_{2.5}$) was measured by a 12-site ambient sensor network and by residing community citizens that conducted personal monitoring using the same wearable $PM_{2.5}$ sensor over the same seasons.
- The investigators collaborated with and supported a community organization, Groundwork Denver, to set-up the sensor network and deploy and retrieve the sensors. Community monitor sites were selected by a Community Advisory Committee and overwhelmingly represented community green spaces, such as schools and parks.
- Community residents successfully monitored, interpreted and applied the $PM_{2.5}$ data to their daily lives in efforts to reduce their exposure to PM. Currently, the researchers are exploring the spatio-temporal variability (i.e., changes in levels across space and time) of ambient $PM_{2.5}$ from the sensor network data. A multi-faceted approach is being used for translating air quality and personal exposure information with the goal to improve environmental health literacy and support the ability for informed decision making.
- Community air quality experts identified by Groundwork Denver received air quality training and subsequently provided community talks and work community events. The investigators developed educational materials that were informed by the needs and preferences of community members through the conduct of focus

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groups. Additionally, the investigators are sharing study results through community presentations, developing a blueprint for conducting air quality monitoring in communities, and creating educational resources.

Local Information for Empowering Environmental Education (LIFE3), a Regional Sustainability and Environmental Science ORD Project

LIFE3 provided a way for Region 5 and ORD to focus attention and resources on real community issues in Saginaw, Michigan. EPA worked side by side with Saginaw Valley State University (SVSU) and the Michigan Department of Environment, Great Lakes, and Energy (EGLE). The product, A Healthy Environmental Actions Database (AHEAD), compiles over 2,500 actions to reduce exposure to a range of pollutants, addressing multiple health endpoints. AHEAD was cleared and delivered to project partners, including Michigan Department of Environment, Great Lakes, and Energy (MEGLE), Saginaw Valley State University (SVSU), and Saginaw County Public Health Department (SCPHD). Further, AHEAD was presented and delivered to participants of Region 5's EJ monthly call with state agencies; to internal EPA scientists during a Region 5 brownbag seminar; and to the ORD SHC Children's Environmental Health PACT team, totaling approximately 100 individuals.

EJ GRANT FUNDING & TECHNICAL ASSISTANCE FOR COMMUNITIES

Environmental Justice Grants

EPA's OEJ manages EPA's Environmental Justice Grants, Funding and Technical Assistance Programs, which support overburdened communities and build partnerships to promote environmental well-being and improve public health. FY 2019 marks the 25th year that OEJ has funded EJ projects throughout the United States. Since 1994, more than $34 million in EJ grant funding has been awarded to more than 1,500 communities. In FY 2019, 44 underserved communities felt the meaningful impacts of EJ funding received over the last two years. Twenty-nine of the communities were in predominantly rural states, with over 90% of the grantee organizations receiving their first EJ grant this decade. Through EJ grant funding, the following project accomplishments impacted grantee communities in FY 2019[20]:

- Approximately 12,350 community residents were trained, educated, participated and/or were otherwise engaged on EJ grant activities addressing disproportionate issues specific to their communities.
- Approximately 300 workshops, trainings, demonstrations, and community forum activities were conducted addressing local environmental and public health issues.
- Grantees developed approximately 50 new partnerships with local stakeholder groups, such as local governments, universities, and other local non-profits in pursuit of improving their communities.
- Over 3,000 trees were planted and maintained in high need areas through projects supporting green job training programs and stormwater management.
- Over 2,000 water and subsistence fish samples were taken to address local water contamination.

The outcomes of these activities and accomplishments will be felt for years to come. Local residents now better understand the local issues impacting their health and environment. Communities have formed stronger relationships with local stakeholders and government to more holistically achieve community goals. And, through youth development and job training projects, young adults and students have started on the path to becoming the next generation of community leaders.

For the FY 2019 funding cycle, OEJ, in partnership with EPA's Urban Waters Program, selected 50 new communities to receive Environmental Justice Small Grants awards totaling $1.5 million to address local environmental and public health issues. Ninety percent of the grantees are new to the EJ Grants Program, with many receiving a federal grant for the very first time. Half of the awardees are located in or are impacting Opportunity Zones.

[20] The total impacts of the 2017 projects are being felt in 2019. The total impacts of the 2018 projects won't be felt until the projects conclude in 2020.

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In FY 2019, the program also prioritized projects focused on Disaster Resiliency and Emergency Preparedness. Overburdened communities are disproportionately impacted by extreme weather events, such as hurricanes, wildfires, droughts, and floods. Sixteen of the FY 2019 grantees are leading projects focused on building the resilience of their local communities to these natural disasters. In FY 2019, the EJ Grants Program also saw its highest interest from the public in the past few years. More than 200 applications were received, further adding to the EJ Grant Applicant Database.[21] The EJ Grant Program focuses on developing relationships and providing guidance to as many applicant organizations as possible, whether or not they receive an EJ grant. In FY 2019, the EJ Grants Program held approximately 75 debriefing calls with unselected applicants detailing how they could improve their applications and pointing them towards other upcoming funding opportunities.

The Environmental Justice Collaborative Problem-Solving (CPS) Cooperative Agreement Program provides financial assistance to community-based organizations working on or planning projects to address local environmental and/or public health issues in their communities, using EPA's "Environmental Justice Collaborative Problem-Solving Model." In FY 2019, the EJ Collaborative Problem-Solving projects completed the first year of their two-year projects. All 10 projects have made significant progress in building collaborations with local stakeholders and addressing local environmental and public health issues. Below are examples of the progress that a CPS project and an EJ Small Grants project have made in FY 2019:

EJ Small Grant - Clinton County Safe Medication Disposal Project, Driven by Students

The Clinton Substance Abuse Council (CSAC) is a non-profit organization that provides support to local community coalitions and other related organizations combating substance abuse-related issues. Beginning in 2013 and through the height of the opioid crisis, CSAC began tracking and developing programming to address the increasing amount of Oxycodone, Hydrocodone, and Methadone prescribed to Clinton's population[22]. Initial efforts for CSAC's medication take-back programs didn't yield the desired results, as it was easier for many seniors to dispose of unused medication down the toilet. During CSAC's normal outreach efforts to youth, high school students asked CSAC where do the drugs go when they are flushed down the toilet? *Doesn't that hurt the water?*

CSAC took the youth's concerns about water safety to the local water board. A representative from the local wastewater treatment plant gave a presentation to the students about how wastewater is treated in Clinton and then discharged into the Mississippi River. Students felt compelled to act, so CSAC took this concern to the Environmental Justice Small Grants program - as not only a substance abuse issue, but a clean and safe-drinking water concern. Through this $30,000, one-year project, CSAC strengthened partnerships with local police departments, water utilities, senior living facilities, and schools. Project successes included:

- CSAC, EPA, DEA and other local partners worked collaboratively to promote a Medication Take Back Initiative featuring local police departments installing medication drop-boxes in convenient locations based on feedback from seniors, students, and parents. Clinton County disposed of a total of 305.7 pounds of medication through the initiative, including 111 pounds of unused medication collected from new and/or non-permanent drop boxes installed during the project period.
- Project Partners held two large "Clean Out Your Medicine Cabinet" events resulting in collecting 104 pounds of medication. Thirty seven percent of event attendees indicated that this was the first time they came to the event.
- Local police visited senior living facilities to collect unused medication directly from residents.

[21] Since 2016, 500+ organizations have applied for an EJ grant.

[22] Clinton has a higher than normal proportion of seniors, which according to the Drug Enforcement Administration (DEA) data from 2015, resulted in Clinton County pharmacies prescribing up to 28% more pain medication than other Iowa pharmacies on average.

- High school students developed the "You Flush it, You Eat it, You Drink it" campaign featured during a youth leadership training with 65 middle school students.

Students brought to light the issue of water safety in the midst of the opioid crisis. The success and sustainability of the project continues to this day. A local pharmacy, Wagner Pharmacy, has begun its own locally-funded take-back program in order to continue collecting unused medicine beyond the EJ project.

EJ Collaborative Problem-Solving Agreement - Lead and Radon Project in Postville, IA

In Region 7, Northeast Iowa Resource Conservation & Development Corporation is providing resources and educational materials about lead and radon hazards to households in the diverse, multi-lingual rural community of Postville, Iowa. The project prioritizes translating information about radon and lead mitigation for populations that may not be familiar with either. The majority of city housing stock was built before 1980 and likely contains lead-based paint. Many Postville families, due to linguistic isolation and cultural differences, are not aware of lead poisoning dangers nor of the existence of radon in northeast Iowa. By providing translated information and instructions, as well as the opportunity to ask questions about radon and lead in different language through interpreters, the grantee is providing a critical service to the community. In FY 2019, the project:

- Provided over 117 radon test kits and 40 lead test kits to Postville households;
- Hired three translators and community liaisons;
- Translated 11 documents and three promotional fliers into Hebrew, Russian, and Spanish; and
- Held ongoing meetings and public outreach events

Community Support Services

In FY 2019, OEJ initiated its Community Support Services (CSS) to supplement ongoing efforts in EPA Regions and other Agency initiatives to revitalize underserved and vulnerable communities. Revitalizing communities helps protect the environment and public health, while providing communities with healthy places in which to live, work, learn, and play. Grassroots voices and community leaders are the drivers of this initiative and the goal is to support these leaders in promoting their community efforts. While there are plans to expand CSS to help additional communities, below are two of the three[23] communities with EJ concerns that CSS supported in FY 2019 and continues to assist into FY 2020:

- CSS is helping Anadarko, Oklahoma, repurpose a vacant church and dilapidated theater into a community center and open-air amphitheater, as one of their priority redevelopment initiatives. In partnership with EPA Region 6's Brownfields Program, Oklahoma Department of Environmental Quality, and Caddo County, CSS efforts are underway to assist the city with brownfields assessments. These efforts build upon an EPA Local Foods, Local Places workshop, which focused on the Delaware Nation's and local community's access to healthy foods.
- CSS is assisting overburdened and underserved communities in Savannah, Georgia, to address three of their priority issues - air monitoring, emergency preparedness, and goods movement[24]. Building on EPA's Near-Port Community Capacity Building Pilot Project[25], CSS is fostering local community capacity by partnering with the community (led by The Harambee House Inc.), EPA Region 4, the city of Savannah, and academia. CSS efforts included convening an Appreciative Inquiry[26] workshop, and a community air monitoring training set for October 2019.

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[23] The 3rd community is Shamokin, PA, discussed in Section 1.

