


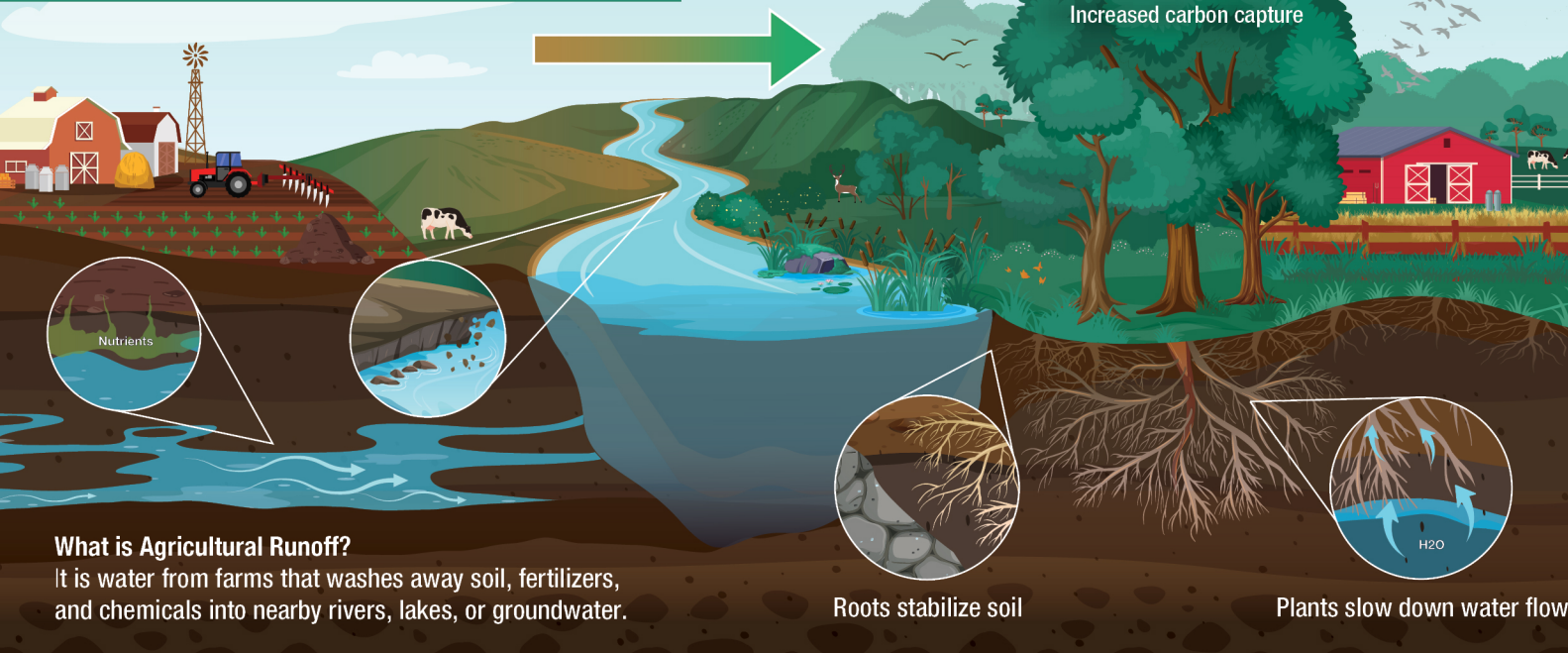
GROWING RESILIENCE: HOW ORNAMENTAL HORTICULTURE POWERS NATURE-BASED SOLUTIONS FOR A CHANGING CLIMATE

Nature-based solutions use the power of nature to tackle climate challenges. In ornamental horticulture, perennial plants, shrubs and trees transform into living systems that manage water, support biodiversity, capture carbon, and renew ecosystems to help communities thrive in a changing climate.





Stabilize Soil and Reduce Agricultural Runoff
 Plants improve soil retention by stabilizing soil and slowing down water flow across the ground.




