# **Climate Vulnerability**

### Vulnerability Assessment: What is it?



An assessment of a threat, including the likelihood of it occurring and the potential severity of its impact

People who suffer from inequalities are often disproportionately affected by climate hazards and the impacts of climate change

#### Climate hazards:

#### impact the economic and social well-being of vulnerable populations



Unaffordable and insecure housing leaves families less able to cope with unexpected expenses such as extensive repairs or rebuilding from flooding or wildfires



Increased respiratory and cardiovascular disease, injuries and premature deaths related to extreme weather events, changes in the prevalence and geographical distribution of foodand water-borne illnesses and other infectious diseases

#### Why Does Vulnerability Matter?



Knowing the highest impacted areas allows towns to direct resources towards those who need it most

Assessing vulnerability helps communities save time, money, and resources



Reducing vulnerability can decrease both human suffering and economic loss



## **Maine Climate Vulnerabilities**

#### Infrastructure

Increased temperatures and precipitation impact infrastructure systems, such as roads, culverts, utilities, and critical facilities

Examples: Flooded roadways, overburdened culverts, strain on the energy grid



Most of our existing infrastructure isn't meant to handle climate impacts. We need to build new infrastructure that is resilient to climate change

#### Social

Refers to a number of factors that may weaken a community's ability to adapt to or recover from a disaster and is an indicator of community resilience

Examples: Age, race, households with no vehicle, etc. all impact social vulnerability



Poverty and affordability are some of the most significant contributors to social vulnerability.

### **Ecosystem**

Changes in the ecosystem due to climate hazards cause shifts in habitats, displacement of species, and compromise natural systems

Examples: Marsh migration, decline in water quality, invasive species, vector-borne disease