[24] https://www.epa.gov/sites/production/files/2018 08/documents/factsheet_on_the_ej_iwg_impacts_from_commercial_transportation_committee.pdf. Also see EPA NEJAC *Reducing Air Emissions Associated with Goods Movement: Working Towards Environmental Justice https://www.epa.gov/environmentaljustice/reducing-air-emissions-associated-goods-movement-working-towards-environmental* (2009). 08/documents/factsheet_on_the_ej_iwg_impacts_from_commercial_transportation_committee.pdf (Feb 2018). "Goods movement is the distribution of freight (including raw materials, parts, and finished products) by all means of transportation, including marine, air, rail, and truck."

[25] https://www.epa.gov/community-port-collaboration-and-capacity-building/pilot-projects-port-and-near-port-community

[26] Appreciative Inquiry is an approach to development and change that focuses on the root causes of success, rather than failure.

Brownfields to Healthfields

The EJ Program also supports communities through the Brownfields to Healthfields[27] (B2H) approach, which helps local organizations access state and federal resources to transform brownfields and blighted properties into community spaces that improve the environment, public health and economic potential of vulnerable communities. This approach is inclusive, collaborative and involves multiple stakeholders and partners who each play a significant role. EPA's role involves identifying and analyzing opportunities; convening and facilitating stakeholder engagement; and providing expertise, guidance and counsel to help successfully move the process forward. Through these efforts, OEJ:

- Supported the launch of the Moving Forward Network[28] (MFN) Brownfields to Healthfields (B2H) as a strategy to support EJ advocates in their efforts to expand from contamination to redeveloping the property into beneficial uses for the impacted population. This initiative focused on eight communities' experience facing environmental, health, and economic challenges from the movement of goods and freight and involves several collaborative partnerships. In FY 2019, East Yard Environmental Justice Coalition and partners led an effort to secure $2M in funding from the state of California to redevelop a contaminated site in Commerce, California, into an active park. This is a major milestone that will support the community's health, environmental and economic needs.
- Many people living in Grundy County, Tennessee, experience persistent poverty, lack access to healthcare, and experience contamination from properties and buildings. Robert Wood Johnson Foundation's (RWJF) County Health Rankings revealed the challenging health status of the rural, low-income population, by ranking the county 95th out of 95 counties in Tennessee in overall health outcomes from 2014-2016. [29] Over the past few years, OEJ convened a diverse group of local leaders who collaborated to fulfill a vision for their community - revitalize the former county high school into the South Cumberland Learning and Development Center and transform an abandoned rail line into the Mountain Goat Trail. This effort applied public health as a driver for change, engaged faith-based organizations, leveraged brownfields resources, and accessed funding from multiple federal and state agencies and philanthropic sources. In 2019, Grundy County rose from 95 to 93 in the RWJF rankings. In FY 2019, OEJ continued its support by engaging new partners and convening meetings under Breaking Bread[30] for B2H to build on the ongoing progress to improve the environment and health of their community.

EJ Program Measures

In FY 2019, the EJ Program initiated an "EJ Program Measures" effort to collect and analyze metrics on common EJ activities that occur across EPA Regions, Program Offices, and OEJ. This first year focused on gathering baseline data on a core subset of EJ Program activities. Below are the reported results from February to August 2019 for conducting trainings and providing education, as well as providing consultation and convening partners and stakeholders.

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[27] https://www.epa.gov/environmentaljustice/brownfields-healthfields-florida-healthfields-successes

[28] MFN is a national network of over 50 member organizations that centers grassroots, frontline-community knowledge, expertise, and engagement from communities across the US that bear the negative impacts of the global freight transportation system.

[29] https://www.countyhealthrankings.org/app/tennessee/2016/rankings/grundy/county/outcomes/overall/snapshot

[30] "Breaking Bread" is a coined-phrase for hosting an initial kick-off convening event(s), which aim to bring multiple parties, resources, and information together to start the B2H process.

The EJ Program provided over 120 training and education sessions, reaching approximately 1,400 participants in 290 stakeholder groups. Training topics included public health, general EJ, community engagement, Brownfields to Healthfields, and career exploration, among other topics.

The EJ Program engages in convening[31] and consulting[32] to promote EJ principles with partners and stakeholders. In this reporting period, the EJ Program engaged in over 400 convenings and/or consultations, reaching approximately 3,700 participants in over 1,000 stakeholder groups. The EJ Program convened partners for various reasons, including outreach activities to gather public comments to inform decision-making and to gather feedback on community priorities. Public comments were gathered from approximately 3,980 community members.

Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts

The Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts was released on December 19, 2018. EPA is working with its federal partners to better coordinate activities and implement the overall federal effort to reduce childhood lead exposures and associated health impacts, the agency is continuing its efforts to reduce lead exposures as described under the following goals:

- Goal 1: Reduce Children's Exposure to Lead Sources
- Goal 2: Identify Lead-Exposed Children and Improve their Health Outcomes
- Goal 3: Communicate More Effectively with Stakeholders
- Goal 4: Support and Conduct Critical Research to Inform Efforts to Reduce Lead Exposures and Related Health Risks (this includes generate data, maps, and mapping tools to identify high exposure communities or locations and disparities for prioritization efforts to reduce children's blood lead levels).

In October 2019 EPA, published *Progress Report on the Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts*. To view the report, visit: https://www.epa.gov/sites/production/files/2019-10/documents/lead_action_plan_booklet_v8_004.pdf. EPA will continue to provide quarterly updates on its implementation of actions under the Action Plan, which will be available at: https://www.epa.gov/leadactionplanimplementation.

OFFICE OF COMMUNITY REVITALIZATION

Community-Driven Solutions

Office of Community Revitalization (OCR) and OEJ are supporting EPA's Community Driven Solutions Approach – an effort to enhance cross-Agency collaboration with vulnerable and underserved communities by identifying, leveraging, and maximizing the support and resources of EPA and partners. This approach helps identify, develop, and implement locally-led solutions to achieve each community's environmental and health vision. In FY 2019, OEJ and OCR are helping multiple EPA programs and regions use a Community Driven Solutions Approach in EPA's place-based assistance efforts, such as Opportunity Zones and Superfund Redevelopment, among others.

[31] Convening is when an EJ Program staff member coordinates meaningful engagement with partners and stakeholders to increase collaboration on a specific EJ issue or concern.

[32] Consulting is when an EJ Program staff member provides subject matter expertise to a stakeholder to address EJ issues and/or increase EJ integration.

Technical Assistance

In FY 2019, OCR – along with governmental, community-based organizations and private sector partners - delivered technical assistance to more than 30 communities across the United States. This work included developing action plans and identifying strategies to support reinvestment and reuse of existing community assets and infrastructure. These efforts supported inclusive economic growth and protecting environmental quality.

OCR worked with OEJ to provide community revitalization technical assistance to leaders from the local government, retail, and faith-based communities of Shamokin, Pennsylvania. As the community considers its next steps towards revitalization, EPA offers technical support around community organizing, establishing a shared vision, and identifying local assets and opportunities. OCR has supported this effort by co-developing a workshop agenda on "community rebuilding," mapping key environmental and economic features of the Shamokin area, and initiating an asset mapping project during a site visit in FY 2019.

In Weldon, North Carolina, OCR worked with OEJ, and EPA's College Underserved/Community Partnership Program (CUPP) to help community and health care partners identify strategies to address local health and economic development challenges through downtown reinvestment, increased access to health services, and walkable downtowns and neighborhoods. Assistance has expanded community capacity to address local health and environmental priorities, facilitate long term partnerships with state and academic resources, and provide leadership and project management training for Weldon community members.

OCR assistance through Healthy Places for Healthy People[33] helped partners in Wenatchee, Washington, develop an action plan to advance their efforts to increase economic opportunities for residents in South Wenatchee, particularly among the neighborhood's Latino population. As a result of the action plan, Wenatchee is revitalizing a community park, supporting entrepreneurship and small business development, improving walkability, strengthening South Wenatchee's connections to downtown, increasing community-based jobs, and highlighting place-based cultural expression to support economic revitalization.

Local Foods, Local Places

Local Foods, Local Places[34] is a program that helps cities and towns across the country protect the environment and human health by engaging with local partners to reinvest in existing neighborhoods as they develop local food systems. The purpose of this program is to create more economic opportunities for local farmers and businesses, better access to healthy, local food - especially among vulnerable groups - and revitalized downtowns, main streets, and neighborhoods. Current program partners include the U.S. Department of Agriculture and the Northern Border Regional Commission. OCR works with EPA Regions and programs to help support these locally led, community-driven efforts to protect air and water quality, preserve open space and farmland, boost economic opportunities for local farmers and businesses, improve access to healthy local food, and promote childhood wellness.

Regional Spotlight – Local Foods, Local Places in South Phoenix, Arizona

South Phoenix, Arizona, was one of 16 communities across the nation that received assistance through the Local Foods, Local Places program in FY 2019. EPA Region 9 worked with community groups and the city of Phoenix to develop a Community Action Plan to promote local food systems and healthy, walkable, economically vibrant communities. Additional partners participating in a technical assistance workshop included Augustine Bartning Real Estate, The Center

[33] https://www.epa.gov/smartgrowth/healthy-places-healthy-people
[34] https://www.epa.gov/smartgrowth/local-foods-local-places

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for Neighborhood Leadership, Green on Purpose Inc., Valley of the Sun United Way, Tepeyac Food Services, Maricopa County Food System Coalition, and Maricopa Community Colleges. EPA and its local partners sought input from the public and stakeholders on local values, vision and goals to develop short and medium-term action items to advance local food goals.

SECTION 2 – More Effective Partnerships

One of EPA's Strategic Plan goals is to have more effective partnerships. Collaborating with partners is key to having greater success with EJ efforts in overburdened communities. To accomplish this, EPA partners with the federal, state, tribal and local governments; indigenous peoples; communities and community-based organizations; and academia. These diverse partnerships create a more coordinated and effective approach in achieving EJ.