What is Agricultural Runoff?
 It is water from farms that washes away soil, fertilizers, and chemicals into nearby rivers, lakes, or groundwater.

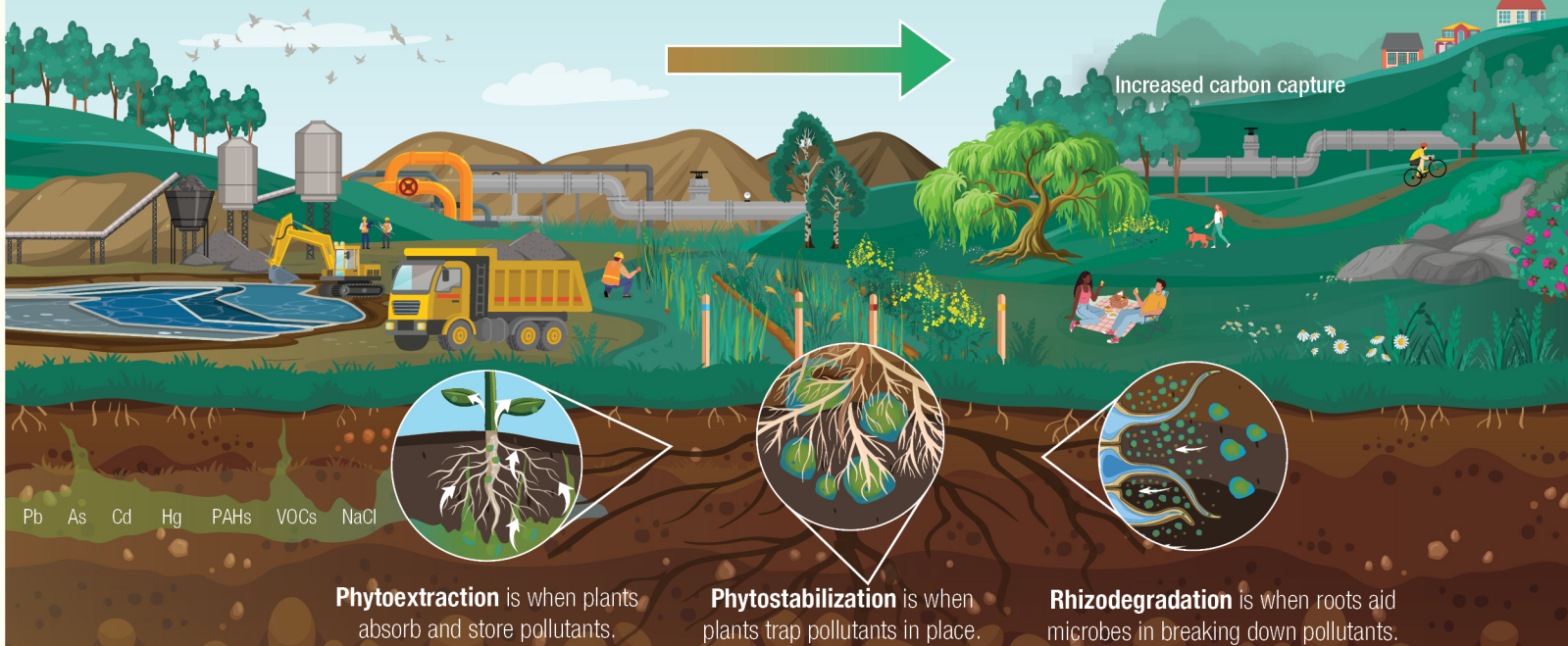
Roots stabilize soil

Plants slow down water flow

Increased carbon capture



Remediate Contaminated Soil
 Plants can restore contaminated soil through phytoremediation which is a process where plants absorb, trap, or transform harmful substances to return the soil to a healthy state.




Phytoextraction is when plants absorb and store pollutants.

