



# Preparing for Climate Change

Presentation to Urban Forestry Commission

Seattle Office of Sustainability & Environment

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# Climate Change in the Pacific Northwest

- Temperature
- Precipitation
- Sea level



# Equitable Climate Preparedness

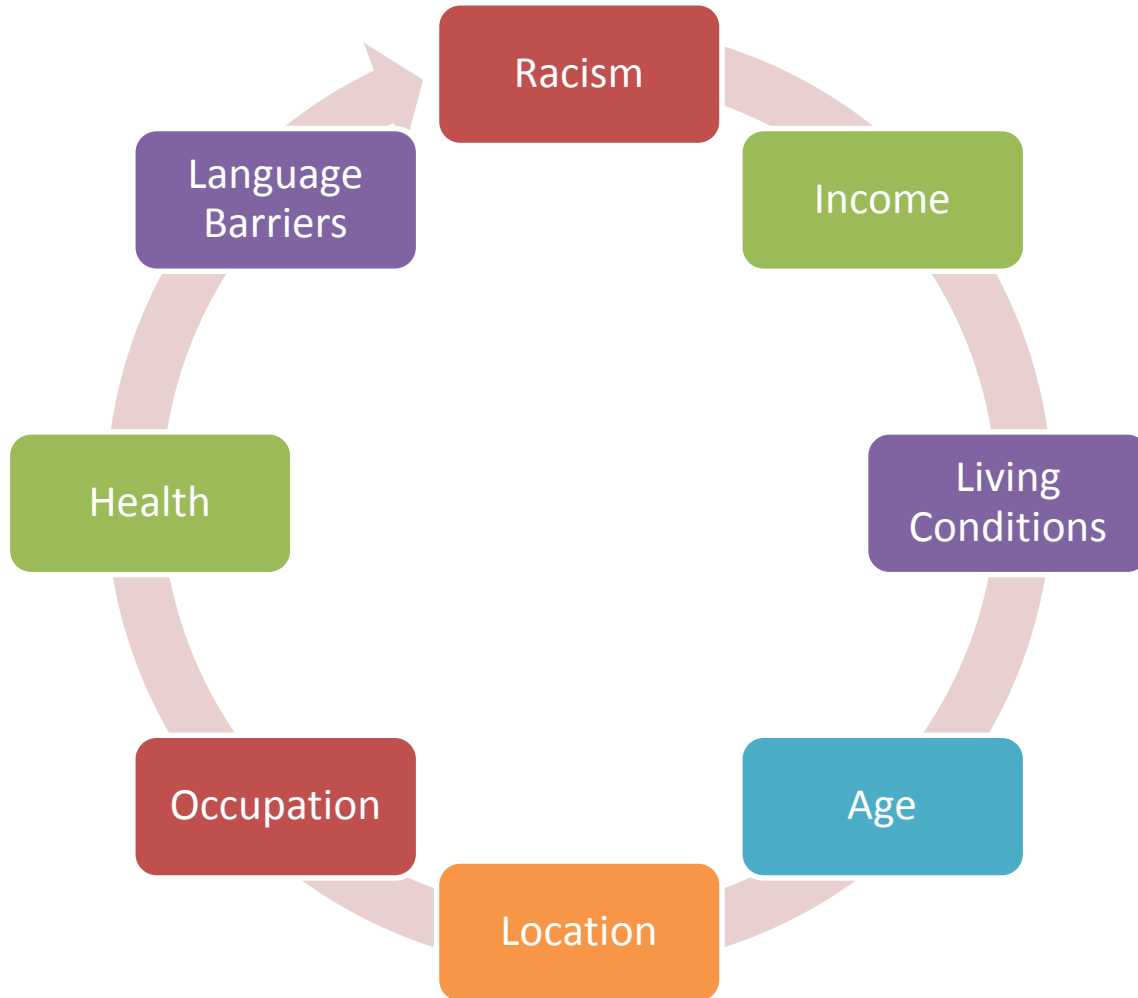
“The effects of climate change threaten everyone, but they do not threaten all people equally.”

“The voices of frontline communities, the ones most impacted, usually don’t make it to the airwaves.”

- *Jacqui Patterson, Director  
NAACP Climate Justice Initiative*



# Vulnerability Factors



# Planning Priorities

- ◆ **EQUITY:** Prioritize actions that reduce risk and enhance resilience for communities with disproportionate climate risk.
- ◆ **CO-BENEFITS:** Design and implement resilience strategies that advance community goals.
- ◆ **NATURAL SYSTEMS:** Use nature-based solutions that leverage ecosystem services and foster natural systems resilience.

# Citywide Actions

- Sea level rise capital projects guidance
- Equitable climate preparedness planning and evaluation tool
  - Strategies
  - Community-driven planning



# Sectors

- ◆ Transportation
- ◆ Land Use & the Built Environment
- ◆ City Buildings
- ◆ Parks
- ◆ Drainage & Water Supply
- ◆ Electricity
- ◆ Community Preparedness



# Urban Forestry Impacts

- Tree stress & mortality due to drought, insects, disease, and storms
- Downed limbs and trees related to extreme precipitation and storms.



# Urban Forestry Implications

- Longer watering and plant establishment period.
- Storm-related tree damage and related road closures and response costs.
- Increased maintenance to reduce risk of blowdown or limb breakage.
- Increased maintenance to respond to fallen branches and dead tree removal.
- Side walk damage due to drought stress.

# Urban Forestry Actions

- ◆ Tree selection
- ◆ Ecosystem services
  - ◆ Mitigate heat islands
  - ◆ Buffer pollution
  - ◆ Mitigate storm surge
- ◆ Improve maintenance
  - ◆ Increase establishment period
  - ◆ Increase watering season
- ◆ Increase community support

# Equity Goals

Reduce disproportionate climate risk and help ensure that the benefits and burdens of preparedness strategies are equitably shared:

- Prioritize actions that help communities of color and lower income communities moderate potential impacts and cope with the consequences of climate change.
- Empower frontline communities as leaders in the planning process.

# Equity Actions

- 💧 Develop an equitable climate preparedness planning tool to help:
  - Identify who is benefiting/burdened by climate change and adaptation strategies
  - Identify equitable adaptation strategies that function at the root causes of disproportionate vulnerability
  - Conduct community-driven planning
- 💧 Prioritize designated EEl Focus Areas and Populations.
- 💧 Design planning processes to include community as partners, sharing decision-making power.
- 💧 Foster social cohesion, a key factor in community resilience, through engagement and planning processes

# Questions & Comments



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