FEDERAL GOVERNMENT

Federal Interagency Working Group on Environmental Justice

EPA is the convener of the Federal Interagency Working Group on Environmental Justice (EJ IWG). The EJ IWG is chaired by the EPA Administrator and comprised of 17 federal agencies and White House offices with standing committees and other committees established as necessary to carry out responsibilities outlined by the 1994 Executive Order 12898[35] (EO 12898). The EJ IWG facilitates the active involvement of all federal agencies to implement EO 12898, which directs that federal agencies must identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations. The EJ IWG provides a forum for federal agencies to collectively advance EJ principles and increase local community capacity to promote and implement innovative and comprehensive solutions to EJ issues. In FY 2019, among other efforts[36], the EJ IWG:

- Continued its natural disaster efforts by partnering with other agencies and health care organizations to leverage resources, expertise and supplies focused on preventing complications from diabetes before, during and following hurricanes.
- Hosted an Educate, Motivate, Innovate student panel[37] at the 2019 National Environmental Justice Conference and Training, which helps promote youth engagement in EJ.
- Released the EJ IWG Guide to Finding Federal Assistance and Resources for Environmental Justice Efforts[38] that offers general guidance and tips on searching for funding opportunities, as well as information on tools, trainings and other relevant resources that are available to help address community needs.
- Released The Community Guide to Environmental Justice and NEPA Methods,[39] which provides information for communities who want to assure that their EJ issues are adequately considered when there is a federal agency action that may involve environmental impacts on minority populations, low-income populations, and/or Indian tribes and indigenous communities. It lays out a framework for how federal agencies generally consider EJ in the NEPA process and summarizes opportunities that communities may use to work with these agencies to advance EJ.

[35] https://www.epa.gov/laws-regulations/summary-executive-order-12898-federal-actions-address-environmental-justice
[36] For more info on EJ IWG progress in FY 2019, look for the forthcoming EJ IWG FY 2019 Report on the EJ IWG Progress Report https://www.epa.gov/environmentaljustice/ej-iwg-framework-collaboration-0 webpage.
[37] https://www.epa.gov/environmentaljustice/2019-educate-motivate-innovate-student-panelists
[38] https://www.epa.gov/environmentaljustice/guide-finding-federal-assistance-and-resources-environmental-justice-efforts
[39] https://www.energy.gov/nepa/downloads/community-guide-environmental-justice-and-nepa-methods

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Federal Interagency Interfaith Collaboration for Vulnerable Communities

Figure 3: IIC members visiting Shamokin, PA, to hear from community and faith leaders on efforts and needs to rebuild the city.

In FY 2019, EPA formed the Federal Interagency Interfaith Collaboration for Vulnerable Communities (IIC) to enhance federal support for interfaith collaborations to address the needs of vulnerable and underserved communities. The IIC is comprised of representatives of the U.S. Departments of Agriculture, Justice, Labor, Homeland Security, Interior/Fish and Wildlife Service, General Services Administration and EPA. This effort recognizes that oftentimes faith leaders and faith-based organizations serve an important role in underserved and overburdened communities and operates under the authority of two presidential executive orders - Faith and Opportunity Initiative[40](FOI) (2018) and Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (1994). The FOI recognizes that faith-based and community organizations serve individuals, families, and communities differently than government and are essential to revitalizing communities; and welcomes opportunities for government to partner with faith-based organizations through innovative, measurable and outcome-driven initiatives. Through current work in Shamokin, Pennsylvania, and the collective experiences of agencies in other communities, the IIC seeks to identify best practices to enhance federal agencies' work with interfaith collaborative partnerships to revitalize communities.

Quindaro Townsite National Commemorative Site – Kansas City, KS

Figure 4: The Quindaro Townsite Designation Ceremony.

EPA and the National Park Service (NPS) have partnered with local community organizations on the Quindaro Townsite (also known as the Quindaro Ruins Underground Railroad site). NPS designated the Quindaro Townsite as a national commemorative site after more than 20 years of advocacy by local champions in Kansas City, Kansas. The site is one of the largest underground railroad sites in the country. The designation was celebrated in FY 2019 by the community along with local, state, and federal officials. NPS will fund the site improvements and Region 7 EJ and Brownfields staff are currently assisting with redevelopment planning and site assessment work.

STATE GOVERNMENTS

Environmental Justice Community Revitalization Council

EPA's Environmental Justice and Community Revitalization Council (EJCRC) provides senior leadership guidance to the Agency's EJ and community revitalization programs. EPA's commitment to the mission and goals of the Agency's EJ Program is to engage with and meet the needs of our nation's most vulnerable communities regarding disproportionate environmental impacts, health disparities and economic distress. Below are examples on how EPA is implementing this commitment in FY 2019.

New Initiative: Region 5 Creates Cross-Divisional Team to Implement the Environmental Justice and Community Revitalization Council's Community-Driven Solutions Initiative

In order to address EJ needs within five Region 5 communities, the Region created a team composed of representatives from each of EPA's programs (Air, Water, RCRA, Brownfields, Great Lakes, Enforcement). This team created a set of screening criteria and selected, in consultation with states, the following five pilot communities to serve as the focus for cross-media, multi-agency, federal/state/tribal collaboration: Detroit, Michigan; Green Bay/Oneida, Wisconsin; Lorain, Ohio; East St. Louis, Illinois; and Duluth/Fond du Lac, Minnesota. Region 5 programs designated lead project managers

[40] https://www.whitehouse.gov/presidential-actions/executive-order-establishment-white-house-faith-opportunity-initiative/

for each city. Working with the states and the communities, a series of creative responses are being designed and implemented. This collaborative approach is just getting underway and is positioning each of these programs and communities to achieve visible improvements. Each of the selected cities include Opportunity Zones. Selected FY 2019 highlights include:

- Coordinating EPA funding, which can support radon monitoring in homes, with USDA Rural Development funding for home renovation expenses to address Radon remediation;
- Providing training for local law enforcement focused on illegal dumping;
- State-led tire clean-ups;
- Funding Brownfield assessment, cleanup, and loan grants to reduce risk associated with exposure to contamination and eliminate barriers to redevelopment;
- Coordinating with HUD Choice Neighborhoods Planning Grant to focus potential brownfields investments;
- Connecting the dots to spur direct investments from philanthropy and federal partners into neighborhoods to create green infrastructure;
- Enforcement/Compliance initiative focused on contractors performing renovation in older structures containing lead paint; and
- Local Foods/Local Places workshops to encourage the availability of healthy locally-grown food

EJ States Training Webinars

In FY 2019, EPA initiated a State Environmental Justice Training Webinar Series to build the long-term capacity among practitioners working to advance EJ at the state level. States represent an important strategic priority for EPA's EJ work since state regulators make most of the environmental decisions of immediate impact to communities. Over 4,000 people registered for these webinar trainings, and represented government agencies in all fifty states, Puerto Rico, Guam and the District of Columbia. Over 80% of evaluation respondents indicated that they intend to use one or more approaches learned during the series.

The EJ Program collaborated with state partners, including the Environmental Council of the States, and others to develop and conduct these training sessions, with the idea of promoting peer learning. Discussions among state EJ coordinators in the All States EJ Workgroup Monthly EJ Conference Calls, hosted by Region 3, also helped to inform this webinar content. This initiative not only captures a set of tested methodologies associated with EJ practice that can be taught, learned and replicated, but it also is an easily accessible web-based repository of training resources for state EJ practitioners housed on OEJ's webpage[41]. The four webinars[42] form a set of basic approaches to integrating EJ in state policies and programs: Identifying and prioritizing environmentally impacted and vulnerable communities; Enhancing community involvement in the regulatory process; Using comprehensive area-wide planning to promote equitable development; and Applying EJ during state environmental impact assessment.

> "From reducing lead exposure to cleaning up contaminated lands, EPA is prioritizing underserved communities that are disproportionately impacted by environmental and public health risks," said EPA Administrator Andrew Wheeler. "This new training will help states identify, prioritize, and address the needs of at-risk communities facing immediate environmental and public health challenges."

[41] https://www.epa.gov/environmentaljustice/state-and-local-government
[42] https://www.youtube.com/watch?v=1gsl4oIEb0U&feature=youtu.be; https://www.youtube.com/watch?v=iz3sc9xSoPg&feature=youtu.be; https://www.youtube.com/watch?v=0kpwuMlnbBM&feature=youtu.be; https://www.youtube.com/watch?v=CoHYcNyawUg&feature=youtu.be

Providing Environmental Justice and Civil Rights Training to State Partners

Figure 5: R1 EPA conducting a presentation for RIDEM.

EPA Region 1 and state partners work together to identify areas for collaboration and partnership. A tool integral for identifying and planning these collaborations is state Performance Partnership Agreements[43]. In these agreements, EPA and its state partners identified training on EJ and Title VI of the Civil Rights Act as a state need. EPA Region 1 kicked off a planned series of EJ and Title VI trainings for the six New England states in partnership with the Rhode Island Department of Environmental Management (RIDEM). The nature and purpose of the RIDEM EJ workshop was to further the mutual environmental goals of RIDEM and EPA Region 1. This workshop was open to RIDEM staff and focused on understanding EJ and its relationship to Title VI; utilizing EJSCREEN; EJ and state public involvement processes; the application of EJ principles to program delegation decisions, clean up decisions and enforcement decisions; and developing proactive strategies and techniques to further implement EJ in state programs.

Through this state training series, EPA will work with the New England states to support and partner with them in their efforts to advance EJ. The training series will provide state partners with a framework for using a variety of approaches and tools for advancing EJ on a day-to-day basis and at an operational level. EPA Region 1 will continue to explore ways to integrate EJ into all aspects of our work and will seek to increase opportunities to establish or improve partnerships with EJ communities and organizations, state and local agencies, and non-government organizations, to protect public health and the environment in every community.

LOCAL GOVERNMENTS

EPA Support to the City of Nampa, Idaho, for Hispanic Community Stormwater and Watershed Pollution Engagement

Nampa, Idaho, is Idaho's third largest municipality (82,000 people in the 2010 Census). Indian Creek, a tributary to the Columbia River via the Boise and Snake Rivers, runs through the middle of Nampa. The Hispanic population of Nampa comprises approximately 25% of the community and is primarily low-income. Between 2011 - 2019, EPA Region 10 and the City of Nampa forged a partnership to engage Hispanic residents in improving water quality through stormwater and watershed pollution management efforts.

The partnership between EPA and Nampa produced many accomplishments over the years, including the convening of a Nampa Stormwater Advisory Group focused on engaging Nampa's Hispanic community in stormwater and watershed public educational opportunities, bi-lingual award-winning stormwater website, a bi-lingual stormwater educational kiosk and a summer camp program. EPA has helped manage the Advisory Group, which provides ongoing guidance to the City on opportunities to engage the Hispanic community. Specific accomplishments in FY 2019 included the planning and design of a demonstration rain garden to provide a community example of green infrastructure, materials to support an Adopt-a-Creek program and bi-lingual educational signage and videos. Additional benefits include a stronger EPA/city of Nampa relationship improving National Pollutant Discharge Elimination System (NPDES) wastewater permit compliance negotiations and the EPA issuance of the stormwater MS-4 permit for the city of Nampa.

