

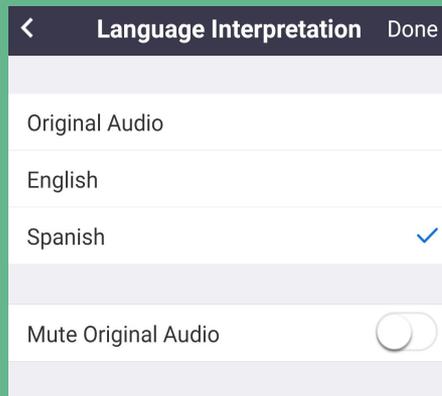
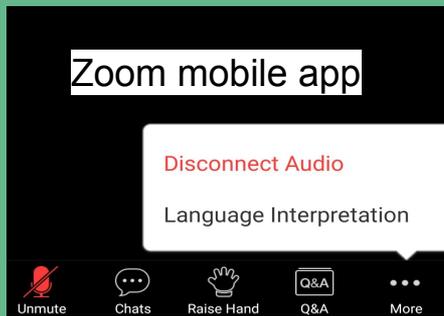
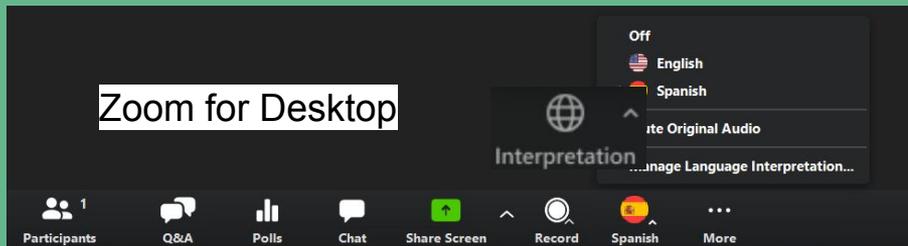


Climate Equity LA Series
Part II: Community-Driven Climate Resilience Solutions for LA
Workshop #1: Introduction to Equitable Climate Resilience

April 7, 2022



CLIMATE EMERGENCY MOBILIZATION OFFICE



All participants // Todos los participantes

Click on the language interpretation button & **select English or Spanish** 🌐

Haga clic en el botón de interpretación de idiomas y **seleccione inglés o español** 🌐

If you are choosing Spanish, make sure you select **“Mute Original Audio”** so you will only hear the Spanish audio

Si elije al Español, asegúrese de seleccionar **“Silenciar audio original”** para que sólo escuche el audio en Español



CLIMATE EMERGENCY MOBILIZATION OFFICE



Director of CEMO, Marta A. Segura, M.P.H.

- **Founding Director of the Climate Emergency Mobilization Office (CEMO)**, Board of Public Works (BPW), City of LA
- **Executive Director of the Climate Emergency Mobilization Commission (CEMC)**
- *Former LA City Planning Commissioner: As LA City Planning Commissioner, spearheaded the passing of Clean Up Green Up, Plan for a Healthy LA, re:code LA, the City's first Sustainability Plan, and its first Equity Day*
- *Community Engagement Practitioner for Equitable Strategic Partnerships*
- *EJ Leader and Advocate since 1995*



CLIMATE EMERGENCY MOBILIZATION OFFICE

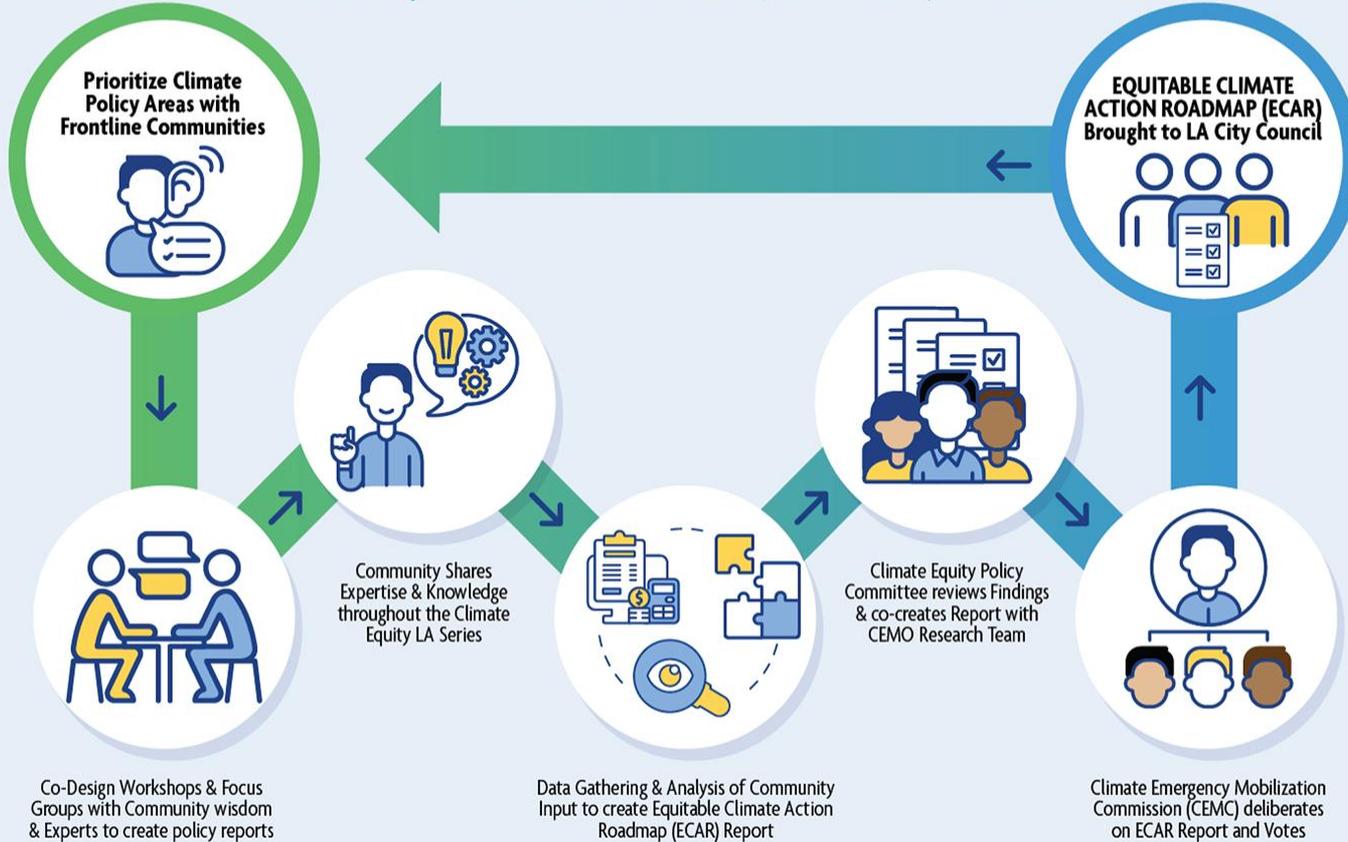


CEMO Vision

We seek to co-create collaborative, innovative, intersectional, and equitable community-led climate solutions to support community climate resilience, and significantly reduce climate-related health burdens, with a laser focus on frontline communities and to equitably increase climate infrastructure investments. This is the only pathway to solve the climate crisis.

CLIMATE EQUITY INNOVATIVE GOVERNANCE MODEL

Collaborating with Frontline Communities to Co-create equitable Climate Policy & Investments



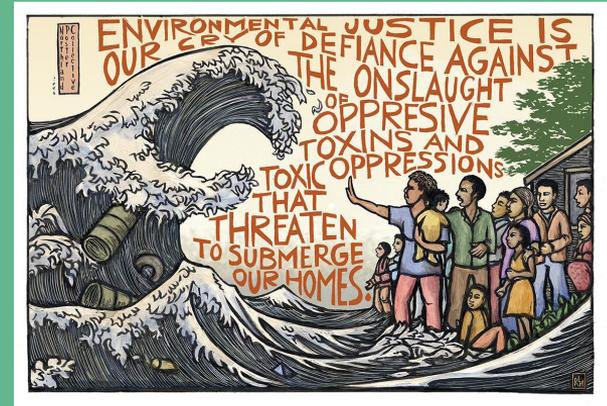


CLIMATE EMERGENCY MOBILIZATION OFFICE



Climate Equity LA

- **Create meaningful engagement and civic-led** governance strategies for equitable climate policies & investments
- **Shape recommendations for equitable** climate policies as per environmental equity metrics
- **Coordinate & collaborate** with City leaders to bring an equity lens to LA's Green New Deal, and engage and mobilize community to innovate governance
- **Deliver** an Equitable Climate Action Roadmap via Commission
- Bring report to **City Council**





CLIMATE EMERGENCY MOBILIZATION OFFICE



Climate Emergency Mobilization Commission (CEMC)

- The Commission will consist of 19 voting members, seven must represent the top 10% pollution-burdened segment noted in CalEnviroScreen.
- Represents appointments from **Frontline communities, Labor, Climate, & Health Experts.**
- This commission is programmatic/advisory to Mayor and City Council via its facilitator, Marta Segura, the Executive Director of the Commission.
- **Ordinance no. 187126 dated July 1, 2021** from the LA City Council, Chapter 35, Division 22 of the Los Angeles Admin Code.



MICHAEL N. FEUER
CITY ATTORNEY

REPORT NO. R 21-0221
JUL 01 2021

REPORT RE:

REVISED ORDINANCE ADDING CHAPTER 35 TO DIVISION 22 OF THE LOS ANGELES ADMINISTRATIVE CODE ESTABLISHING A CLIMATE EMERGENCY MOBILIZATION COMMISSION; AND ADDING ARTICLE 12 TO CHAPTER 13 OF DIVISION 22 OF THE LOS ANGELES ADMINISTRATIVE CODE ESTABLISHING A CLIMATE EMERGENCY MOBILIZATION OFFICE WITHIN THE DEPARTMENT OF PUBLIC WORKS

The Honorable City Council
of the City of Los Angeles
Room 395, City Hall
200 North Spring Street
Los Angeles, California 90012

Council File No. 19-1084

Honorable Members:

Enclosed, we are transmitting a revised ordinance, approved as to form and legality, consistent with changes adopted by the City Council at its June 29, 2021, regular meeting pursuant to a motion by Councilmember Koretz revising "25%" to "10%" within Section 22.1500(c)(i) of Chapter 35 in Division 22 of the Los Angeles Administrative Code. Please contact Deputy City Attorney Steven Martin at (213) 978-8253 if you have any questions.

