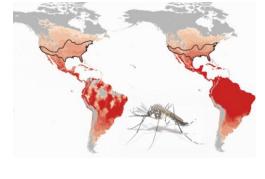
## Climate Change and the Local Environment

## **Impacts**

- Event Disturbances
  - Loss of trees and vegetation
  - Pollution of aquatic habitat
  - Loss of plants and animals, particularly birds
  - Introduction of invasive species downstream
- Habitat Changes
  - Loss of snowpack to protect trees roots and other plants and animals
  - Decrease in food for birds because the timing is off
  - Expanding or contracting ranges depending on climate requirements majority profoundly shrinking
  - Decrease in fish populations (seafood)
- Immediate & Long-term effects
  - Increase in cost of food
  - Loss of important native species
  - Changes in environmental composition
  - New pests and disease
  - Mass extinctions
  - o Ecosystem failure



Emerald

Borer

The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) Report notes that since 1980 greenhouse gas emissions have doubled, raising average global temperatures – with climate change already impacting nature from the level of ecosystems to that of genetics – impacts expected to increase over the coming decades, in some cases surpassing the impact of land and sea use change and other drivers.



## **Solutions**

- ✓ Forest and tree management
  - ✓ Incentivize healthy forest over development and remove invasive species
- ✓ Natural resource inventories
  - ✓ Know your species and habitats to enable post-disaster restoration
- ✓ Nature-based methods of resilience
  - ✓ Avoid using grey infrastructure such as riprap and cement and opt for methods that mitigate while adapting to increased extreme weather
- ✓ Restoration, Preservation & Conservation that protects habitat & people
  - ✓ River corridor development control
  - ✓ Prevent toxic material storage in floodplains
- ✓ Address invasive and problematic species
- ✓ Landscape with native species
- ✓ Education and public engagement
- ✓ Buy/consume ethically and less (build to last)