[43] https://www.epa.gov/ocir/national-environmental-performance-partnership-system-nepps

TRIBAL GOVERNMENTS

ORCR Tribal Programs Team Leadership in ITF

The Office of Resource Conservation and Recovery (ORCR) within EPA's Office of Land and Emergency Management (OLEM) represents EPA in collaboration with member agencies of the Tribal Infrastructure Task Force (ITF) (USDA-Rural Development, HHS-Indian Health Service, DOI-Bureau of Indian Affairs, and the Department of Housing and Urban Development) to identify and develop solutions to waste management challenges in Indian country. The ITF established the Waste Programs Sub-Workgroup and subsequently, the Waste Programs Sub-Workgroup established Work Team 1 to identify barriers that prevent tribes from developing and implementing the necessary components of an effective and sustainable waste management program. Work Team 1 prepared a report titled, *Overcoming Barriers to Sustainable Waste Management in Tribal Communities*.

The report provides certainty to tribes that EPA and other agencies are aware of their needs and priorities for waste management on tribal lands. Potential implementation of the proposed recommendations will demonstrate to tribes that the agencies are invested in assisting tribes with addressing the challenges related to establishing sustainable waste management programs. The following two recommendations that are being considered demonstrate a commitment to customized assistance that is responsive to tribal priorities: development of a comprehensive set of trainings that allow for regionalization tailored to local tribal needs, and provide follow-up technical assistance, through circuit riders or other mechanisms to tribal communities participating in training.

ORCR also led the ITF in development of the Tribal Waste Management Funding Resource Directory[44] and Tribal Waste Management Technical Assistance Directory[45]. These two web-based directories provide a range of information that can assist tribes with identifying funding and technical assistance resources to help with developing and implementing a waste management program. These directories serve to consolidate the information in one place, so tribes can more easily identify funding and technical assistance information.

Application of Traditional Ecological Knowledge in the Cleanup of the Grasse River Superfund Site in New York

At the Grasse River Superfund Site in New York, EPA worked collaboratively with the Saint Regis Mohawk Tribe on the design of the cleanup of contaminated sediment along the shores of the Grasse River, specifically with thoughtful attention to habitat reconstruction and application of Traditional Ecological Knowledge (TEK) to the restoration of habitats following cleanup. Incorporating TEK involved close collaboration between EPA and the Tribe's Environment Division on inclusion of tobacco burning ceremonies and seed ceremony songs in the reconstruction process as specified by the Tribe. Seed selection and seed sources/nurseries are also being selected on the basis of their ability to provide the species of cultural plants used for traditional foods, medicines, utility, ceremony, etc. specified by the tribe as well as seeds adapted to the site-specific growing conditions. EPA's Policy on Environmental Justice for Working with Federally-Recognized Tribes and Indigenous People[46] encourages, as appropriate and to the extent practicable and permitted by law, the integration of TEK into the Agency's environmental science, and policy decision-making processes to address EJ concerns.

Interagency Agreement for the Study of Lead, Allergen, Pesticide, and Polychlorinated Biphenyl Levels in Licensed Child Care Centers in Portland Area Indian Country

In FY 2019, the Indian Health Service (IHS) Portland Area Office conducted sampling events at 31 tribal child care centers around the States of Idaho, Oregon and Washington, as there is a significant data gap regarding the levels of chemicals present in child care centers within Indian country. Wipe, vacuum and soil samples were collected and analyzed for

[44] https://www.epa.gov/tribal-lands/tribal-waste-management-funding-resources-directory
[45] https://www.epa.gov/tribal-lands/tribal-waste-management-technical-assistance-directory
[46] https://www.epa.gov/environmentaljustice/epa-policy-environmental-justice-working-federally-recognized-tribes-and

concentrations of lead, pesticides, polychlorinated biphenyls (PCBs) and allergens. Non-stressor environmental data and qualitative data were also collected. Sampling and analysis were supported by funding from an EPA Region 10/ORD Regional Applied Research Effort (RARE) grant. The sampling design was patterned after the National Survey of U.S. Head Start Child Care Centers in 2001. This survey of tribal child care centers will provide important information regarding children's environmental health in Indian country in the Pacific Northwest.

Backhaul Alaska, Mitigating Environmental and Public Health Hazards in Rural Alaska

With unlined landfills as the only solid waste disposal option for many rural Alaskan communities, many of these communities do not have a safe way to dispose of hazardous materials within the community. This insufficient capacity to handle hazardous wastes can result in exposure of vulnerable populations to these hazardous materials. A broad coalition of tribes, tribal organizations, non-profits, private industry, government, and academic institutions are working together to create a hazardous waste disposal program, called *Backhaul Alaska*, for Alaskan Native Villages and rural Alaskan cities located off the road system. "Backhaul" is a term to describe the shipment of waste out of Alaska's remote communities in the empty hulls of outbound airplanes, trucks, and barges.

In FY 2019, the three-year pilot program tested backhaul coordination services in 27 rural Alaskan communities and evaluated their successes. The EPA programs supporting the effort include the Indian General Assistance Program, the Tribal Solid Waste Program and the Environmental Justice Program, through the EJ Collaborative Problem Solving Grant Program. There is currently EJ Grant funding for the *Alaska Native Community Engagement Project*, conducted by the Zender Environmental Health and Research Group. The *Backhaul Alaska* pilot phase will close out and the full program is planned for implementation beginning in January 2021.

Establishing a Successful Partnership with the Confederated Tribes of the Colville Reservation

Figure 6: March 2019 ORAP Meeting on Colville Reservation.

To raise awareness and reduce high levels of $PM_{2.5}$, EPA Region 10 and the Confederated Tribes of the Colville Reservation convened the Okanogan River Airshed Partnership (ORAP) in the State of Washington. This dynamic group brings together 25 organizations and over 90 individuals to collaboratively implement innovative, non-regulatory solutions. The Okanogan Valley's predominate rural population falls in the low-income bracket, relying on low-cost or no-cost means to dispose of debris and heat their homes, and one-third of the community identify as mostly Hispanic and Native American.

To reduce backyard burning, the Okanogan Conservation District and two cities sponsored community chipping events in May and October of 2018. To date, these chipping events have resulted in 48,500 pounds of debris being diverted from the landfill. Also, in FY 2019, the Colville Tribes' Air Quality Program used the EPA's funding to replace older, less efficient wood stoves with 25 newer, safer models. Composting is another initiative that is gaining traction in the ORAP area. At Okanogan's Virginia Granger Elementary School, elementary teacher Jim Anderson started a composting program (*Make Soil, Not Smoke*) to teach students about burning alternatives and the benefits of composting. "The Partnership provides a framework for people to get things done. "It's a great mechanism to garner more grant funding for partner work," said Kris Ray, Colville Tribes' Air Quality Program Manager. While resources and capacity are limited, the ORAP has succeeded in increasing awareness of the negative impacts of smoke pollution and showcasing how positive changes can be realized with a collaborative, dedicated group working together on sustainable solutions.

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EPA Tribal Disaster Debris Management Training

Figure 7: Oneida Nation Environmental Director, Jeffrey Mears, speaks to training participants.

EPA Region 5 hosted its third Tribal Disaster Debris Management Training in Green Bay, Wisconsin in FY 2019, in partnership with the Oneida Nation and the National Tribal Emergency Management Council (NTEMC). This year's training was expanded to a national audience and held in conjunction with the National Joint Tribal Emergency Management Conference. There were 46 attendees representing tribal, state, federal, and academic organizations. Tribal attendees represented tribes from Louisiana, Wisconsin, Minnesota, Oklahoma, Texas, New Mexico, Nebraska, Montana, and Washington. EPA coordinated with the Oneida Nation, NTEMC, and federal and state agencies (including the U.S. Coast Guard, FEMA, Bureau of Indian Affairs, U.S. Department of Agriculture, U.S. Army, and Wisconsin Department of Natural Resources) to develop specific parts of the training. The small groups discussed factors to be considered for key components of a disaster debris management plan, within the context of issues and situations that are unique to tribes. The federal and state programs, resources, technical assistance, and tools to support these components of disaster debris management were highlighted in each session. Since Region 5 has provided these Tribal Disaster Debris Management Trainings, more tribes have been building capacity for disaster debris management by developing such plans.

INDIGENOUS PEOPLES

US Government Participation in the Permanent Forum on Indigenous Peoples

Figure 8: Indigenous Organization Representatives at the USG Side Event on Traditional Knowledge.

The U.S. Government (USG) Delegation for the United Nations 2019 Permanent Forum on Indigenous Issues[47](UNPFII) consisted of representatives from the Advisory Council on Historic Preservation (ACHP), U. S. Department of State, U.S. Department of Agriculture/Forest Service (FS), U.S. Agency for International Development and EPA. The USG participated in the plenary sessions held April 22 – 25, and several of the UNPFII side events[48]. The USG prepared two official statements for the UNPFII. One statement was on indigenous languages, the focus of the first day. The second statement was on Traditional Knowledge[49] (TK), which was the primary theme of the 2019 UNPFII. The USG statement[50] included a reference to EPA's policies pertaining to TK and also indicated that EPA and ACHP recently collaborated on TK training for both agencies.