Sincerely,

MICHAEL N. FEUER, City Attorney

By: 
DAVID MICHAELSON
Chief Assistant City Attorney



CLIMATE EMERGENCY MOBILIZATION OFFICE



CEMO Origins: LEAP L.A. Coalition



- EJ & Grassroots organizing led to the development of CEMO Community-driven public partnership
- Emphasis on frontline communities
- Deep stakeholder engagement
- Coalition building



CLIMATE EMERGENCY MOBILIZATION OFFICE



- LA's Energy Planning & Equity Strategy
- Building Decarbonization: Curriculum Design and Policy
- Community/Climate Resilience (Extreme Heat, Wildfires, Blackouts, Earthquakes, Cyber threats)
- Just Transition/Workforce Development
- Cumulative Air Emissions/Plastics



CLIMATE EMERGENCY MOBILIZATION OFFICE



Overarching Context for Climate Resilience Series

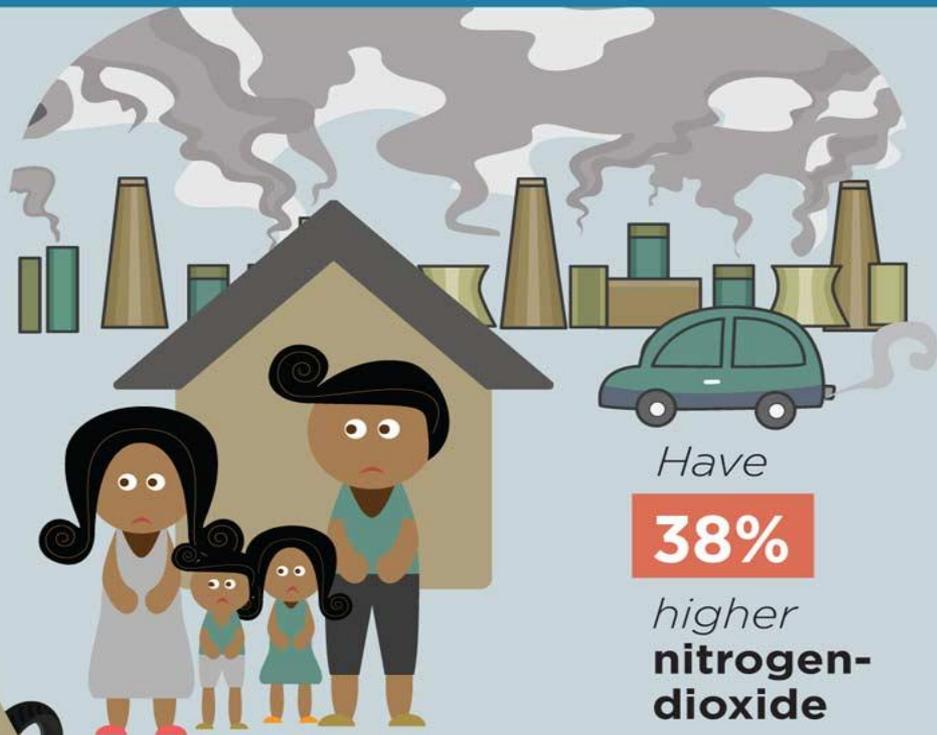
- Ensure frontline communities have ***a strong voice in policy*** and decision-making in the City of Los Angeles.
- Advise ***on equitable climate resilience strategies and policies*** to prevent, mitigate, and undo impacts from cumulative pollution burdens and disinvestments.
- Convey cumulative impacts and their role in exacerbating climate risks.
- Convey the decades of work of Environmental Justice advocates.
- Convey the role of environmental racism in creating unequal exposure, and climate risks and health impacts on frontline communities.

Environmental Racism Is Nothing New

Race is the most significant predictor of a person living near contaminated air, water, or soil.

56%

*of the population near **toxic waste** sites are people of color.*



People of color:

Have seen

95%

*of their claims against polluters **denied by the EPA.***

Have

38%

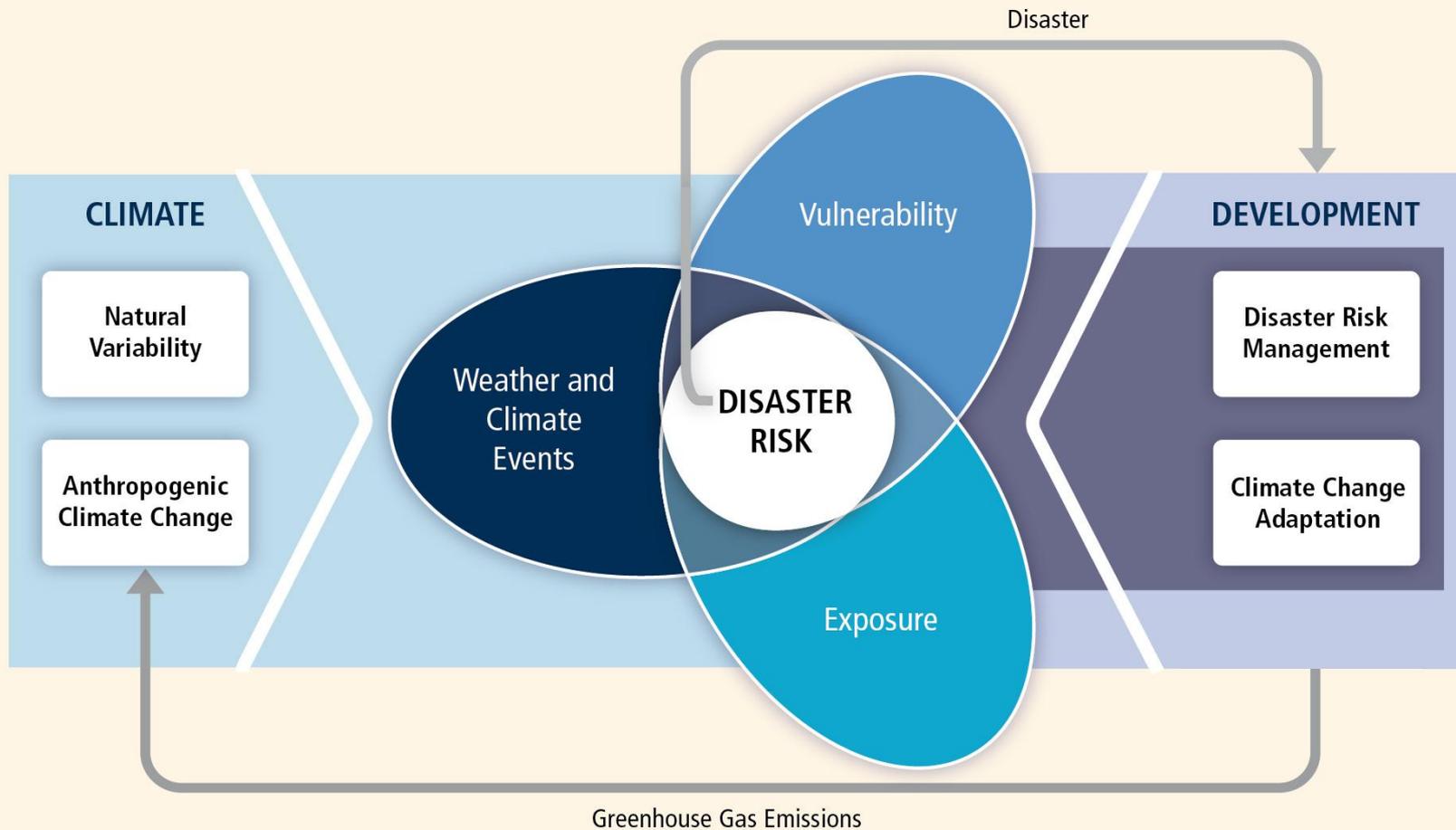
*higher **nitrogen-dioxide** exposure.*

Are

2x

*more likely to live without **potable water** and **modern sanitation.***





A presentation for the Climate Equity LA Virtual Workshop Series

Community Resilience // Resiliencia Comunitaria

Terilyn Chen, Asian Pacific Environmental Network

April 7, 2022

Overview // *Resumen*

What we'll be going over today//
Lo que vamos a cubrir hoy

Introduction to APEN// *Introducción a APEN*

What is community resilience?// *Que es la resiliencia comunitaria?*

- Research// *Investigaciones*

- Resilience Before Disaster// *Resiliencia antes de Desastre*

- Mapping Resilience// *Mapeando Resiliencia*

- Vulnerable Communities Mapping Platform// *Plataforma de Mapeo de Comunidades Vulnerables*

Who is APEN? // Quien es APEN?

The Asian Pacific Environmental Network is an environmental justice organization based in the Bay Area. We:

- organize with Southeast Asian refugees in Richmond and Chinese immigrants in Oakland – currently building out base in Wilmington as well
- fight for policies at the state level that will improve the health of communities where people live near refineries and other major pollution sources
- run the largest Asian-language voter mobilization program in the country

La Red Ambiental Asiático Pacifico es un organización de justicia ambiental en base a la zona de la Bahía. Nosotros:

- *Organizamos refugiados del Sudeste Asiáticos en Richmond y inmigrantes Chinos en Oakland – ahora estamos aumentando nuestra base en Wilmington también*
- *Pelemos por leyes al nivel estatal que mejoraran la salud de comunidades que viven cerca de refinerías y otras fuentes grande de polución*
- *Mantenemos el programa de movilización mas grande de votantes de idiomas Asiático en el país*



The Climate Gap // *La Brecha Climática*

Climate disasters have *unequal* impacts and act as a *threat multiplier*//

Los desastres climáticos tienen impactos desiguales y actúan como un multiplicador de riesgo

The Troublesome Connection Between City Trees and Income Inequality

More Than 40 Sites Released Hazardous Pollutants Because of Hurricane Harvey

The New York Times

'Your eyes start itching': pollution soars in Houston after chemical industry leaks

California's Drought Continues to Harm Native Tribes and Fishermen

Houston Flooding Always Hits Poor, Non-White Neighborhoods Hardest

As rain batters California, floods leave homeless with even fewer places to go

Community resilience is the ability of communities to withstand, recover, and learn from climate impacts to strengthen future response and recovery efforts.

- **Social infrastructure** refers to the services required to promote the economic, health, cultural, and social well-being of the community, and the physical infrastructure that supports those services.

Resiliencia comunitaria es la habilidad de las comunidades poder aguantar, recuperar, y aprender de los impactos climáticos para fortalecer sus futuras reacciones y sus esfuerzos de recuperación.

- **Infraestructura social** se refiere a los servicios requeridos para promover la economía, salud, cultura, y bien-estar social de la comunidad, y la infraestructura física que apoya estos servicios.