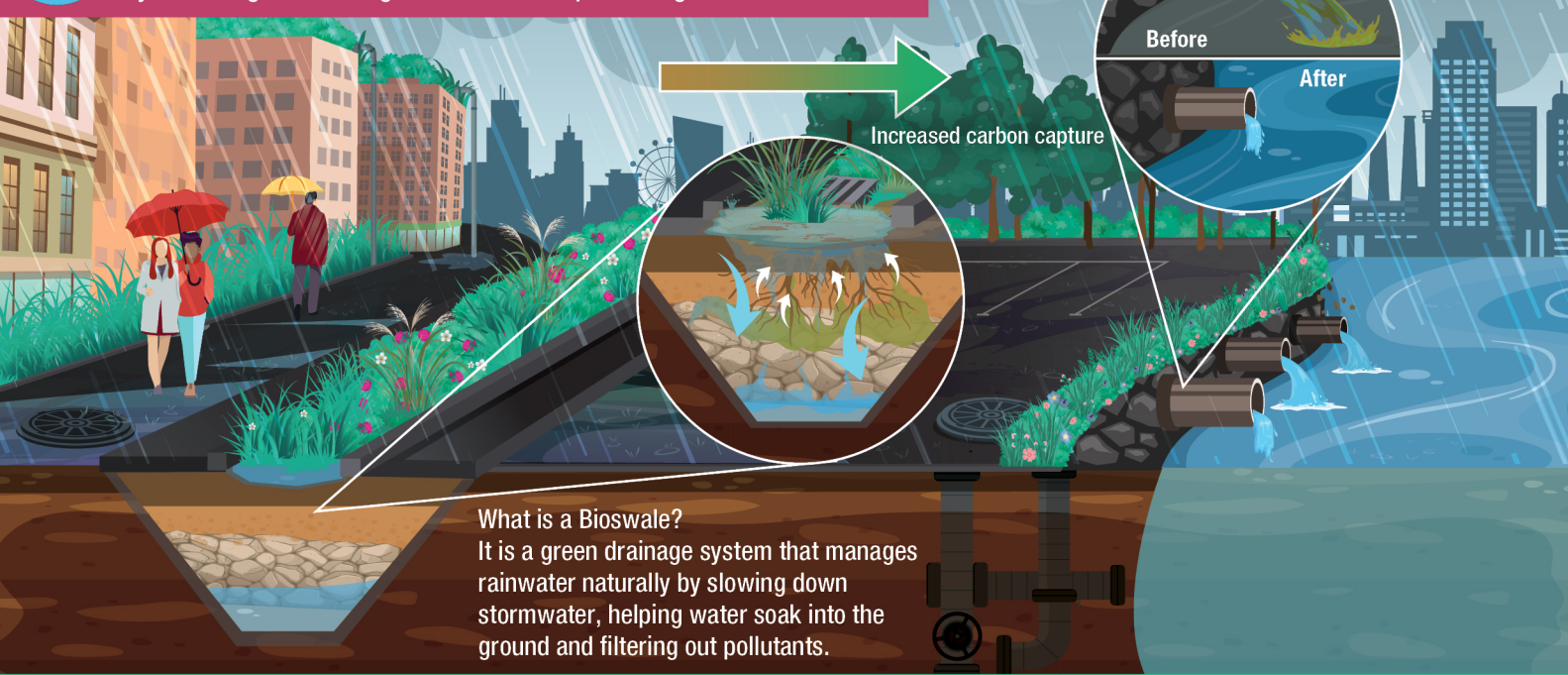
Phytostabilization is when plants trap pollutants in place.

Rhizodegradation is when roots aid microbes in breaking down pollutants.

Increased carbon capture




Minimize the Impacts of Intense Rain
 Bioswales, green roofs, and other planted areas help city drainage systems by absorbing and filtering rainwater while preventing floods and erosion.