[47] https://www.un.org/development/desa/indigenouspeoples/unpfii-sessions-2/18-2.html
[48] https://www.achp.gov/news/achp-serves-subject-matter-experts-during-un-session-indigenous-issues
[49] For a definition of Traditional Knowledge, please refer to the 2014 NEJAC Report "Proposed Advice and Recommendations on Implementation of the EPA Policy on Environmental Justice for Tribes and Indigenous Peoples."
[50] https://www.facebook.com/usachp/videos/vb.619377588237825/2068665229913068/?type=2&theater

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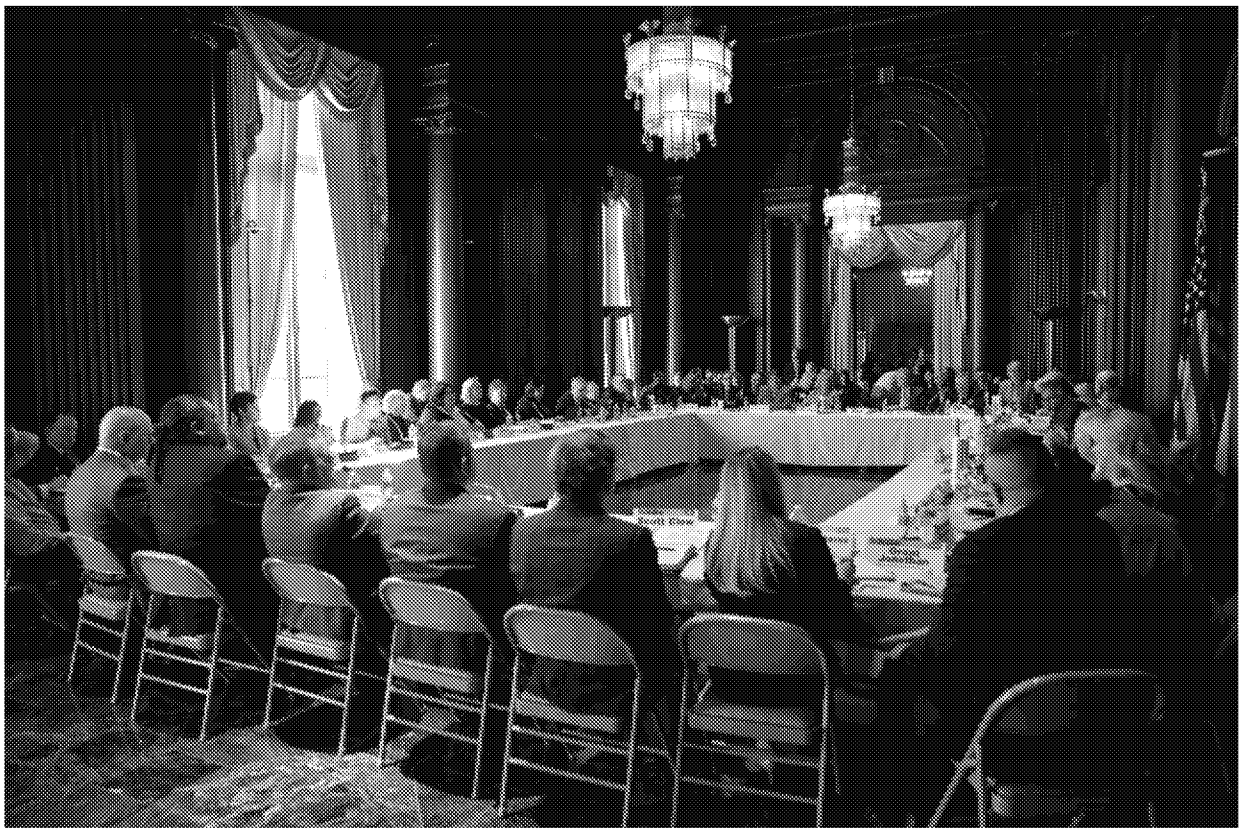
Traditional Knowledge Side Event Hosted by the US Government

Figure 9: Federal Panelists (US Forest Service, EPA, ACHP) at USG Side Event.

A USG Traditional Knowledge (TK) side event was held in FY 2019, as part of the Eighteenth Session of the Permanent Forum on Indigenous Issues. The meeting was hosted by the U.S. Department of State at the USG United Nations Mission. Approximately 25 tribal leaders and indigenous organization representatives attended. The side event[51] included panelists from the ACHP, EPA's OEJ, and the FS. The ACHP focused on their authorizing federal laws, regulations, and recent policy developments in TK. EPA highlighted current policies related to TK, such as the EPA Policy on Environmental Justice for Working with Federally Recognized Tribes and Indigenous Peoples[52] (2014) – Principles 6 and 7, and the OLEM Memorandum – Considering Traditional Ecological Knowledge during the Cleanup Process[53] (2017), and EPA Region 10's TK principles (2018). Tribal and indigenous US-based organizations, including the Sevenths Generation Fund, Native American Rights Fund, Indigenous Environmental Network, International Indian Treaty Organization, were represented. Participants also included international indigenous organizations, such as the UN Expert Mechanism on the Rights of Indigenous Peoples, and a few tribal government leaders and representatives, including from the Chickaloon Village of Alaska and Navajo Nation.



EPA Administrator Andrew Wheeler hosts the National Tribal Operations Committee Meeting at EPA headquarters in Washington, D.C.

[51] https://www.achp.gov/news/achp-serves-subject-matter-experts-during-un-session-indigenous-issues
[52] https://www.epa.gov/environmentaljustice/epa-policy-environmental-justice-working-federally-recognized-tribes-and
[53] https://www.epa.gov/tribal-lands/considering-traditional-ecological-knowledge-tek-during-cleanup-process

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COMMUNITIES AND COMMUNITY-BASED ORGANIZATIONS

Friends of Deckers Creek Discusses Grant Progress with Region 3's Regional Administrator

Figure 10: Regional Administrator Cosmo Servidio (left center) and Friends of Deckers Creek discuss progress on grant activities, including e-coli testing procedures.

Friends of Deckers Creek (FODC), in Morgantown, West Virginia, received an Environmental Justice Collaborative Problem-Solving Cooperative Agreement in 2018 that will run through August 2020. The project, "Deckers Creek Restoration Team: Reducing the Impacts of Fecal Coliform," received $120,000 to monitor fecal coliform and e. coli levels in the Deckers Creek watershed, while also providing a much-needed public education effort on the hazards of contamination and citizens' rights under the Clean Water Act.

In September of 2019, Regional Administrator Cosmo Servidio visited with staff and volunteers from FODC to discuss the project goals and future activities. FODC has one year remaining on their grant. In the coming months, they will be utilizing their newly-formed, in-house lab to review water samples, and will communicate their findings through public meetings and educational materials.

Superfund Redevelopment

The Superfund remedial program protects human health and the environment by cleaning up hazardous waste sites and facilitating reuse and redevelopment, and much of our success is due to our collaborations with federal, states, tribes, local governments and other partners. Superfund redevelopment activities help communities reclaim and reuse thousands of acres of formerly contaminated land. Through an array of tools, partnerships, and activities, Superfund Redevelopment continues to provide local communities with new opportunities to grow and prosper. In FY 2019, EPA celebrated the 20th year of Superfund Redevelopment to help transform communities:

- EPA's Superfund remedial program has established several awards to recognize state, tribal and local community partners who have worked collaboratively with the Superfund remedial program and gone the extra mile to support the redevelopment of Superfund sites in ways that are beneficial to the community and are compatible with the cleanup.
- As of the end of FY 2019, there are over 1,000 sites in reuse, which is roughly half of the sites on Superfund's National Priorities List.
- As of FY 2018, EPA has collected data on more than 8,600 businesses at Superfund sites. In FY 2018, these businesses generated $52.4 billion in sales and employed more than 195,000 people who earned a combined income of $13 billion. Over the last eight years, these businesses generated at least $263 billion in sales.
- Redeveloping Superfund sites has brought thousands of jobs to communities.
- Thanks in part to Superfund Redevelopment and EPA's RE-Powering America's Land initiative, 64 Superfund sites are now home to alternative energy facilities. As of September 2019, these facilities provided enough energy to power approximately 100,000 homes. Wind, solar and landfill gas facilities make up about 92 percent of these projects.

Superfund Job Training Initiative (SuperJTI)

In FY 2019, EPA trained 33 graduates through the Superfund Job Training Initiative, which is a job readiness program that provides training and employment opportunities for people living in communities affected by Superfund sites. Many of these areas are communities with EJ concerns – historically under-represented minority and low-income neighborhoods and areas burdened with significant environmental challenges. EPA's goal is to help these communities develop job opportunities that remain long after a Superfund site has been cleaned up.

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The EPA-HUD Memorandum of Understanding

Under a 2017 Memorandum of Understanding between the Superfund program and the Office of Housing and Urban Development's Office of Environment and Energy, the Superfund remedial program meets quarterly to share information and discuss paths forward on issues related to HUD housing near Superfund sites.

Center for Health, Environment & Justice

The Superfund remedial program hosts quarterly meetings with the Center for Health, Environment & Justice (CHEJ) to discuss EJ issues near Superfund sites.

Regional Spotlight in Region 4 - Community and State Partnerships Supporting Job Training and Cleanup at Former Wood-Treating Site in Florida

Region 4 works collaboratively with a diverse network of partners – affected communities, states, tribal and local governments, nonprofits, private sector organizations and other federal agencies – to ensure the protection of public health and the environment. In March 2019, 13 community members completed EPA's Superfund Job Training Initiative (SuperJTI) training at the Fairfax Street Wood Treaters site in Jacksonville, Florida. Through a partnership with Northwest Jacksonville Community Development Corp., SuperJTI provided local job seekers with new skills. After a rigorous screening and recruitment process, trainees earned three certifications in hazardous waste and emergency response, CPR/first aid, OSHA construction safety courses alongside professional development training. As a result, site contractors hired eight graduates to work on site. EPA completed remaining cleanup activities – removal and disposal of remaining impacted soil, removal of concrete and pavement, and site grading and restoration – in the fall of 2019. FDEP is leading construction activities for Fairfax North properties. Region 4 continues to work closely with the Florida Department of Environmental Protection (FDEP) on the site's cleanup. Region 4 completed the residential portion of the site's cleanup in FY 2019.

Environmental Justice Academy in Region 4

The EJA is the premier leadership development program and curriculum for EJ community leaders. The EJA launched its first class in September 2015 with 26 participants. The 2nd year EJA class began in September 2016 and graduated 15 students in April 2017. In FY 2019, the EJA graduated 20 students in two separate classes. Both classes participated in a pilot-modified approach, which included three days of classroom instruction, five homework webinars, and capstone presentations. The original 9-month EJA curriculum provided training on a range of topics and incorporated established methods and principles, including the following:

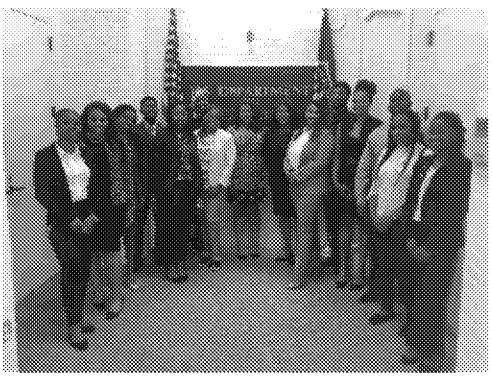

Figure 11: EJA participants at Tennessee State University.