Climate resilience isn't just about strengthening built infrastructure and protecting the natural environment//
Resiliencia climática no es solamente reforzando la infraestructura física y protegiendo el medio ambiente

It must

- center **communities** and **neighborhoods**
- prepare people to cope with and respond to climate disasters

Tiene que

- *centrarse en comunidades y vecindarios*
- *preparar a la gente para enfrentar y responder a los desastres climáticas*

RESILIENCE

BEFORE

DISASTER

The Need to Build Equitable,
Community-Driven Social Infrastructure

APEN
ASIAN PACIFIC
ENVIRONMENTAL
NETWORK

SEIU
California
Stronger Together

seiu 2015
California's Long Term Caregivers

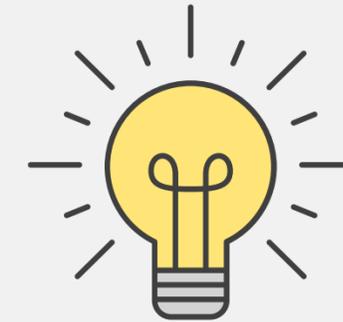
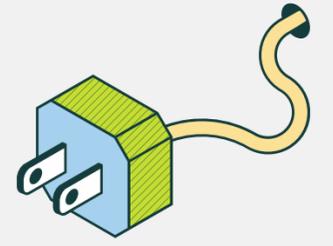
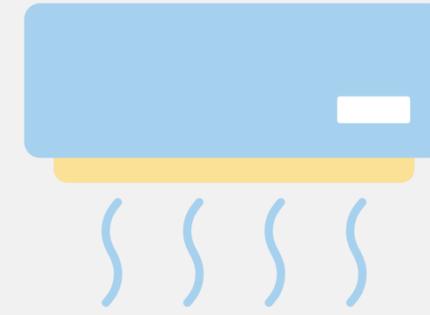
BLUEGREEN
ALLIANCE

Resilience is built *before*
disaster hits //
La Resiliencia se
construye antes de que un
desastre ocurra

Resilience Principles // *Principios de Resiliencia*

- Build community and public institutions.
 - Target solutions to the communities with the least material resources.
 - Create equitable economic development through high road jobs.
 - Promote democratic and community-led planning, implementation, and governance.
-
- *Generar comunidad y instituciones publicas*
 - *Soluciones dirigidas a las comunidades con menos recursos materiales*
 - *Crear Desarrollo económico equitativo a través de trabajo de alta calidad*
 - *Promover procesos de planeación, implementación, y gobernanza democrática y liderado por comunidades*

Community
Resilience
Centers //
*Centros de
Resiliencia
Comunitaria*



community-serving buildings that offer space to gather, organize, and access resilience-building services — **not only during disasters, but on a daily basis//**

edificios que sirven a la comunidad y que ofrecen espacios para reunirse, organizar, y acceder servicios de edificios resilientes — no solamente durante desastres, pero, también en el día a día

In-Home Resilience // *Resiliencia en Casa*

A community's socially embedded systems, patterns, and practices that increase community members' capabilities and support new growth in response to crisis while staying in place.//

Los sistemas, modelos, y practicas integrados socialmente a un comunidad que aumenta la capacidad de sus miembros y apoya el crecimiento en respuesta a crisis mientras que permanezcan en lugar

The frontline of in-home resilience:

- Homecare workers
- Public sector workers

La primera línea de resiliencia en casa:

- *Trabajadores de hogar*
- *Trabajadores del sector publico*

RECOMMENDATIONS

FUND RESILIENCE HUBS

.....

California should lead funding efforts to support the development of Resilience Hubs. The report highlights RYSE Youth Center, a youth-led community center in Richmond, which is taking steps toward becoming an innovative Resilience Hub model through a community-led governance approach.

ESTABLISH RESILIENCE HUB NETWORKS

.....

City and county government departments should facilitate local networks of Resilience Hubs. A well-coordinated network can implement community resilience solutions on a regional scale, share best practices, and offer complementary services.

INVEST IN THE CARE WORKFORCE

.....

We need an empowered homecare workforce to assist and support some of the state's most vulnerable residents. California should implement strategies to turn these difficult, low-wage jobs into high road careers.

REBUILD THE PUBLIC SECTOR WORKFORCE

.....

We must commit to growing a robust public sector workforce capable of meeting the needs of vulnerable populations and supporting community resilience. We need a full complement of public health, human services, public works, library, school, parks and recreation, and sustainability workers to achieve our climate goals.

IMPROVE EMERGENCY RESPONSE TO PROTECT THE MOST VULNERABLE

The state must target resources to the most vulnerable communities, particularly working-class communities of color who are disproportionately impacted by systemic racism and historic economic disinvestment. The state must also develop a comprehensive strategy for protecting medically vulnerable populations in the event of power shutoffs and increase funding for initiatives to improve disaster preparedness and emergency response.

Climate Vulnerability Should Be Assessed By Region And Climate Threat // *Vulnerabilidad Climática Debería Ser Evaluado por Región y Riesgo Climática*

- Climate impacts vary based on biophysical setting, climate, and jurisdictional factors
- Regional variations caution against making statewide comparisons//
- *Impactos climáticas varían en torno al ambiente bio-físico, climática, y factores jurídicos*
- *Variedades regionales precaucionan contra comparaciones por todo el estado*



No New Tools / / *No Mas Nuevas Herramientas*

- Rich volume of existing tools to identify people and places most impacted by climate threats
- Significant redundancy of indicators across frameworks
- Enough underlying data, established indicators, and methodologies asserting relevant factors
- **No imminent need for researchers to create a wholly new set of climate vulnerability indicators in California//**
- *Existe ya un gran volumen de herramienta para identificar a la gente y los lugares mas impactados por riesgos climáticos*
- *Hay una gran redundancia de indicadores por todos estos esquemas*
- *Ya hay suficiente datos, indicadores establecidos, y metodologías que aciertan los factores mas relevantes*
- *No hay necesidad inmediata para que investigadores produzcan una nueva serie de indicadores de vulnerabilidad climática en California*

A Centralized Climate Vulnerability Mapping Platform Is Needed //

Se Necesita una Plataforma Central de Mapeo de Vulnerabilidad Climática

- Lack of comprehensive framework to overlay social vulnerabilities across climate threats
- No single set of indicators exhaustively captures the most significant factors
- Availability of so much data is leading to paralysis of action
- Policymakers would benefit from **streamlined, actionable framework**
 - Mirrors and complementary to CalEnviroScreen
 - Depicts the interacting and cumulative impacts of climate change
 - Supports **identifying climate-vulnerable communities** to target protections and resources
- *Falta de una esquema comprensiva que sobresalta vulnerabilidades social en cima de riesgos climáticas*
- *No existe un solo grupo de indicadores que captura por complete los factores mas significativos*
- *Disponibilidad de tanta información a causado parálisis de acción*
- *Decidores políticos beneficiarían de **una esquema centralizado y practico***
 - *Refleja y complementa al CalEnviroScreen*
 - *Muestra la interacción y los impacto cumulativos de cambio climático*
 - *Apoya y identifican la comunidad vulnerables al clima para dirigir protección y recursos*

We Must Ground-Truth and Complement Maps with Community Expertise // Tenemos Que Fijar la Verdad y Complementar Mapas con el Conocimiento Comunitaria

- Data limitations should caution against relying on any single framework to identify and capture all relevant factors//
- *Limitaciones de data tienen que advertir que no se puede confiar en un solo esquema para identificar y capturar todo los factores relevantes*
- Public officials should integrate quantitative data with experiential knowledge and stories//
- Funcionarios públicos deberían integrar datos numéricos con el conocimiento de la experiencia y historias
- Ensures public processes involving climate vulnerability mapping are inclusive and participatory//
- *Asegurar procesos públicos que involucren el mapeo de vulnerabilidad climática que sea inclusive y participativa*

Vulnerable Communities
Mapping Platform //
*Plataforma de Mapeo de
Comunidades Vulnerables*

OPR's Vulnerable Communities Mapping Platform + Community

Resilience Working Group // *La Plataforma de Mapeo de Comunidades*

Vulnerables de OPR + Grupo de Trabajo de Resiliencia Comunitaria

- Governor's Office of Planning & Research developing the Vulnerable Communities Mapping Platform
 - Beta map being worked on right now
- Environmental Justice and equity organizations formed the Community Resilience Working Group to influence this work, as well as other key community resilience initiatives at the state level
- Space for building and applying EJ and equity expertise around things like process, specific climate and resilience priorities for communities
- *La Oficina de Planificación y Investigación del Gobernador están desarrollando una Plataforma de Mapeo de Comunidades Vulnerables*
 - *Un mapa Beta se esta desarrollando ahora*
- *Justicia Ambiental y otras organizaciones equitativas formaron un grupo de trabajo de Resiliencia Comunitaria para influir este trabajo, y también a otros iniciativas estatal de resiliencia comunitaria*
- *Espacio para construir y aplicar Justicia Ambiental y conocimiento de equidad sobre el proceso, y prioridades de clima y resiliencia para comunidades*

Thank you! //
¡Gracias!



LA County Climate Vulnerability Assessment (CVA)
Evaluación de Vulnerabilidad Climática del Condado de LA

Presentation for Climate Equity LA

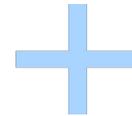
April 7, 2022

Ali Frazzini afrazzini@cs0.lacounty.gov

Climate Vulnerability *Vulnerabilidad Climática*

Sensitivity
Sensibilidad

Adaptive Capacity
*Capacidad
Adaptativa*



Exposure
Exposición

Defining Social Vulnerability

Definiendo Vulnerabilidad Social

Vulnerability is not an indicator of an individual's weakness or incapacity to cope but of the factors, almost entirely outside of individual control, that put people at higher risk of negative impacts.

Climate hazards pose a risk to all County residents. However, various factors can make certain populations more susceptible than others:

- Low access to quality infrastructure, opportunities, and services;
- Institutionalized bias or exclusion from power;
- Poor environmental and living conditions;
- Differences in individual health, age, and ability.

**This framing is informed by 2017 Advancing Climate Justice in California: Guiding Principles and Recommendations for Policy and Funding Decisions*

La vulnerabilidad no es una muestra de la debilidad o incapacidad de un individuo poder aguantar, si no, que es factores fuera del control del individuo, que pone a la gente en más alto riesgo a sus impactos negativos.

