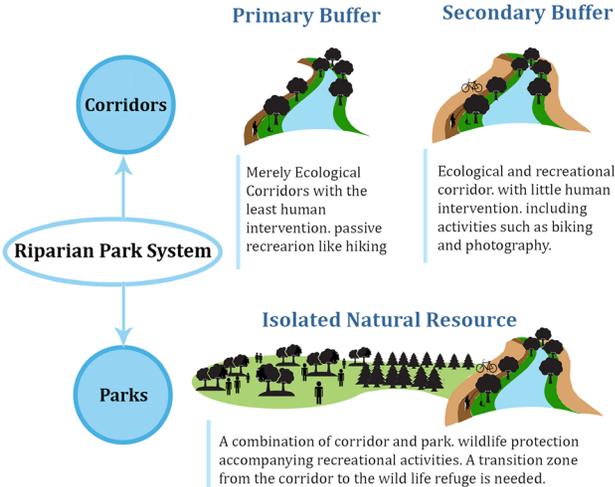
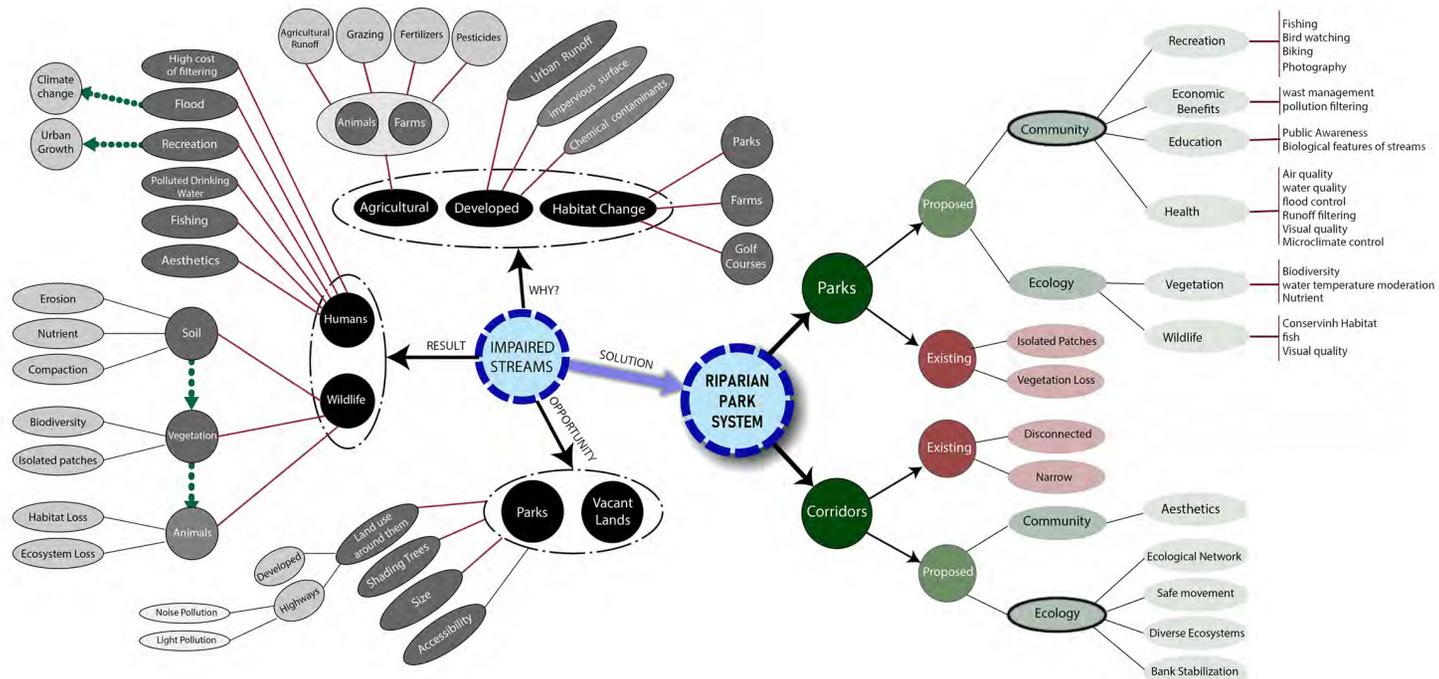