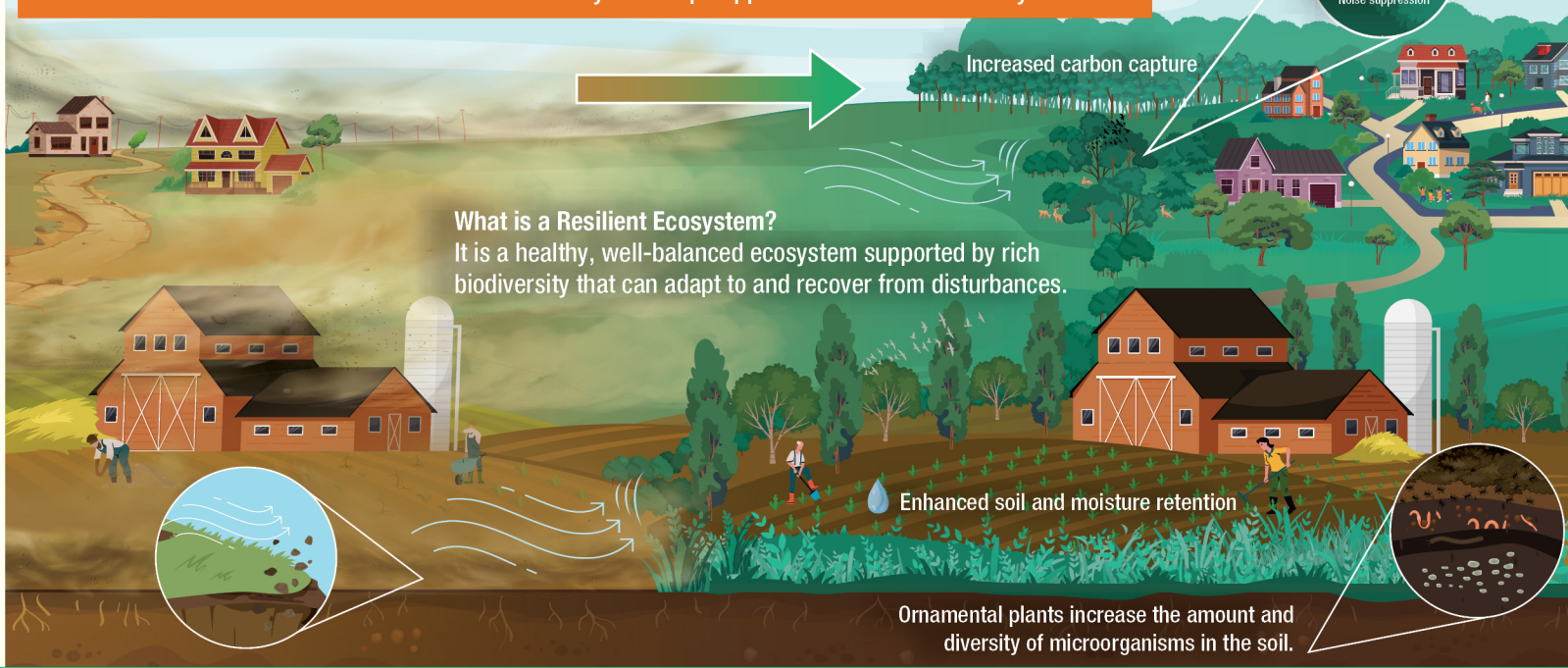


What is a Bioswale?
 It is a green drainage system that manages rainwater naturally by slowing down stormwater, helping water soak into the ground and filtering out pollutants.

Increased carbon capture



Reduce Wind Erosion and Boost Biodiversity
 Planted windbreaks and cover crops slow harsh winds, protect soil from erosion, and create habitat corridors that increase biodiversity and help support a more resilient ecosystem.



What is a Resilient Ecosystem?
 It is a healthy, well-balanced ecosystem supported by rich biodiversity that can adapt to and recover from disturbances.

Increased carbon capture

Enhanced soil and moisture retention

Ornamental plants increase the amount and diversity of microorganisms in the soil.