Riesgos climáticos poseen un riesgo a todo los residentes del Condado. Pero, varios factores puede ayudar a que ciertas poblaciones sean más susceptibles que otras:

- *Bajo acceso a infraestructura, oportunidades, y servicios de calidad;*
- *Prejuicio institucional o la exclusión del poder;*
- *Condiciones de baja calidad de vivienda y ambiente;*
- *Diferencias en salud, edad y capacidad individuales.*

**Este parámetro es informado por el reporte 2017 Advancing Climate Justice in California: Guiding Principles and Recommendations for Policy and Funding Decisions*

Stakeholder engagement overview// *Resumen de la participación de grupos de interés*

Advisory Committee Meetings (4)
Reuniones de Comités de Asesoría (4)



Public Workshops (2)
Talleres Públicos (2)
Cities Summit (1)
Conferencia de Ciudades (1)



Listening Sessions (6)
Sesiones de para Escuchar (6)



Key Informant Interviews
Entrevistas de Informantes Claves



Webpage
Página de Internet



Quantitative Data on Social Sensitivity

Social sensitivity is assessed using a range of indicators across the following categories:

Datos Cuantitativos sobre Sensibilidad Social

La sensibilidad social se evalúa utilizando una serie de indicadores en las siguientes categorías:



Age + Gender
Edad + Género



Community + Language
Comunidad + Idioma



Education
Educación



Health
Salud



Housing + Mobility
Vivienda + Movilidad



Income + Wealth
Ingreso + Riqueza

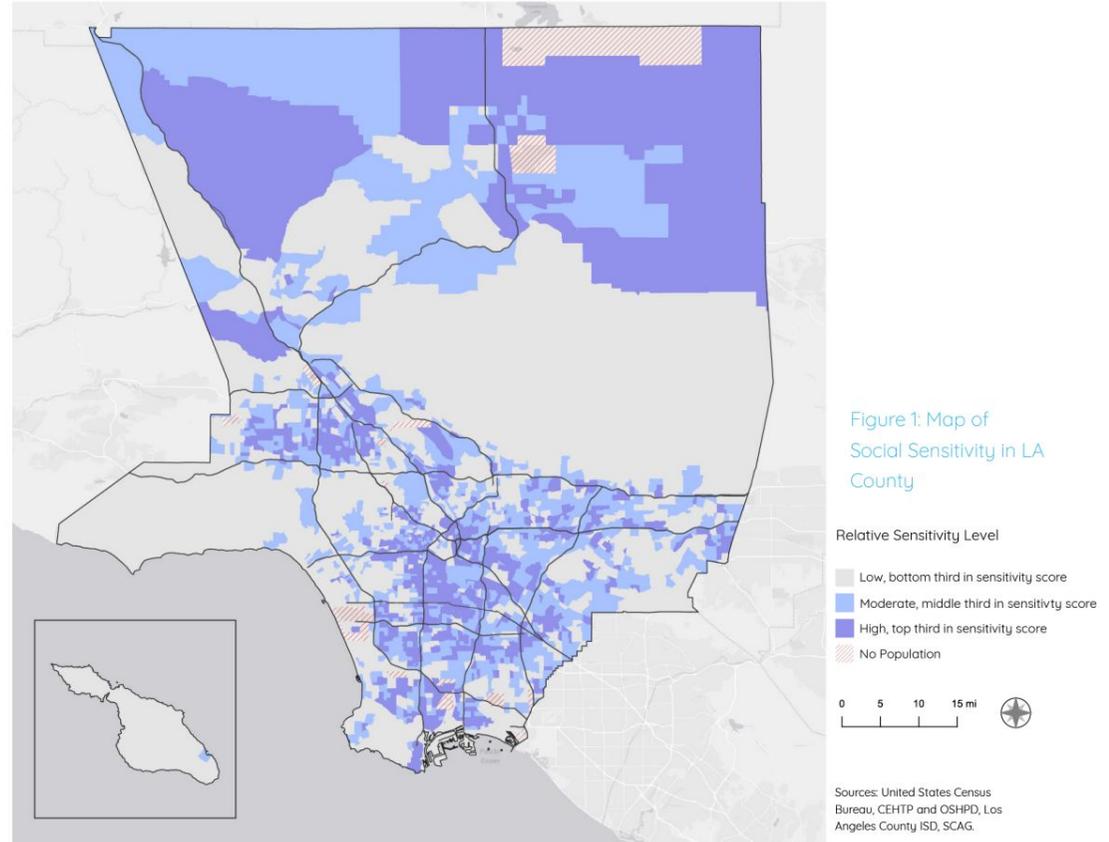


Occupation
Ocupación



Race/Ethnicity
Raza/Etnicidad

Social Sensitivity Index // Índice de Sensibilidad Social



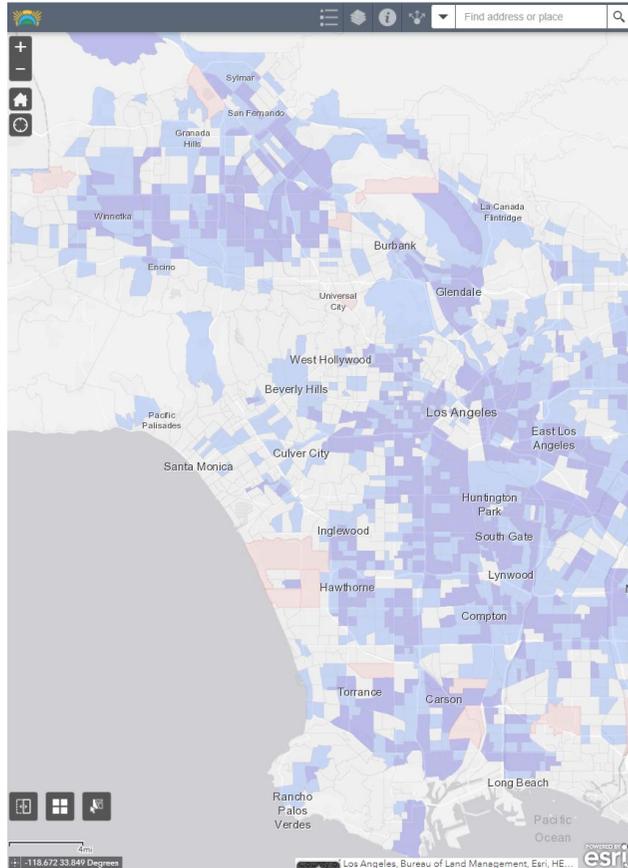
Social Vulnerability to Climate Hazards

Vulnerabilidad Social a los Riesgos Climáticos



Sensitivity + Adaptive Capacity

Sensibilidad + Capacidad Adaptativa



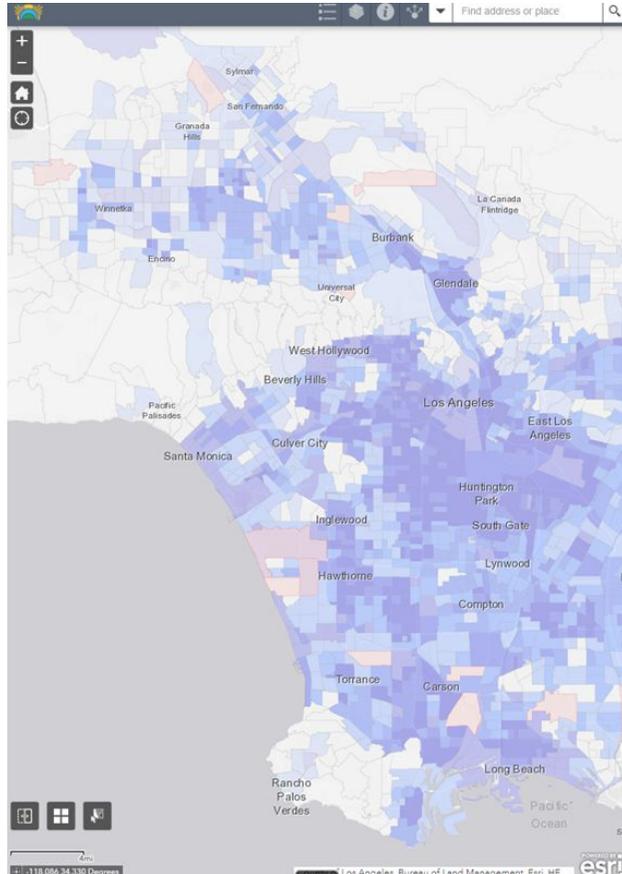
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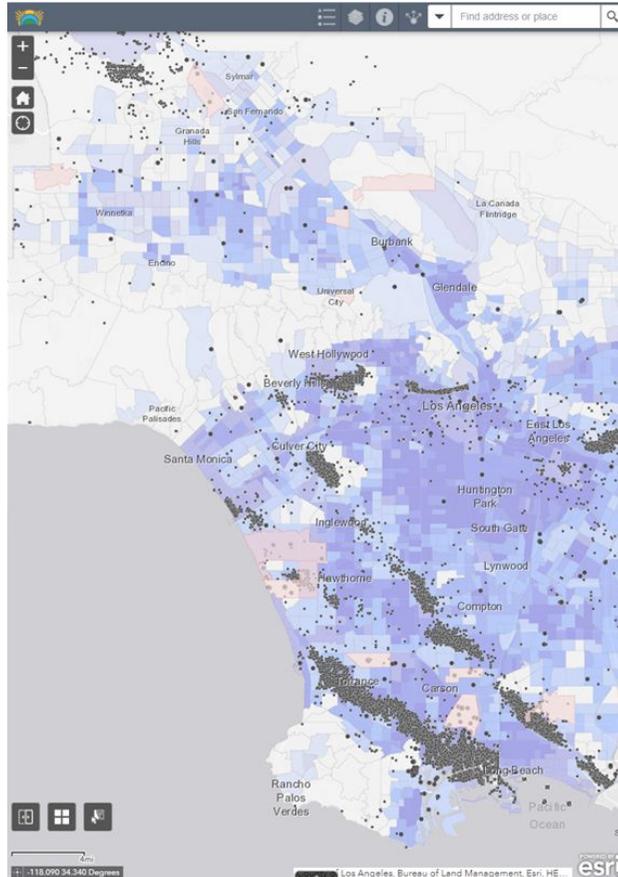
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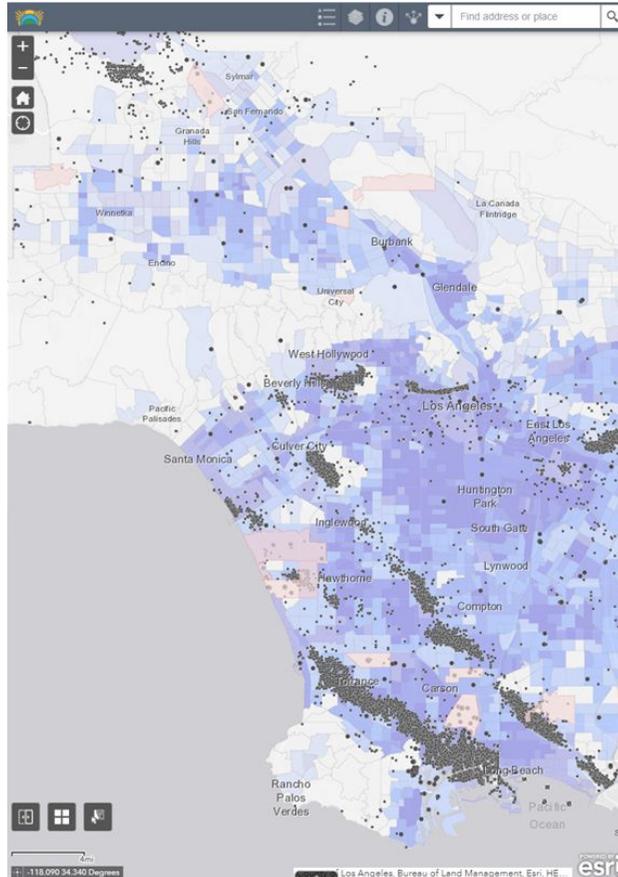
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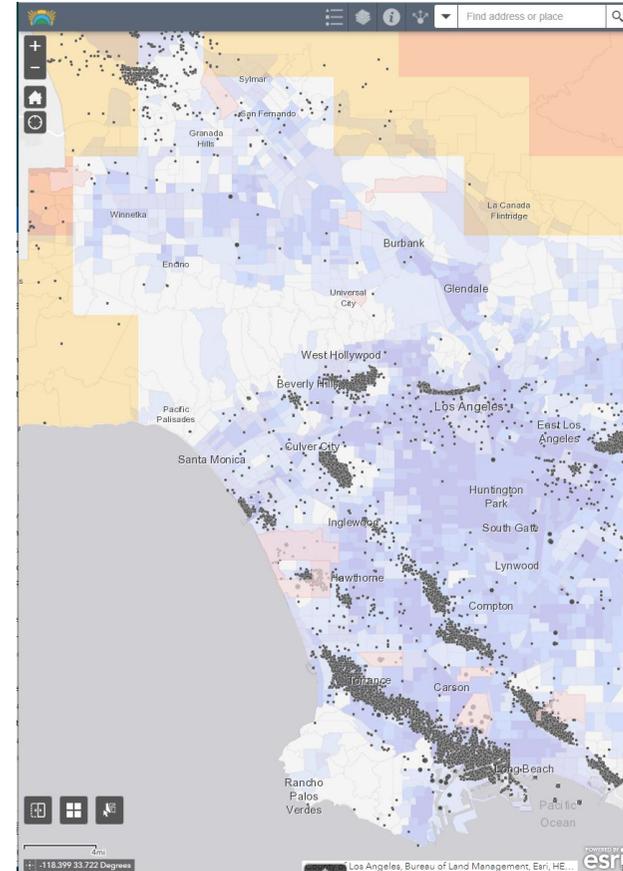
Sensitivity + Adaptive Capacity