# RIPARIAN PARK SYSTEM

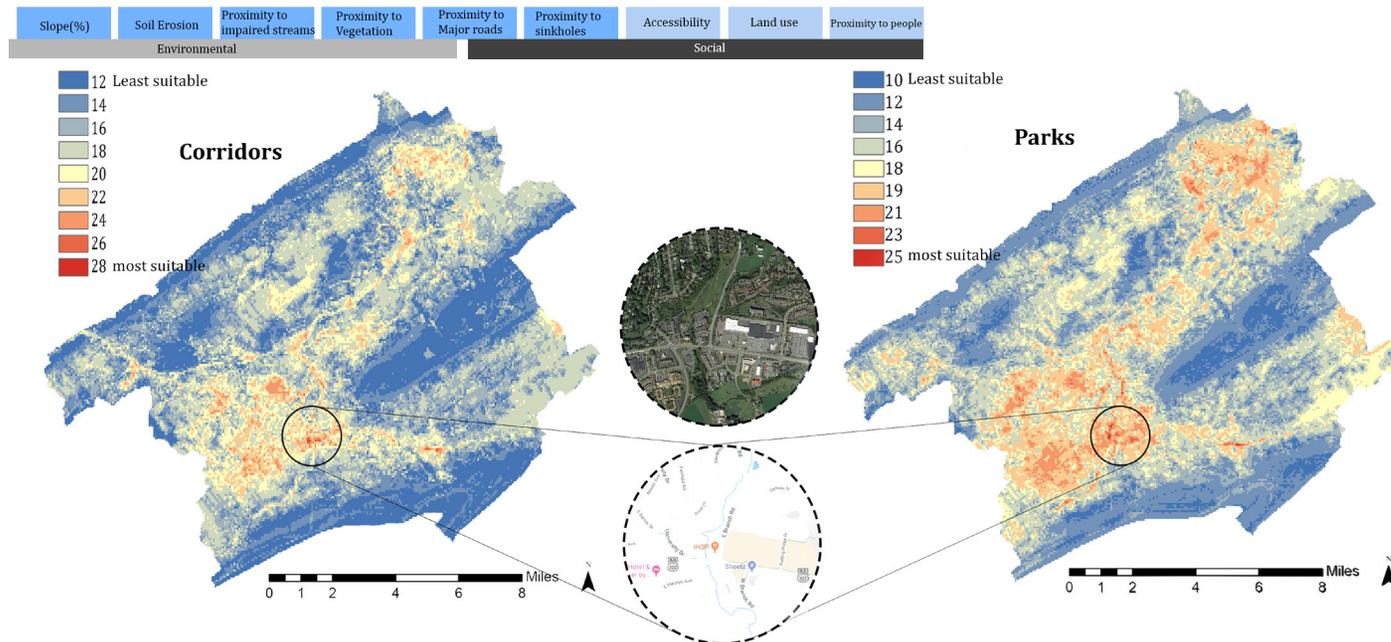
## A System to Improve Impaired Streams

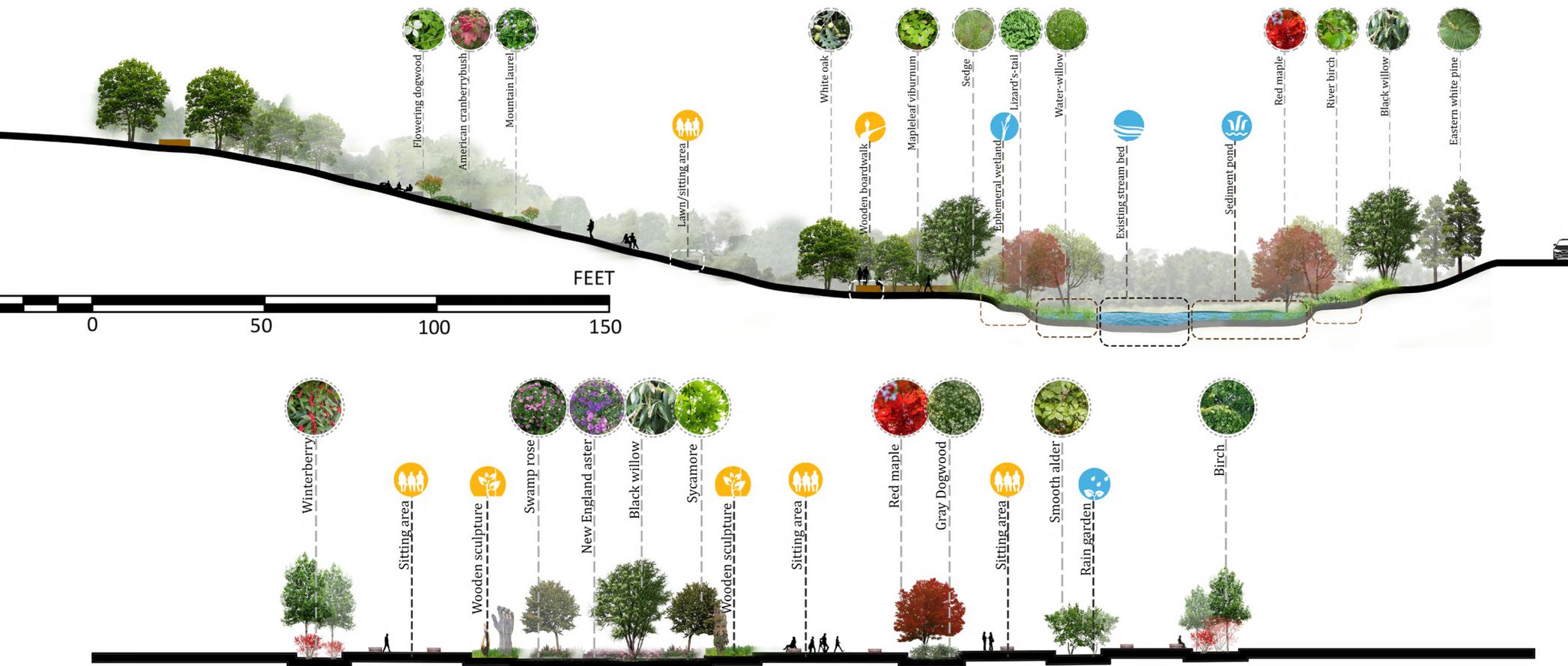


The wooden boardwalk takes visitors over the stream and throug the park.



The main cause of the pollution includes habitat modification, urban runoff, storm sewers and grazing. These issues originate from a shift in land use especially urban areas and agricultural lands. Also vegetation loss and chemical pollutants including pesticides, fertilizers and vehicle related chemicals are other results of development. network of buffers can conserve streams as well as notify people about water related issues. Therefore the best solution is to have a combination of corridors and parks or “buffer park system”.





Wetlands provide habitat for a variety of plants and fish, they slow down the water flow and remove pollutants. People can enjoy these water features by walking along the boardwalk. The lawn area can be used for gathering and events and it provides a view of the stream and street.

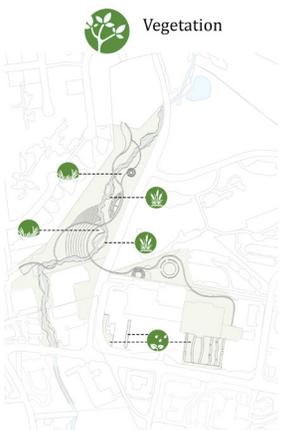
Rain gardens treat the polluted water and also provide a sitting area. People can walk through them and visit the wooden sculpture garden and learn about rain gardens and water pollution.