- EPA's Collaborative Problem-Solving Model, consisting of 7 elements, such as community capacity building, consensus building and dispute resolution, and leveraging resources;
- Appreciative Inquiry Philosophy, which is based on the principle of focusing on what is positive, as opposed to the negative;
- Smart Growth Building Blocks Process, which includes equitable development, sustainable strategies, complete streets, and flood resilience; and
- Leadership development principles.

The EJA equips graduates with capacity-building tools they can utilize in their community to comprehensively address the challenges they face. The first pilot-modified approach was tested by Atlanta Metropolitan State College (AMSC), in partnership with the Greater Atlanta Regional Centre of Excellence and the Center for Sustainable Communities (CSC). Ten participants representing local nonprofit organizations, collegiate and graduate-level students, graduated in March 2019. The second class utilizing the pilot-modified approach was tested by Tennessee State University through a grant

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from the U.S. Forest Service. Another ten students from 1890 HBCU Land Grant Institutions graduated in September 2019.

Partnering with Public Health Seattle King County and the Target Communities in Developing Fish Consumption Risk Communication Strategies for the Duwamish Superfund Site

EPA's cleanup of the Lower Duwamish Waterway (LDW) Superfund Site is partly driven by health risks to people eating contaminated fish. The cleanup promotes the Washington Department of Health's fish consumption advisory for the LDW. The advisory recommends consumption of salmon and no consumption of resident fish, especially for pregnant women, nursing moms and young women. While fish advisory signs are posted along the LDW, this risk communication method is not effective for limited English proficiency communities.

To improve upon the fish advisory risk communication methods, EPA used an innovative community-based approach to develop tailored strategies for its LDW Seafood Consumption Institutional Control Implementation and Assurance Plan (August 2019). The community-based program is a component of the Settlement Agreement with the Lower Duwamish Waterway Group and led by Public Health Seattle King County. Throughout FY 2019, PHSKC convened meetings of a Community Steering Committee comprised of 15 fishers and fish consumers from three target communities: Latino, Cambodian and Vietnamese. The CSC was central in developing the ICIAP key strategies because as community members, they receive feedback and input from their broader communities to share with the agencies.

Brownfields Program Outreach

Many brownfields are located in communities that need help accessing resources to improve their environmental and public health outcomes. In FY 2019, EPA's Office of Brownfields and Land Revitalization (OBLR) conducted outreach and developed guidance for communities, including those with EJ concerns, in several key emphasis areas:

- Connecting brownfields and public health: OBLR launched a series of new webpages that explain Brownfields and Public Health[54]
    - The Brownfields to Healthfields Story Map[55] highlights several opportunities to turn a brownfield site into a "Healthfield." Healthfields increase local access to healthcare and community clinics, parks and open space, food sources, and housing - all through cleanup and reuse of a former brownfield site
    - New and updated factsheets on health monitoring[56] and community health assessment[57] provide information on ways to address public health challenges in communities
- Helping brownfield communities initiate brownfields revitalization and specific actions they can take to prepare a site for reuse:
    - New fact sheets explain eligible site planning activities[58]
    - Community Actions that Drive Brownfields Redevelopment[59] guide
- Helping communities build capacity for the site assessment, cleanup and reuse process:
    - Continued support to brownfield communities via our brownfields technical assistance providers
    - Public outreach via webinar series to describe the range of Brownfields Technical Assistance Available to Communities[60] and how communities who struggle with brownfields challenges can access these resources free of charge.

[54] https://www.epa.gov/brownfields/brownfields-and-public-health
[55] https://epa.maps.arcgis.com/apps/Cascade/index.html?appid=fa7b68b3075a4340970b1e5c00c76cf4
[56] https://www.epa.gov/sites/production/files/2015-09/documents/finalphandbffact.pdf
[57] https://www.epa.gov/sites/production/files/2018-10/documents/community_health_assessment_placeholder.pdf
[58] https://www.epa.gov/brownfields/information-eligible-planning-activities
[59] https://www.epa.gov/land-revitalization/community-actions-drive-brownfields-redevelopment
[60] https://www.epa.gov/brownfields/brownfields-technical-assistance-training-and-research#TAB

ACADEMIA

In FY 2019, EPA worked with a number of academia partners. Highlights include projects under EPA's College/University Underserved Community Partnership Project[61] (CUPP) that was spearheaded by Region 4 to provide a creative approach to partnering and delivering technical assistance to underserved communities from local colleges and universities. Students work on a range of plans and projects that help communities gain access to resources that can improve the economic future and overall quality of life for the community.

CUPP in Action

CUPP continues to thrive in assisting rural and underserved communities in need of resources to improve their economic viability, health, environmental conditions, and overall quality of life. CUPP enlists colleges and universities with suitable programs that assist communities with vital technical support through student internships and capstone projects. Many of the participating organizations include but are not limited to Minority Serving Institutions (MSIs) and numerous other federal agencies such as the U.S. Department of Agriculture, U.S. Department of the Interior, U.S. Department of Energy, National Parks Service, U.S. Department of Education, and Health and Human Services. At the same time, CUPP provides practical experience for students in their areas of academic study, thus they receive academic credit for their efforts. The participating communities receive these vital services at no cost; moreover, the schools provide their services at no cost to the federal government. In FY 2019, CUPP completed projects with the following schools and project locations:

University	Project locations
Clemson University	Pendleton, SC
Coastal College of Georgia	2 project locations in Brunswick, GA
Georgia State University	Clarkston, GA
Texas A&M Corpus Christi	Gregory, TX
Tuskegee University/Drexel University/Clemson University/The University of South Alabama collaboration	Lowndes County, AL
Western Kentucky University	Glasgow, KY

Helping to Address Sewage and Associated Health Issues in the Alabama Black Belt

Region 4's CUPP program, in support of, and in partnership with the State of Alabama Department of Public Health, created a consortium of institutions of higher learning and nonprofit organizations to develop recommendations to address the sewage and associated health issues in the Alabama Black Belt area. Several organizations (universities and non-governmental organizations) including Tuskegee University; University of South Alabama; Clemson University; Drexel University; Thriving Earth Exchange; and Engineers without Borders (i.e., the Consortium) agreed to collaborate on developing innovative technology recommendations to address this issue.

The consortium operates under the umbrella of the following two guiding principles: the recommendations must work to address the problem and must be cost efficient. The four schools and two nonprofits began working together in the Fall of 2018. The participating university professors are working with students, who as a part of their course work, and/or for capstone projects. The final recommendations were provided to the Director of the Bureau of Environmental Services for the State of Alabama Department of Public Health. Based on the approval of the Department, the project recommendations were selected to be implemented as a pilot project for the Alabama Black Belt. The student's best ideas will be used to develop a pilot project and if implemented, the innovative technologies will be utilized in the Black Belt of Alabama.

[61] https://www.epa.gov/environmentaljustice/collegeunderserved-community-partnership-program

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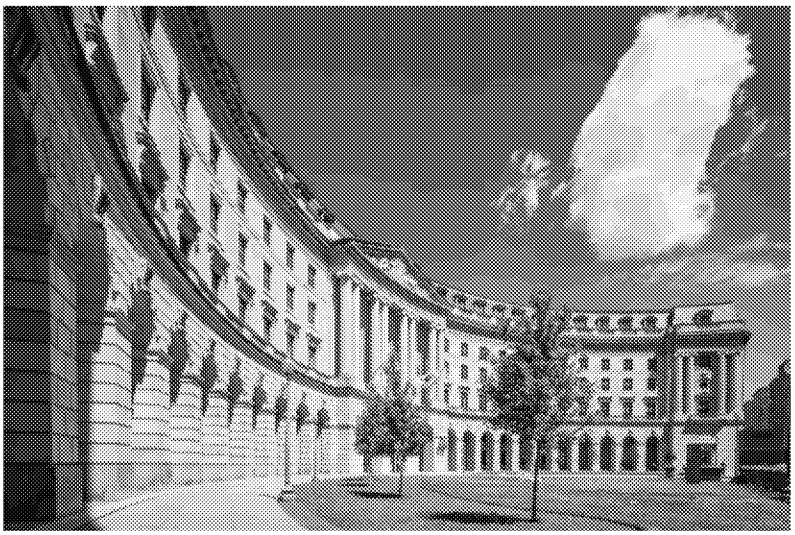
NATIONAL ENVIRONMENTAL JUSTICE ADVISORY COUNCIL

OEJ manages the National Environmental Justice Advisory Council[62] (NEJAC), which provides independent advice and recommendations[63] to the EPA Administrator on matters related to EJ, with a focus on key areas that include evaluation of a broad range of strategic, scientific, technological, regulatory, community engagement, and economic policy issues. Established in 1993, the NEJAC brings together a diverse set of stakeholders, who engage in a systematic and comprehensive review of the issues before recommendations are formulated. The NEJAC is also a direct channel for vulnerable communities to communicate their EJ concerns with EPA[64]. In FY 2019, the NEJAC:

- Produced the report - EPA's Role In Addressing The Urgent Water Infrastructure Needs Of Environmental Justice Communities[65]
- Managed two working groups, including the Superfund Task Force Working Group Recommendation 42 discussed below) and The Environmental Justice and Water Infrastructure Finance and Capacity Working Group.
- Produced seven letter reports on the following topics: Agriculture Worker Protection Standards and Certification of Pesticide Applicators Rule; Chemical Safety Rule; National Environmental Policy Act; threats of above-ground storage tanks; regulation of ethylene oxide; PFAS Action Plan; and data limitations in Hawaii, Alaska, and U.S. Territories.
- Held three public meetings, where a total of 369 individuals attended in-person and via phone, and 32 members of the public shared comments on EJ concerns with the NEJAC.

> "NEJAC plays a vital role in providing EPA Administrators with feedback and advice for improving our efforts to ensure environmental justice ... We are committed to protecting the environment and public health for [communities], regardless of race or income..."
>
> *- EPA Administrator Andrew Wheeler (August 2018)*



EPA headquarters in Washington, D.C.