Sensibilidad + Capacidad Adaptativa



Vulnerability to Wildfire

Vulnerabilidad a Incendios



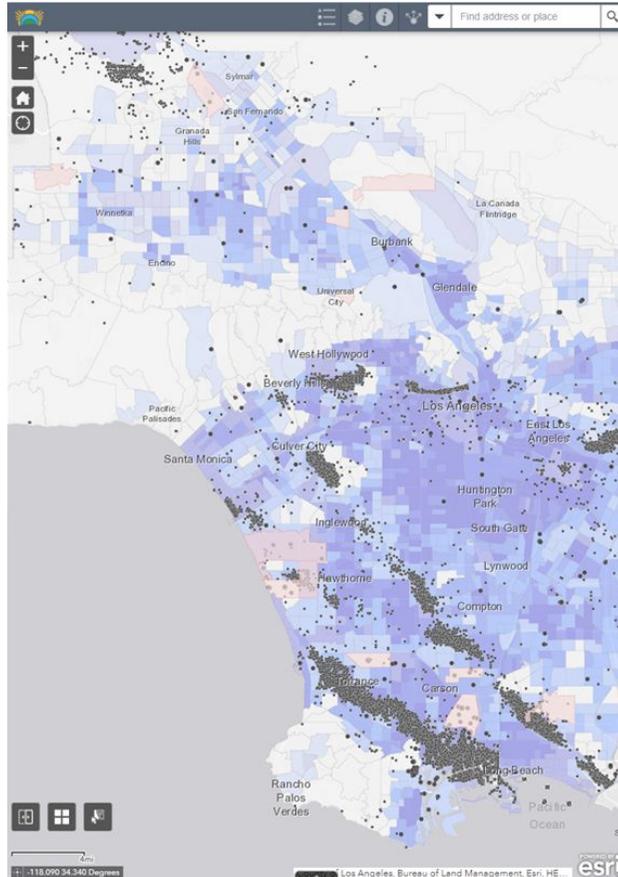
Social Vulnerability to Climate Hazards

Vulnerabilidad Social a los Riesgos Climáticos



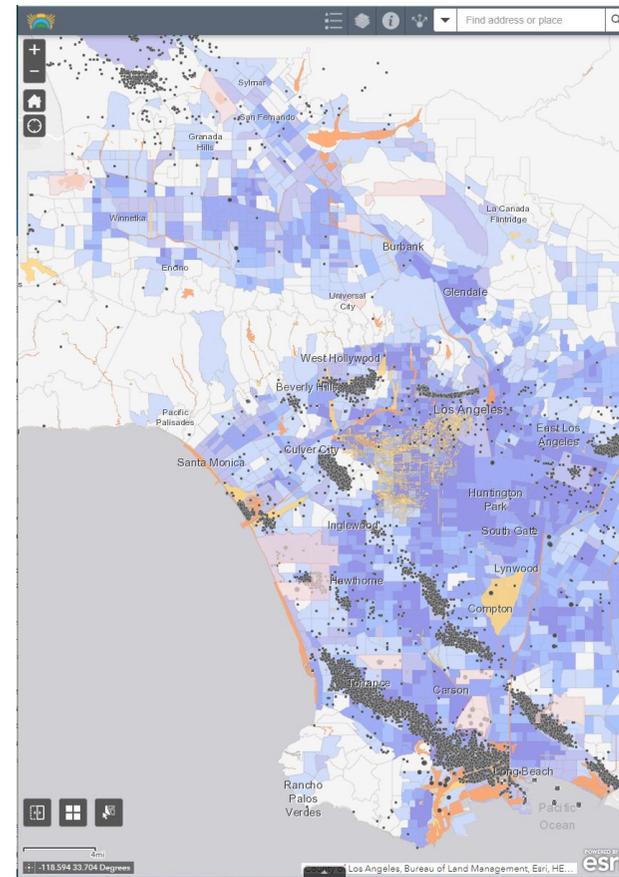
Sensitivity + Adaptive Capacity

Sensibilidad + Capacidad Adaptativa



Vulnerability to Inland Flooding

Vulnerabilidad a Inundaciones del Interior



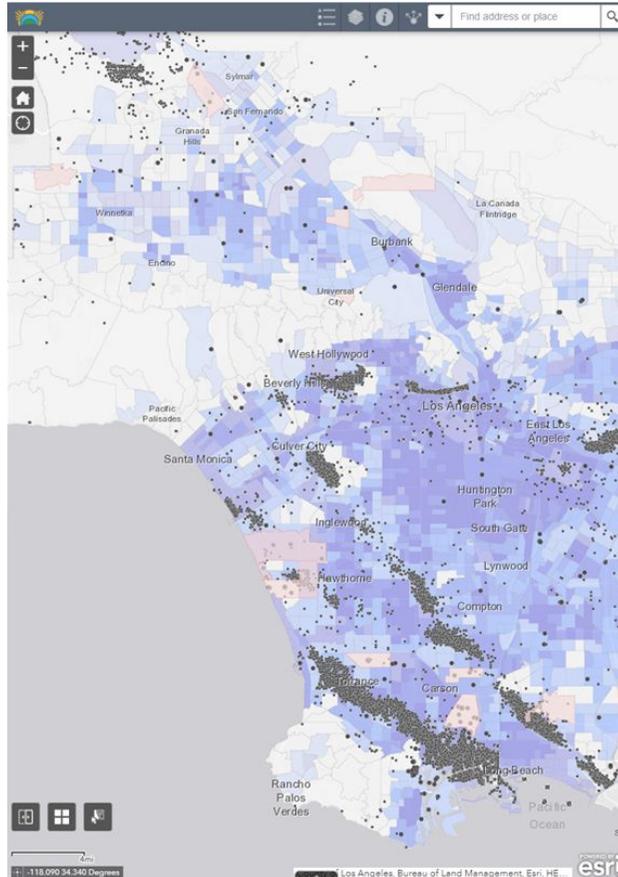
Social Vulnerability to Climate Hazards

Vulnerabilidad Social a los Riesgos Climáticos



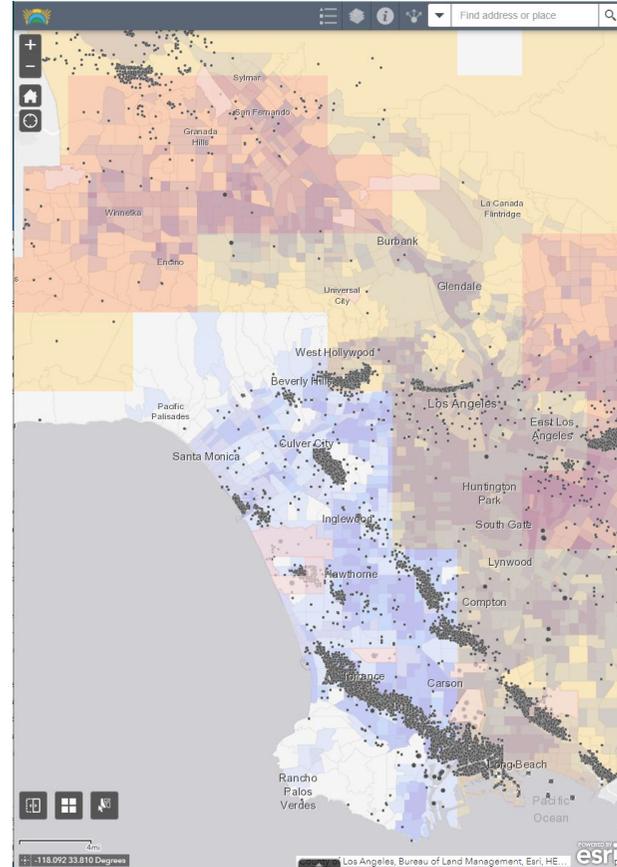
Sensitivity + Adaptive Capacity

Sensibilidad + Capacidad Adaptativa



Vulnerability to Extreme Heat

Vulnerabilidad al Calor Extremo



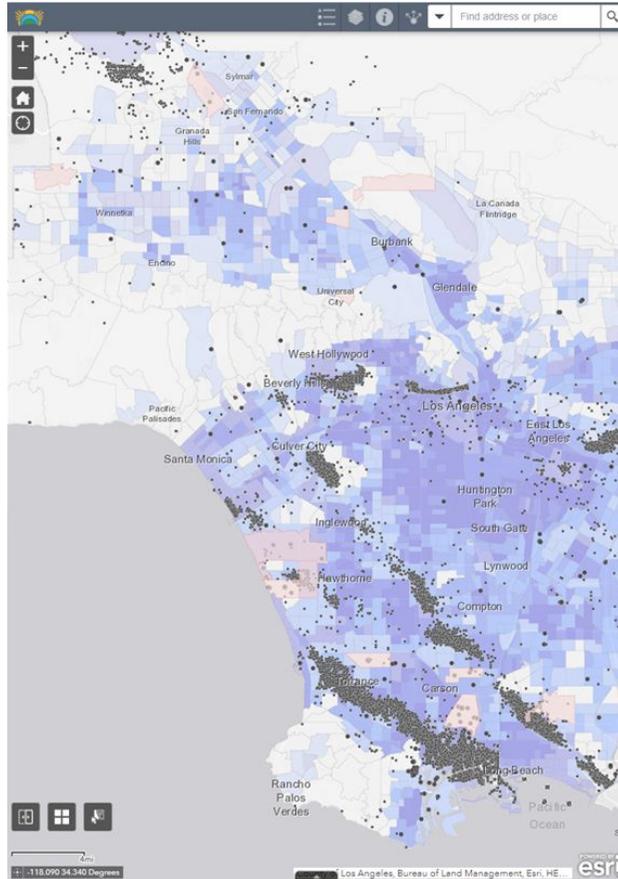
Social Vulnerability to Climate Hazards

Vulnerabilidad Social a los Riesgos Climáticos



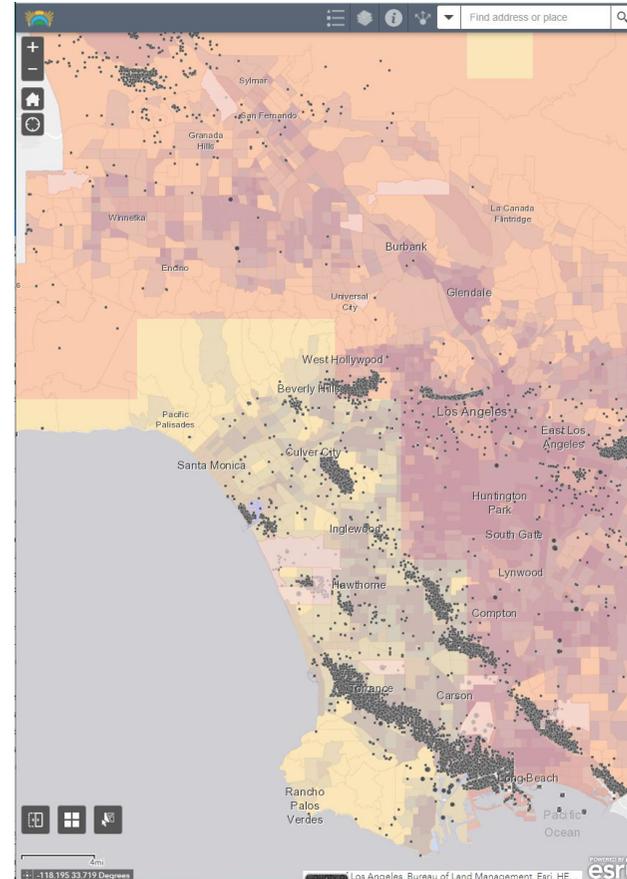
Sensitivity + Adaptive Capacity

Sensibilidad + Capacidad Adaptativa



Vulnerability to Extreme Heat

Vulnerabilidad al Calor Extremo





Wildfire



The Los Angeles skyline is shrouded in smoke from the Bobcat fire. (Carolyn Cole/Los Angeles Times)

50% of the population says they avoided going outside due to smoke last year

50% de la población dice que evitaron salir de casa por causa de humo en este último año

Source: LA Barometer



Extreme precipitation and inland flooding// *Precipitación extrema y inundación del interior*



Source: Union Station Homeless Outreach Team



Kagel Canyon Precipitation Preparedness and Mudslide Prevention -
Jan 2018
Source: Flickr, CEO Countywide Communications



Housing type and condition are a major factor

- Nearly a third of all mobile homes are at risk of exposure
- Unhoused populations can also lose access to services

El tipo de hogar y su condición son un factor enorme

- *Casi un tercio de todas viviendas móviles tienen riesgo de exposición*
- *Poblaciones sin casa pueden perder acceso a servicios*



People without access to vehicles may need evacuation assistance

Gente sin acceso a vehículos pueden requerir asistencia para evacuar



Extreme heat/*Calor Extremo*



Extreme heat can trigger pre-existing conditions, leading to spikes in health outcomes like asthma and heart attacks