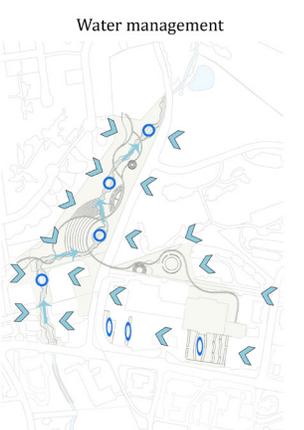
detention pond, sediment pond, rain gardens and ephemeral wetlands. The meandering channel of wetlands around the stream, not only cleans the water but also slows down the current which results in stabilizes stream banks.



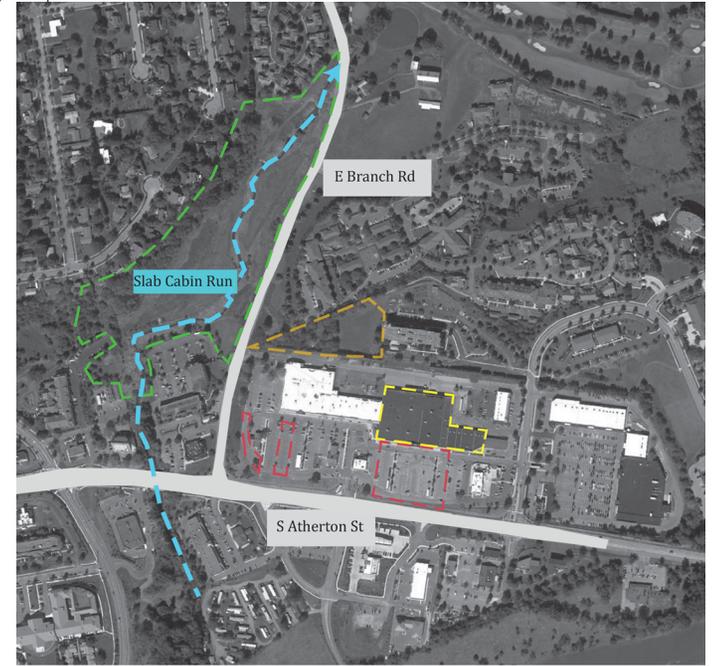
The boardwalk will take people through different parts of the park without disturbing the natural surroundings. The hammock garden around the detention pond, provides the opportunity of relaxing and watching the pond full of vegetation.



Three categories of vegetation will be planted. Riparian plants, wetland plants and rain garden plants, based on their location. But all species are native. At the edges of the site, evergreens will provide protection against the winter winds.



Run-off from developed areas and parking will decontaminate and infiltrate before reaching the stream in rain gardens. The detention pond near the building collects all the run-off from the neighborhood.



Current Land use	Suggested Land use	Goal
Stream	Stream, wetland, sediment pond	treat polluted water, provide habitat
Utility	Park	Recreation, increasing people's awareness
Vacant structure	Library, play space for kids	Recreation
Forest/Residential	Park, detention pond	Connect the green space, collect the polluted water
Transportation	Rain garden, sculpture garden	treat polluted water, attract people