[62] https://www.epa.gov/environmentaljustice/national-environmental-justice-advisory-council
[63] https://www.epa.gov/environmental-justice/national-environmental-justice-advisory-council-recommendation-reports-0
[64] https://www.epa.gov/environmentaljustice/national-environmental-justice-advisory-council-guidelines-public-comment
[65] https://www.epa.gov/environmentaljustice/epas-role-addressing-urgent-water-infrastructure-needs-environmental-justice

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SECTION 3 – Greater certainty, Compliance, and Effectiveness

EJ includes the 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. Risk communication provides an opportunity for the Agency to increase meaningful involvement for communities, exchange information, facilitate community participation in the decision-making process, and help establish mutual trust and a productive relationship between EPA and communities. Risk communication can include EJ trainings and tools for communities to better understand policies or processes, data availability (e.g., EJSCREEN), as well as improving communication of risks around toxic sites or during crises. Key accomplishments of this work in FY 2019 include:

- Increased use of EJSCREEN as a mobile app[66] with a 50% from prior fiscal year.
- Conducted EJSCREEN training sessions for more than 160 individuals in a variety of stakeholder groups.
- Helped communities build capacity regarding resilience and emergency preparedness through multi-lingual outreach and workshops, as well as worked with partners to release the Regional Resilience Toolkit.
- Conducted outreach, education and trainings on reducing and preventing childhood lead exposure and published Investigating Environmental Contamination: A Guide for Communities through the Agency's partnerships with the Pediatric Environmental Health Specialty Units.
- Released the Getting Risk Communication Right: Helping Communities Plan at Superfund Sites report to lay out how EPA is working to improve risk communication and community involvement practices during the post-construction, long-term stewardship phase of Superfund site remediation.

COORDINATION BETWEEN ENVIRONMENTAL JUSTICE & CIVIL RIGHTS PROGRAMS

The External Civil Rights Compliance Office[67] (ECRCO) is responsible for enforcing several federal civil rights laws that together prohibit discrimination on the bases of race, color, national origin (including limited English proficiency), disability, sex, and age, in programs or activities that apply for or receive financial assistance from EPA. ECRCO does this primarily through complaint investigations, but also through proactive reviews and technical assistance, community engagement, and policy formulation. EPA has a two-pronged effort on coordination between ECRCO and EJ that includes: (1) investigation of complaints filed with EPA pursuant to Title VI of the Civil Rights Act of 1964 and other federal nondiscrimination laws enforced by EPA, and (2) training and technical assistance to approximately 40 states agencies and organizations, as well as local agencies and tribes, across all ten EPA Regions, on how to proactively address their civil rights obligations. In November 2018 and June 2019, ECRCO partnered with EPA's Region 1 Office in to engage their states in building a collaborative relationship regarding EJ issues. This effort produced robust and effective nondiscrimination programs for those states that could serve as a model for other states. In FY 2019, ECRCO also presented at the NEJAC meeting to share information about ECRCO's civil rights role, accomplishments, and its commitment to ensuring that the promise of EPA's mission -- the protection of human health and the environment, is available to all persons in the United States, regardless of race, color, national origin, disability, sex or age.

[66] https://ejscreen.epa.gov/mapper/mobile/index.html

[67] https://www.epa.gov/ogc/external-civil-rights-compliance-office-title-vi

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EJSCREEN

EJSCREEN[68] is EPA's publicly available web-based EJ mapping and screening tool that allows users to access high-resolution environmental and nationally consistent demographic information for locations in the United States, and compare their selected locations to the rest of the state, EPA region, or the nation. For the past seven years, EJSCREEN has been a viable resource for public and private sectors for identifying areas with minority and/or low-income populations and potential environmental quality issues.

To increase the tool's accessibility, EJSCREEN became a mobile application in FY 2018. In FY 2019, the use of EJSCREEN as mobile app[69] increased by 50% from the prior FY. Education and awareness of the tool is increasing. In FY 2019, EPA conducted training sessions for more than 160 individuals, representing a wide range of government and non-government organizations. Many of these organizations rely on EJSCREEN to inform their outreach and engagement practices, grant writing, educational programs, enforcement work, and other purposes.

In FY 2019, OEJ provided an EJSCREEN training to staff of the U.S. Army Corps of Engineers' (USACE) Mississippi Valley Division to increase awareness of the tool among USACE staff engaged in environmental reviews and other federal activities. Screening-level use of EJSCREEN by federal agencies at the onset of environmental reviews and other activities can help provide certainty that EJ is considered in the decision-making process. EPA (OEJ, OEI, and Region 9) and USACE (Mississippi Valley Division and HQ) collaborated to develop and implement this training. The webinar consisted of a live demonstration of EJSCREEN's key features, functionality, and standard report interpretation. A follow-up training is scheduled this fall for a nation-wide audience of USACE staff.

OEJ and the EJ Program continue to promote the use of EJSCREEN - inside and outside of EPA - to enhance EJ programs and help enable stakeholders across the country to engage meaningfully in decision-making processes that impact public health and environment. Please go to EPA's website to learn how to use EJSCREEN[70]and access the EJSCREEN mobile app[71].

Regional Spotlight - EJSCREEN in Region 3

Since the 2013 agency-wide release of EJSCREEN, Region 3 has conducted approximately 7,000 EJ screening assessments utilizing the tool. In FY 2019 approximately 500 EJ screening assessments were conducted. The procedures and protocols developed by the Region have ensured transparency, consistency and efficiency. Examples of requests for EJ assessments include for public outreach and engagement, enforcement targeting, inclusion in inspection reports, permitting and EIS reviews, and reviews of grant projects and other placed-based initiatives.

EDUCATION, TRAININGS AND TOOLS

EJ 101

In FY 2019, OEJ updated EJ 101, a training required by all new employees at EPA. EJ 101 defines EJ, discusses its importance, outlines some of the key historical milestones of the EJ movement, and speaks to the ways that the EPA is working to apply EJ principles. Updating this training raises awareness and fosters education about EJ throughout the Agency.

[68] https://www.epa.gov/ejscreen
[69] https://ejscreen.epa.gov/mapper/mobile/index.html
[70] https://www.epa.gov/ejscreen/learn-use-ejscreen
[71] https://ejscreen.epa.gov/mapper/mobile/index.html

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Regional Resilience Toolkit

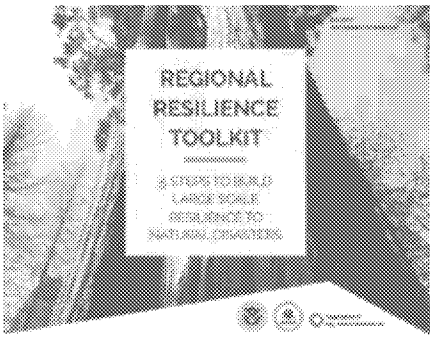

Figure 12: Cover of Regional Resilience Toolkit.

In FY 2019, the Federal Emergency Management Agency (FEMA), the Metropolitan Transportation Commission/Association of Bay Area Governments and EPA partnered to create the Regional Resilience Toolkit: 5 Steps to Build Large-Scale Resilience to Natural Disasters[72] (Toolkit), which helps regions plan for disasters by working across multiple jurisdictions and with nongovernmental partners. The goal of this Toolkit is to help cities, regions, and other partners integrate various planning processes – including for hazard mitigation, climate adaptation, sustainability, and equity – into a single process to create a common action plan. This approach takes into account engaging underrepresented stakeholders, including communities with EJ concerns. The Toolkit provides a step-by-step process to help decision makers engage with partners and stakeholders, conduct vulnerability assessments, identify and prioritize strategies, fund projects, and evaluate results. It also has detailed appendices with worksheets to help inform and guide work, as well as additional information and resources for each step.

PEHSU Education and Outreach Efforts to Protect Children in EJ Communities

Pediatric Environmental Health Specialty Units (PEHSU) are funded and supported by EPA and the Agency for Toxic Substances and Disease Registry (ATSDR). PEHSUs provide medical advice, education and training to medical professionals and the public through 11 major medical centers across the nation.

The Region 3 PEHSU developed videos and fact sheets on lead in soil in English and Spanish to inform families of potential risks and how to minimize exposures to children from lead in soil. Materials were shared with families near current and former Superfund sites where lead is a contaminant of concern and throughout the region to support lead outreach efforts. The PEHSU also trained community health workers, health educators, and others on how to conduct an in-home environmental assessment to help families reduce exposures to children. Two in-person trainings were provided in English and Spanish in communities with high incidence of childhood lead and asthma. Webinars in English and Spanish allow other communities to be reached throughout the region.

The Region 5 PEHSU, the Great Lakes Center for Children's Environmental Health and the University of Illinois at Chicago School of Public Health, recently published *Investigating Environmental Contamination: A Guide for Communities*[73]. The guide is for community members who are concerned about environmental exposures, including lead, in their neighborhood. It covers outdoor pollution in the air, soil, and water and offers resources specific for Region 5 states. It also includes an example to help community members advocate for change regarding their environmental concerns.

In Region 8, the Rocky Mountain PEHSU conducted outreach and education on reducing and preventing childhood lead exposure. They disseminated materials relevant to protecting children from exposure to lead to region-wide partners such as state and local departments of environmental health and/or public health and clinicians. They engaged in a process of lead mapping with Denver Health. A database with over 17,000 lead test results over the last 3 years has been assembled and will be used support geo-mapping. The maps will concentrate on the Denver metropolitan area but will likely cover other areas of Colorado. The PEHSU has plans to continue the regional outreach and education efforts on childhood exposure to lead and has been invited to present on this topic at the Frontiers of Medicine Conference in Casper, WY and the Wyoming Medical Society's annual meeting in 2020.

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[72] https://www.epa.gov/smartgrowth/regional-resilience-toolkit

[73] https://great-lakes.uic.edu/wp-content/uploads/sites/480/2019/07/online_comm-resource-guide_071719.pdf

In Region 9, the Western States PEHSU developed factsheets in English, Dari, Pashto, Urdu, Hindi, Arabic, and Somali to help refugees and others understand the risks of using lead-containing imported cosmetic products on children. In Region 10, the Northwest PEHSU educated more than 550 Washington and Oregon clinicians, including those working with refugees, on the importance of pediatric lead screening.

Third Annual Region 7 Pediatric Lead Poisoning Prevention Summit

In FY 2019, EPA Region 7, in collaboration with HUD's Region 7 office and the University of Kansas Health System co-sponsored, held a Pediatric Lead Poisoning Prevention Summit. The Summit was an 8-hour training (approved by the state of Missouri for continuing education credits) attended by more than 100 pediatricians, community health workers, academics, and local, state, and federal staff. The goal of the summit was to increase knowledge and awareness regarding current regulations, resources, trends and best practices in pediatric lead poisoning prevention. Participation this year more than doubled that of previous years. There were speakers and participants from all four Region 7 states: Iowa, Kansas, Missouri, and Nebraska. Participants received information regarding:

Figure 13: Monica Espinosa speaks at the Pediatric Lead Poisoning Prevention Summit.