Calor extremo puede empeorar condiciones preexistentes, causando más impactos a la salud como ataques asmáticos y cardíacos



Heatwaves lead to surges in worker injury

- More than 1 in 4 heat-exposed workers in LA County report a lack of protections from heat illness
- Many fear that reporting incidents related to heat or other climate hazards will lead to retaliation//

Olas de calor causan aumentos en heridas de trabajadores

- *Más de 1 de cada 4 de trabajadores expuesto al calor en el reporte del Condado de LA dicen que no tiene protecciones contra enfermedades de calor*
- *Muchos tienen miedo de reportar incidentes de calor o otros riesgos climáticos a causa de retribución*



Source: Genaro Molina, Los Angeles Times
[Poor neighborhoods bear the brunt of extreme heat](#)

Human impacts of infrastructure disruption

Impactos humanos de la interrupciones de infraestructura



- Energy disruptions disproportionately impacts socially vulnerable populations
- Trees, parks and open space are important to a community's adaptive capacity for multiple reasons but are themselves often vulnerable to heat, wildfire, and drought
- There is a reinforcing feedback loop between impacts on workers and the need for workers to address impacts
- *Interrupciones de energía desproporcionadamente impacta poblaciones socialmente vulnerables*
- *Árboles, parques, y espacios abiertos son importante para la capacidad adaptativa de la comunidad por varias razones, pero entre si también son vulnerable al calor, incendios, y sequia*
- *Hay un ciclo de que se auto perpetua entre los impactos de los trabajadores y la necesidad de más trabajadores para resolver estos impactos*

Community responses to climate impacts

Respuestas comunitarias a estos impactos climáticos



THANK YOU!
GRACIAS!

To contact the LA County Chief Sustainability Office:

Para contactar a la Oficina Ejecutiva de Sostenibilidad Ejecutiva del Condado de LA:

sustainability@csso.lacounty.gov

CVA Report & Map Online

Reporte CVA y Mapa Digital:

ceo.lacounty.gov/ourcounty-cso-actions/

UCLA

Fielding School of Public Health

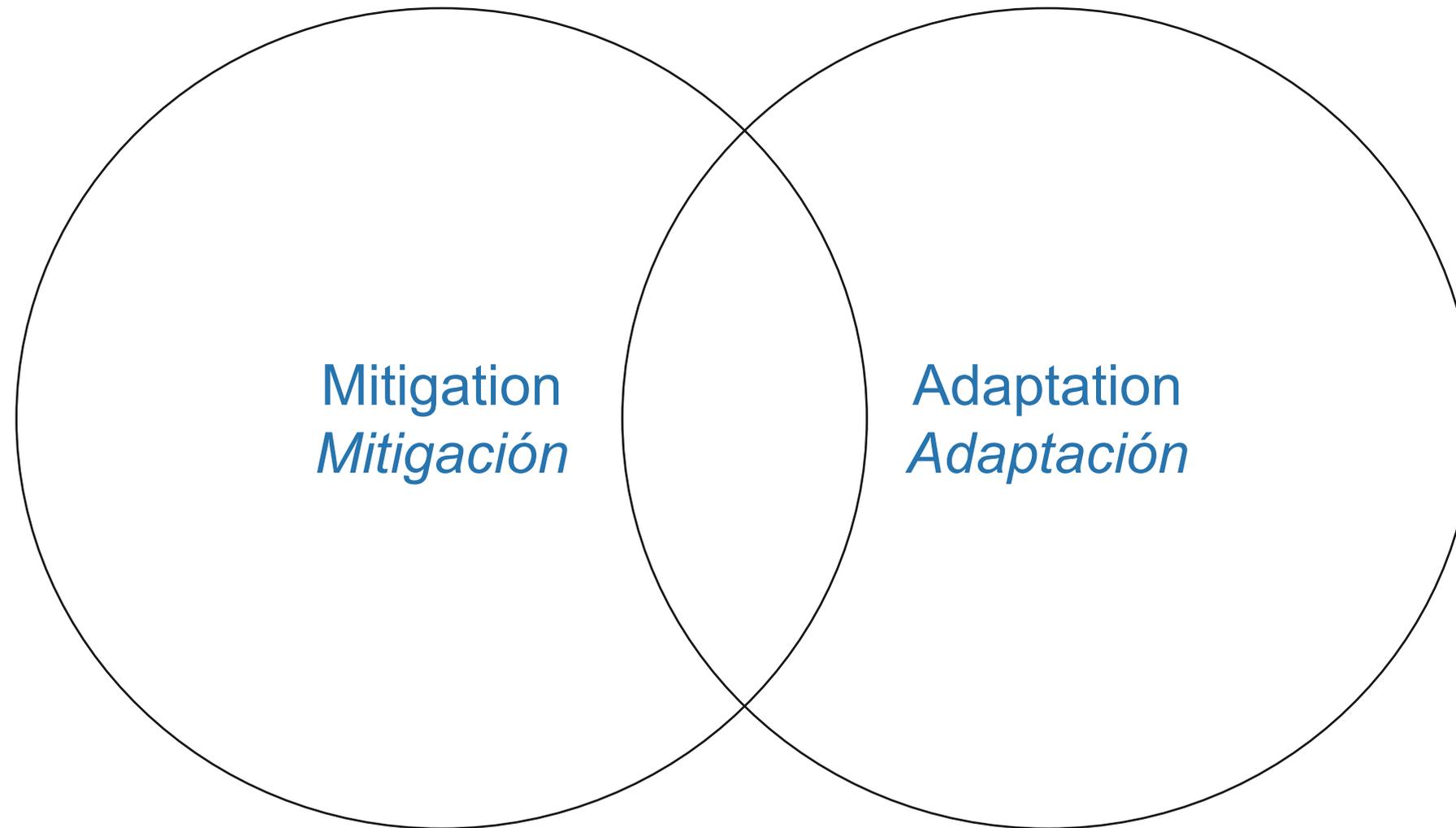
Center for Healthy Climate Solutions

Protecting human health from the harmful effects of climate change
Protegiendo la salud humana de los efectos nocivos del cambio climático