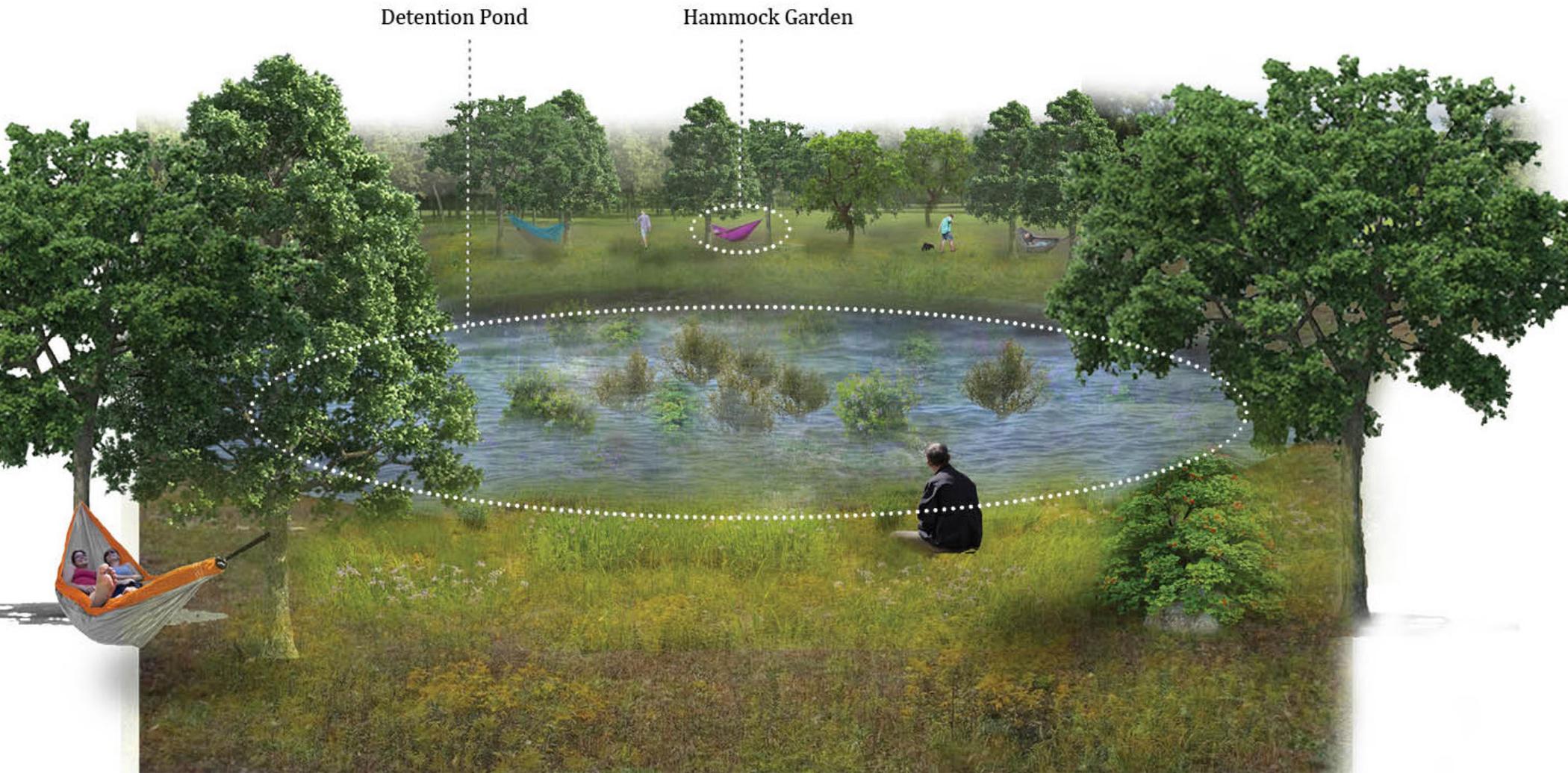
The intersection of stream and trails are highlighted by planting red maples in the green line of trees. Black willow is planted near sediment ponds as it grows in wet condition and it's distinct shape draws attention to these ponds. The stream is hidden by trees and people can see just see it from the bridge, so they are encouraged to go through the park and discover the stream.



Lawn for Events

Cascading Rocks

Sediment Pond and Wetland



Detention pond collects the water from neighborhood and also creates a habitat for plants. The hammock garden around the detention pond provides a public space for gatherings and social interactions.