- Federal resources and programs to address lead poisoning and how to apply,
- Emerging decision-making geospatial approaches using health, demographics and local land use data to identify priority areas down to the census block level,
- Effective community engagement and partnership strategies,
- Program highlights from successful urban and rural lead programs, and
- Creative approaches to increasing lead awareness, testing, and other lead poisoning prevention activities.

Superfund Task Force

In FY 2019, EPA published the Superfund Task Force Report which emphasized the importance of effective risk communication. The Superfund remedial program released the Superfund Risk Communication Improvement Plan to: 1) conduct focused risk communication evaluations at select, priority long-term stewardship sites; 2) continue a national dialogue on improving risk communication at Superfund sites and build and strengthen partnerships to improve risk communication; and 3) develop measures for continual improvement of Superfund remedial risk communication activities.

As part of Superfund Task Force effort, the NEJAC created a workgroup that proposed guiding principles and recommendations, including: expanding Superfund's role beyond cleanup to community asset creation; increasing grant resources for reuse planning assistance and community engagement; and expanding use of health impact assessments as a planning tool.

Building Community Capacity to Address Air Quality Concerns at the Port of Providence, RI

EPA provided technical assistance through a Technical Assistance Services for Communities (TASC) contract to the Environmental Justice League of Rhode Island (EJLRI) to help build community capacity to address air-quality concerns and impacts to public health around the Port of Providence. After three stakeholder meetings in 2018-19 led by EPA, a "Port-Community Working Group" was formed to steer future collaboration. The group includes diverse representation of community, businesses, and state/local agency partners, and meets quarterly to identify goals, opportunities, and resources to help "green" port

Figure 14: Port-of Providence Working Group Meeting. Photo by Gary Rennie (EPA R1).

operations (e.g., reduce truck traffic and idling) and businesses (e.g., promote use of renewable energy) to improve public health and economic conditions in the port area. One successful outcome of the project has been "Green Marine" certification of Waterson Terminal Services, the operator of ProvPort, which covers a portion of the port area. Green Marine is a voluntary environmental certification program, managed by a non-profit corporation, that encourages participants to reduce their environmental footprint and potential impacts on nearby communities. Moving forward, city and state agencies are collaborating to support the working group with an array of approaches for cleaning and greening the working port area, and for providing robust community participation.

North Charleston Community Resilience Workshop

Region 4 and Low Country Alliance for Model Communities (LAMC) organized a community resilience workshop in North Charleston, South Carolina in November 2018. LAMC is a nonprofit organization founded for the purpose of advocating EJ and promoting community development, education, employment, quality housing, and community involvement for seven historic neighborhoods. This workshop focused on the Union Heights community to introduce the EPA Inland Port Community Resilience Roadmap and develop a shared understanding of community resilience goals and objectives, articulate community resilience challenges and opportunities, support existing resilience activities in the community, and identify feasible resilience strategies.

Recognizing that port communities such as Union Heights face a unique set of resilience challenges by virtue of their proximity to and dependence on a port, workshop participants walked through the first three steps of the roadmap. Workshop activities included a "resilience walk" through Union Heights to identify resilience challenges and opportunities for further discussion. The workshop also included an exercise on the Cumulative Stressors and Resiliency Index (CSRI) version 2.0, which is a community-informed screening tool developed to assess the cumulative burden of environmental stressors while accounting for resilience or health-promoting factors. Participants completed a ranking exercise to determine which indicators were most appropriate to the LAMC community.

As a follow-up to the North Charleston Community Resilience Workshop, EPA and LAMC held a working session and community resource fair in FY 2019 to develop an actionable implementation plan for North Charleston and share key resources with the community to help them address the resilience challenges and solutions. EPA and other federal and state agencies shared resources related to the community's environment, health, housing, transportation, economic opportunity, and community partnership objectives, such as EPA's Healthy Environmental Actions Database.

EPA Region 4 staff also led a hands-on community-based brownfield training to show community members how to identify, inventory, and prioritize brownfields. The exercise included a presentation on conducting and using a brownfields inventory and a walk through the community to identify and inventory potential brownfields in real time. The North Charleston Resilience Project resulted in numerous successful outcomes and accomplishments including the Collaborative Community Vulnerability Assessment for North Charleston, which reflects the roadmap process and next steps for the LAMC community to increase their resilience and the community's science capacity through training, translation and the expansion of community partnerships.

Training to Strengthen Community Engagement

In FY 2019, the Region 5 EJ program hosted a four day/two-part Appreciative Inquiry training for staff and managers that work directly with communities, especially communities with EJ concerns. Partners from the non-profit Center for Neighborhood Technology, Illinois EPA, and Region 4's EJ program also participated in the training. Appreciative Inquiry is a collaborative and participative, system-wide approach to organizational and community development. It is a change process focusing on strengths - rather than weaknesses - that encourages active and effective staff and community participation. Training in this approach has strengthened our ability to engage effectively and empathetically with the wide range of partners and community leaders who work together for healthy communities in Region 5.

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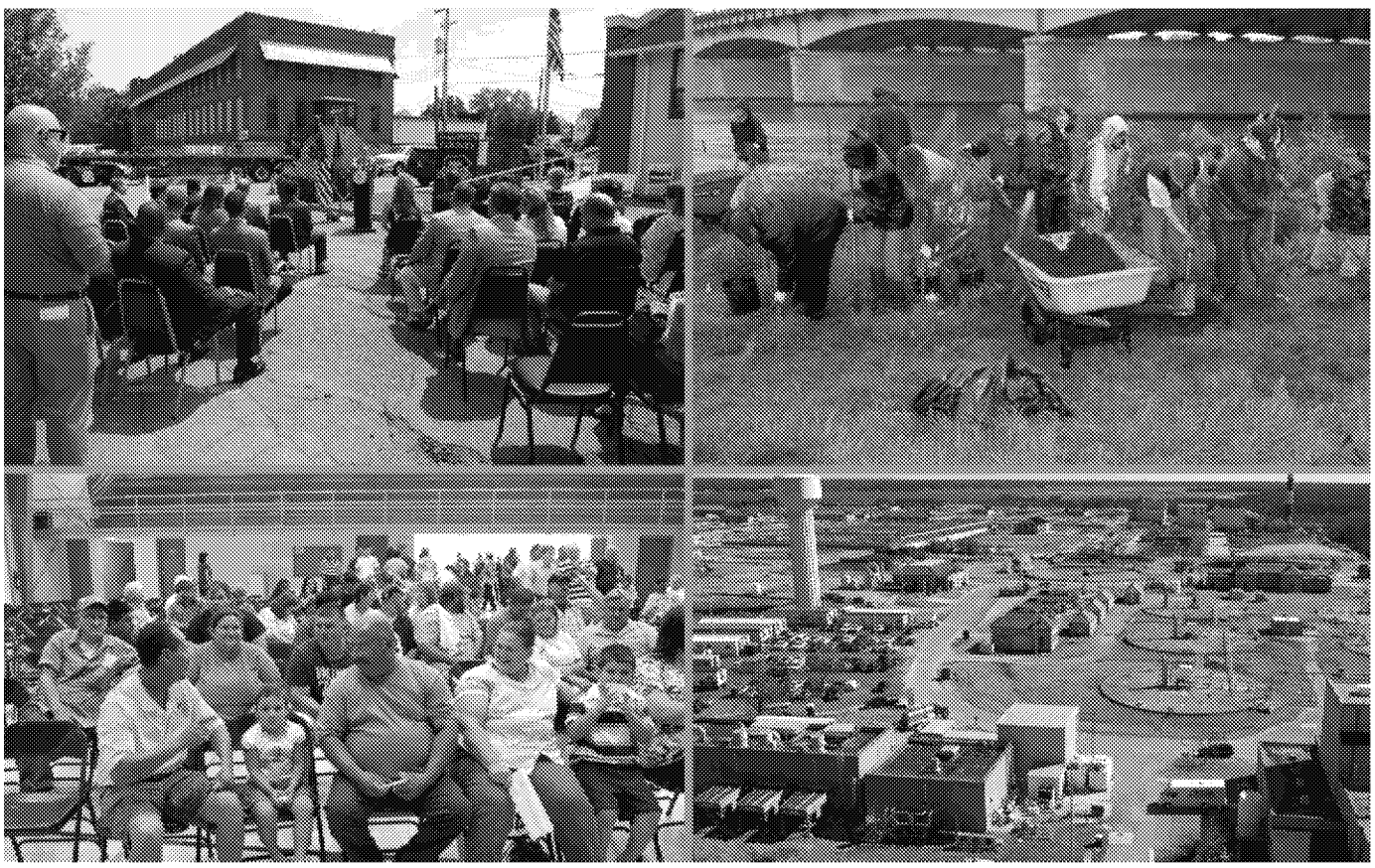
Region 8 Develops "Risk Communication Principles and Best Practices" Document To Aid Regional Staff In Effective Risk Communication

The "Risk Communication Principles and Best Practices" document, developed by the Region 8 Risk Communication Advisory Team, describes basic principles of risk communication and broadly outlines best practices designed to empower EPA employees to communicate successfully. It incorporates concepts aimed at ensuring effective engagement with disadvantaged, underserved populations such as sensitivity to stakeholder characteristics (e.g., demographic, cultural, economic, social, historical), capacity to implement recommendations, preferences for receiving information (including language preferences), and the importance of receiving information from trusted sources and venues. The document is intended for use by Region 8 staff, managers, and senior leadership who engage in risk communication; both internally and externally under a wide range of circumstances.

CONCLUSION/LOOKING FORWARD

EPA's EJ efforts help vulnerable and overburdened communities become healthier, cleaner and more prosperous places to live, work, learn and play. The examples highlighted in the FY 2019 Environmental Justice Annual Progress Report illustrate how the Agency is working to meet the needs of vulnerable communities to address disproportionate environmental impacts, health disparities and economic distress.

To achieve these accomplishments, EPA is partnering with federal, states, tribes, local governments, indigenous peoples, community-based organizations and academia to provide all communities with clean water, air and land. EPA is continuing to innovate and integrate EJ principles into the Agency's programs. EPA is improving how risk is communicated to better engage communities to help address EJ concerns. Looking forward, EPA will continue to deepen and strengthen its commitment to support vulnerable communities and protect the health and environment of everyone in the United States.



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