Lyn Stoler, MPH

April 7th, 2022

Building Climate Resilience *Construyendo Resiliencia Climática*



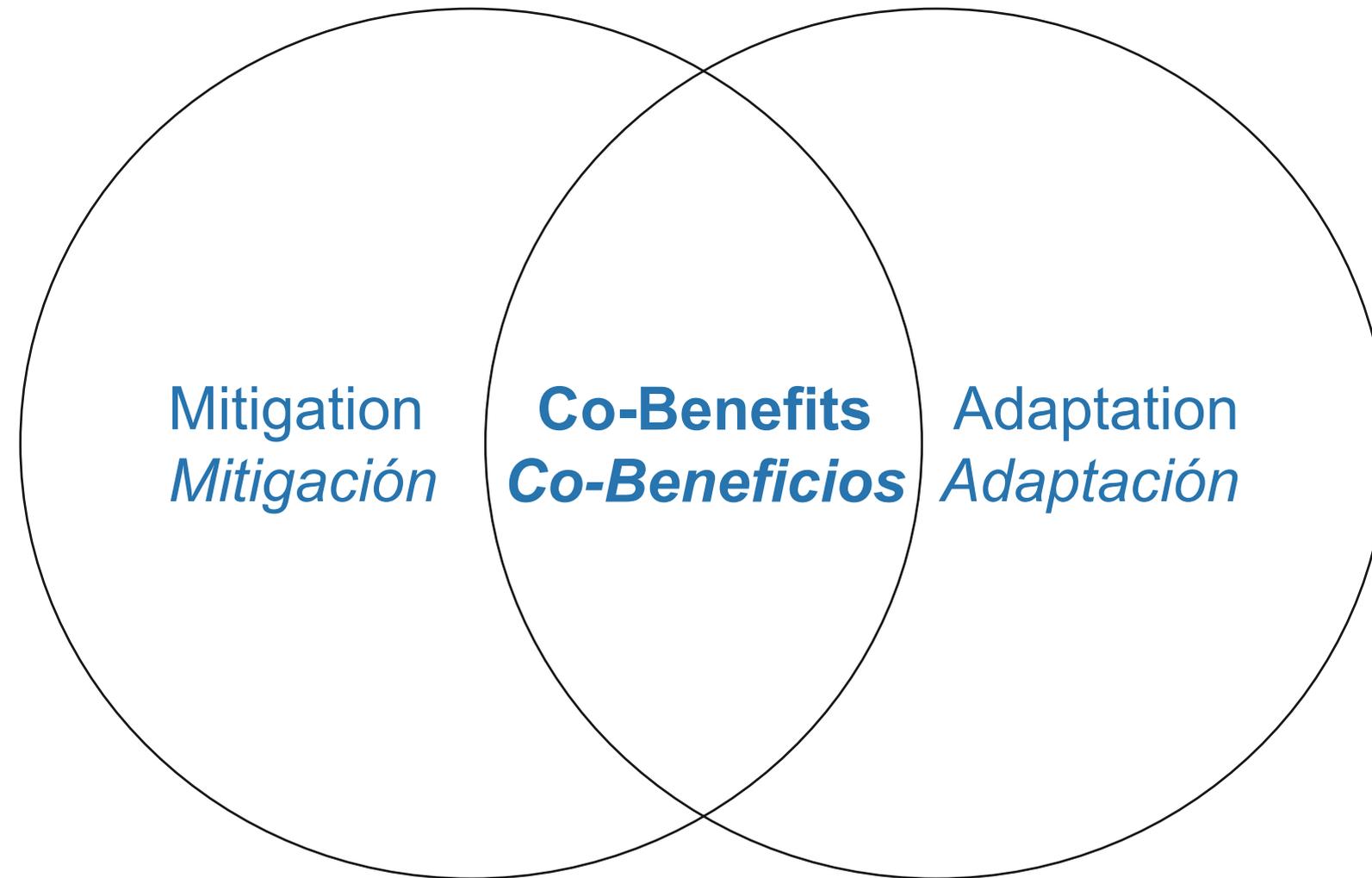
Co-Benefits // Co-Beneficios

Positive, secondary effects of climate response strategies that go beyond greenhouse gas mitigation.

Efectos positivos y secundarios de las estrategias de respuesta climática que van más allá de la mitigación de los gases de efecto invernadero.

- Narrow definitions: Adaptation and resilience benefits // *Definiciones estrechas: Beneficios de adaptación y resiliencia*
- Broader definitions: benefits to health, education, society, and more // *Definiciones más amplias: beneficios para la salud, la educación, la sociedad y más*
- Co-benefits are often as important as primary mitigation goals // *Los beneficios colaterales son a menudo tan importantes como los objetivos primarios de mitigación*
- Focusing on co-benefits is a unique opportunity to promote equity // *Centrarse en los beneficios colaterales es una oportunidad única para promover la equidad*

Building Climate Resilience *Construyendo Resiliencia Climática*



Example: Tree Planting

Ejemplo: Plantación de árboles

- Mitigation: Trees capture and store carbon from the atmosphere
Mitigación: Los árboles capturan y almacenan carbono de la atmósfera
- Adaptation: Trees increase shade and reduce surface temperatures, reducing the impact of extreme heat days and the urban heat island effect
Adaptación: Los árboles aumentan la sombra y reducen las temperaturas de la superficie, reduciendo el impacto de los días de calor extremo y el efecto isla de calor urbano
- Energy: Lower surface temperatures reduce the need for air conditioning and energy use
Energía: Las temperaturas superficiales más bajas reducen la necesidad de aire acondicionado y el uso de energía
- Health // Salud:
 - Lower temperatures reduce the likelihood of dehydration, heat stress, and heat stroke
Las temperaturas más bajas reducen la probabilidad de deshidratación, estrés por calor y golpe de calor
 - Lower temperatures promote outdoor activity and exercise
Las temperaturas más bajas promueven la actividad al aire libre y el ejercicio
 - Access to trees improves mental health
El acceso a los árboles mejora la salud mental

Types of Co-Benefits

Tipos de co-beneficios

- Adaptation // *Adaptación*
- **Health – Physical // *Salud – Física***
- **Health – Mental // *Salud – Mental***
- Education // *Educación*
- Social // *Social*
- Energy // *Energía*
- Equity // *Equidad*

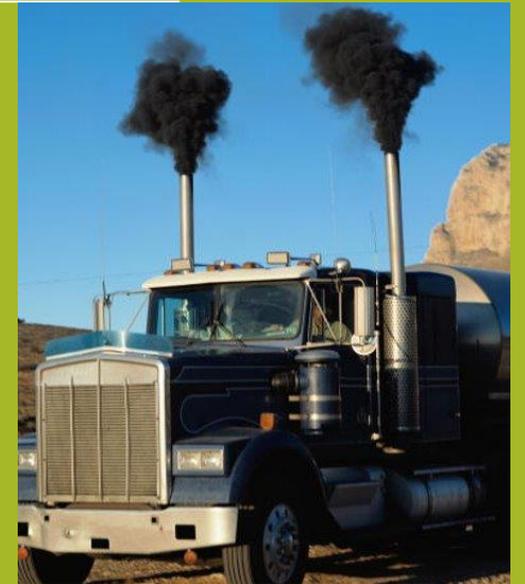
Tackling climate change could be the greatest global health opportunity of the 21st century.

Abordar el cambio climático podría ser la mayor oportunidad de salud global del siglo 21.



Root Causes

Causa Principal



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🔥 **Wilmington's usual Air Quality Index (AQI) ranges from 51-100. Wildfire season worsens the local AQI; adding to existing pollution from refineries & oil drilling.**

🔥 **High amounts of PM 2.5 were present in September 2020, as wildfires raged on.**



(SCAOMD, Air Quality Details- Historical Data, 2020)

HEALTH?

- Heat can accelerate the formation of ozone. Ground-level ozone forms when pollutants (NOx or VOC's) are separated by the sun's ultraviolet light, this worsens air quality.
- Ozone can cause:
 - coughing
 - sore/scratchy throat
 - difficulty breathing
 - inflamed/damaged airways

Aggravate emphysema, chronic bronchitis, and increase asthma attacks.



Children, elderly, immune-compromised folks, and

SALUD?

- El calor puede acelerar la formación de ozono. El ozono a nivel del suelo se forma cuando los contaminantes (NOx or VOC's) están separados por la luz ultravioleta del sol, esto empeora la calidad del aire.
- El ozono puede causar:
 - tosiendo
 - dolor de garganta/picazón
 - respiración dificultosa
 - vías respiratorias inflamadas/dañadas

Agrava el enfisema, la bronquitis crónica y aumenta los ataques de asma.



Los niños, los ancianos, las personas inmunodeprimidas

COMMUNITIES FOR A BETTER ENVIRONMENT established 1978

SEA-LEVEL RISE AND WILMINGTON:

- Flooded water contaminated by oil, gasoline, diesel gas, and petro- coke.
- Flooded water could also contain sewage, trash, toxic chemicals, building debris, human and animal waste.
- Our houseless neighbors would especially be impacted since they lack sustainable shelter to protect themselves.



WILMINGTON & HEAT?



PM 2.5 enters the body through the skin or inhalation. It can cause coughing, difficulty breathing, & harm lungs.

The cumulative impacts from refineries, oil drilling, freeways, lack of green spaces, displacement & redlining causes ~17% ozone, 70% particulate matter (PM 2.5), and 99% of diesel PM.

The unhoused community, low-income folks, & those living with disabilities are especially impacted since they may not have access to air conditioning, transportation to cooling centers, or require life-saving medical devices.

¡Cuidense!

USAR ROPA LIGERA

REVISAR A TUS VECINOS

MANTENERSE HIDRATADO

USE EL VENTILADOR EN ÁREAS VENTILADAS

MANTENGA UN REFRIGERADOR Y HIELO CERCA EN CASO DE CORTE DE ENERGÍA

COMER ALIMENTOS FRESCOS

PERMANEZCA EN ÁREAS SOMBRADAS

VISITA UN CENTRO DE ENFRIAMIENTO

Bay Area:
<https://www.kron4.com/weather/list-bay-area-cooling-centers/>

Wilmington & SELA:
<https://ready.lacounty.gov/heat/>

Cumulative Impacts: Air Quality

- Smoke releases PM 2.5 which can enter your lungs and cause long term lung and heart effects.
- Ozone forms from vehicle exhaust and refineries which react in sunlight.
 - burning eyes
 - runny nose
 - coughing/ sore or scratchy throat, phlegm
 - fatigue
 - difficulty breathing, shortness of breath, and tight chest
 - aggravate emphysema, chronic bronchitis, and increase asthma attacks.



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Impactos Acumulativos: Calidad del aire

- El humo emite PM 2.5 que puede ingresar a los pulmones y causar efectos pulmonares y cardíacos a largo plazo.
- El ozono se forma de los gases de vehículos y refinerías que reaccionan a la luz solar.
 - ojos ardientes
 - secreción nasal
 - tos/dolor de garganta o picazón, flema
 - fatiga
 - dificultad para respirar y presión en el pecho
 - agravar el enfisema, la bronquitis crónica y aumentar los ataques de asma.

Cumulative Impacts: Extreme Heat

- Heat is the **#1** weather related killer in the US
- via dehydration, heat stroke, heat exhaustion,
- Increases risk in cardiovascular disease, kidney disease, diabetes
- Elderly, young, pregnant, outdoor workers, low-income and those experiencing homelessness are usually the most vulnerable



Impactos Acumulativos: Calor Extremo

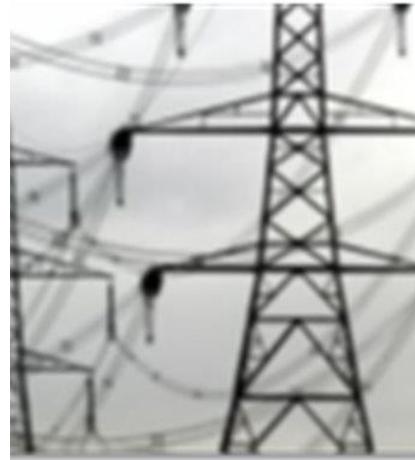
- El calor es la principal causa de muerte relacionada con el clima en los EE. UU.
- por deshidratación, golpe de calor, agotamiento por calor,
- Aumenta el riesgo de enfermedad cardiovascular, enfermedad renal, diabetes
- Los ancianos, los jóvenes, las embarazadas, los trabajadores al aire libre, los de bajos ingresos y las personas sin hogar suelen ser los más vulnerables.

Cumulative Impacts: Infrastructure

- Heat waves often cause:
- Severe power failure
- Dangerous for those that rely on life-saving equipment or need to keep medicine cool
- Severe disruption of train services
- Moderate impact on road transportation
- Severe strain of ambulatory and ER capacity

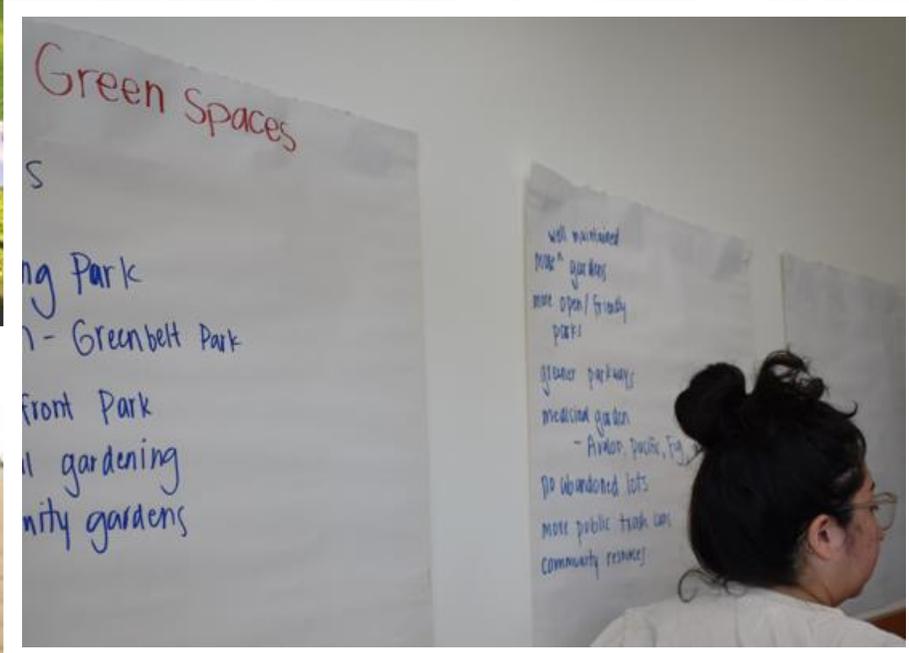


In case you're wondering why we're canceling service for the day, here's what the heat is doing to our power cables.



Impactos Acumulativos: Infraestructura

- Las olas de calor a menudo causan:
- Grave fallo de alimentación
- Peligroso para aquellos que dependen de equipos que salvan vidas o necesitan mantener los medicamentos frescos
- Interrupción grave de los servicios ferroviarios
- Impacto moderado en el transporte por carretera
- Tensión grave de la capacidad ambulatoria y de urgencias



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Jay Chi Community Clinic

Neighborhood Care

- Stay in the shade
- Stay hydrated
- Checking on neighbors
- Emergency plans
- Alert notifications
- Resilience Hubs
- Solar & Battery Storage

Cuidado del Vecindario



- Quédate en la sombra
- Mantente hidratado
- Comunicando y apoyando a los vecinos
- Planes de emergencia
- Notificaciones de alerta
- Centros de resiliencia
- Paneles solares y Almacenamiento de batería

Wilmington Resilience Hub Survey/ Encuesta del Centro de Resiliencia



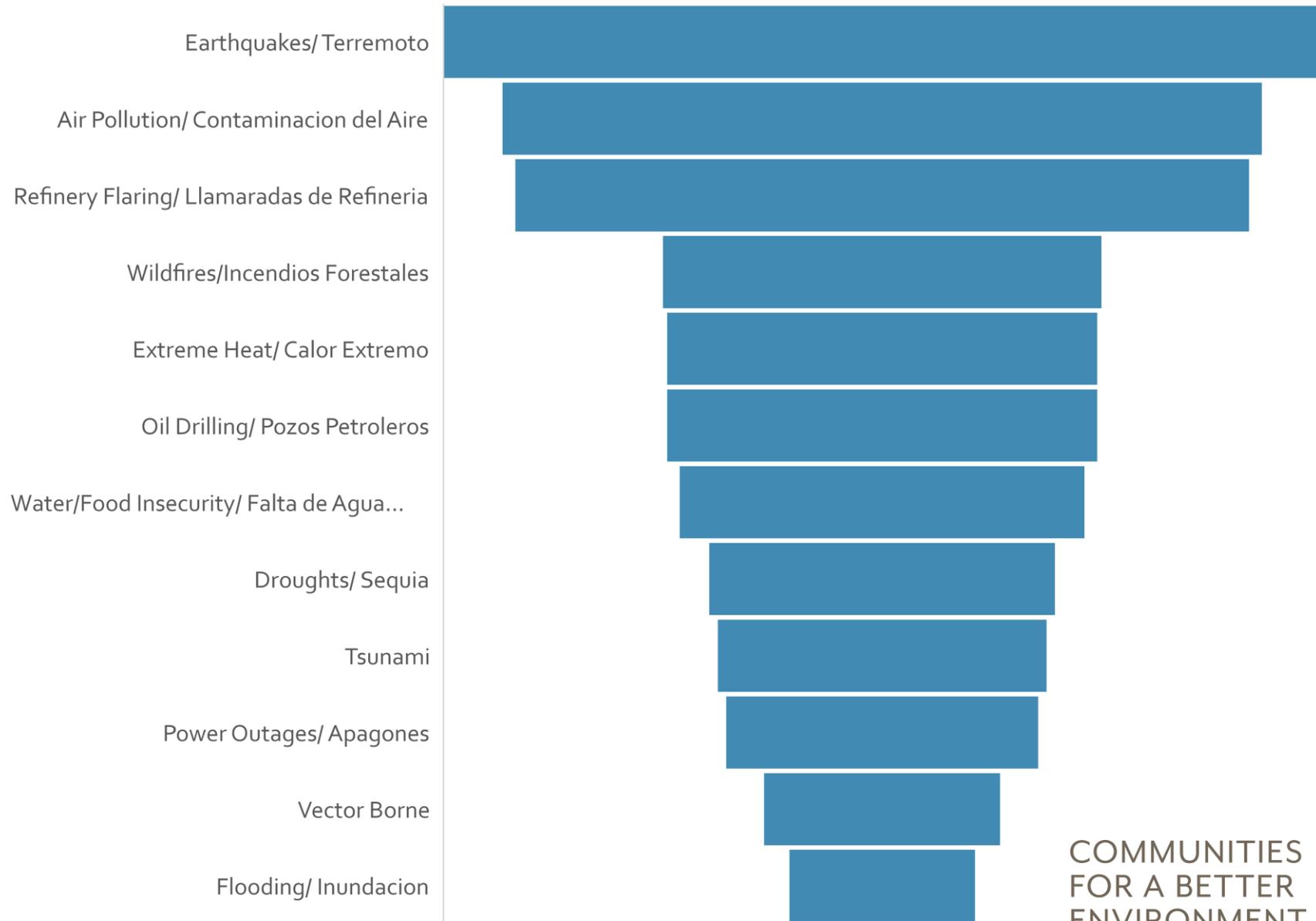
Identify a strategic location to build a hub, what characteristics make a hub, and what resources are necessary.

Identifique una ubicación estratégica para construir un centro, qué características hacen un centro y qué recursos son necesarios.

- 123 Total/ En total
- Ages/ Edades
 - 12-30 (39%)
 - 31-50 (40%)
 - <50 (19%)
- Majority Spanish/ Mayoria Espanol
- 56% had dependants/ tienen dependientes

What types of natural disasters or climate impacts are you most concerned about?

¿Qué tipos de desastres naturales, impactos industriales o impactos climáticos le preocupan más?



Services

□ High Priority

- Water & Food
- PPE
- Supportive Staff
- Phone Charging
- Wifi

□ Priority

- Funding for families
- Emergency Response Training
- Transportation
- Counseling
- Tutoring

□ Consider

- In/outdoor activities
- Know Your Rights
- Self-defense
- Gender Neutral Restrooms
- Sexual Health Resources
- Advocacy opportunities
- De-escalation

Servicios

☐ Alta prioridad

- Agua y alimentos
- EPI
- Personal de apoyo
- Carga del teléfono
- Wifi

☐ Prioridad

- Financiación para familias
- Capacitación en respuesta a emergencias
- Transporte
- Asesoramiento
- Tutoría

☐ Considerar

- Actividades en/al aire libre
- Conozca sus derechos
- Autodefensa
- Baños de género neutro
- Recursos de salud sexual
- Oportunidades de incidencia
- Desescalada

Resources & Materials Recursos y Materiales



- Earthquake Kits
- First Aid Kit
- Portable Battery/
Power Generator
- Flashlights/ Lantern
- Refrigerator
- Air Filtration
- N95 Masks
- Evacuation Plans
- Kits para terremotos
- Botiquín de primeros
auxilios
- Batería portátil /
generador de energía
- Linterna (s)
- Refrigerador
- Filtración de aire
- Mascarillas N95
- Planes de evacuación

**MORE DETAILS TO BE
SHARED 4/21**

**VAMOS A COMPARTIR
MAS DETALLES EL 21 DE
ABRIL**



CLIMATE EMERGENCY MOBILIZATION OFFICE

Thank you for joining us!



Contact information

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Climate Emergency Mobilization Commission
Board of Public Works • City of Los Angeles

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MOBILIZATION OFFICE**

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CEMO-Office@lacity.org

We want to hear from you!

Part 2, Workshop #1 survey:
bit.ly/Resilience-Survey1

Please complete the brief post-event survey to help us improve our events & gather the community's input as part of the CEMO Blueprint model to co-create equitable climate policy.