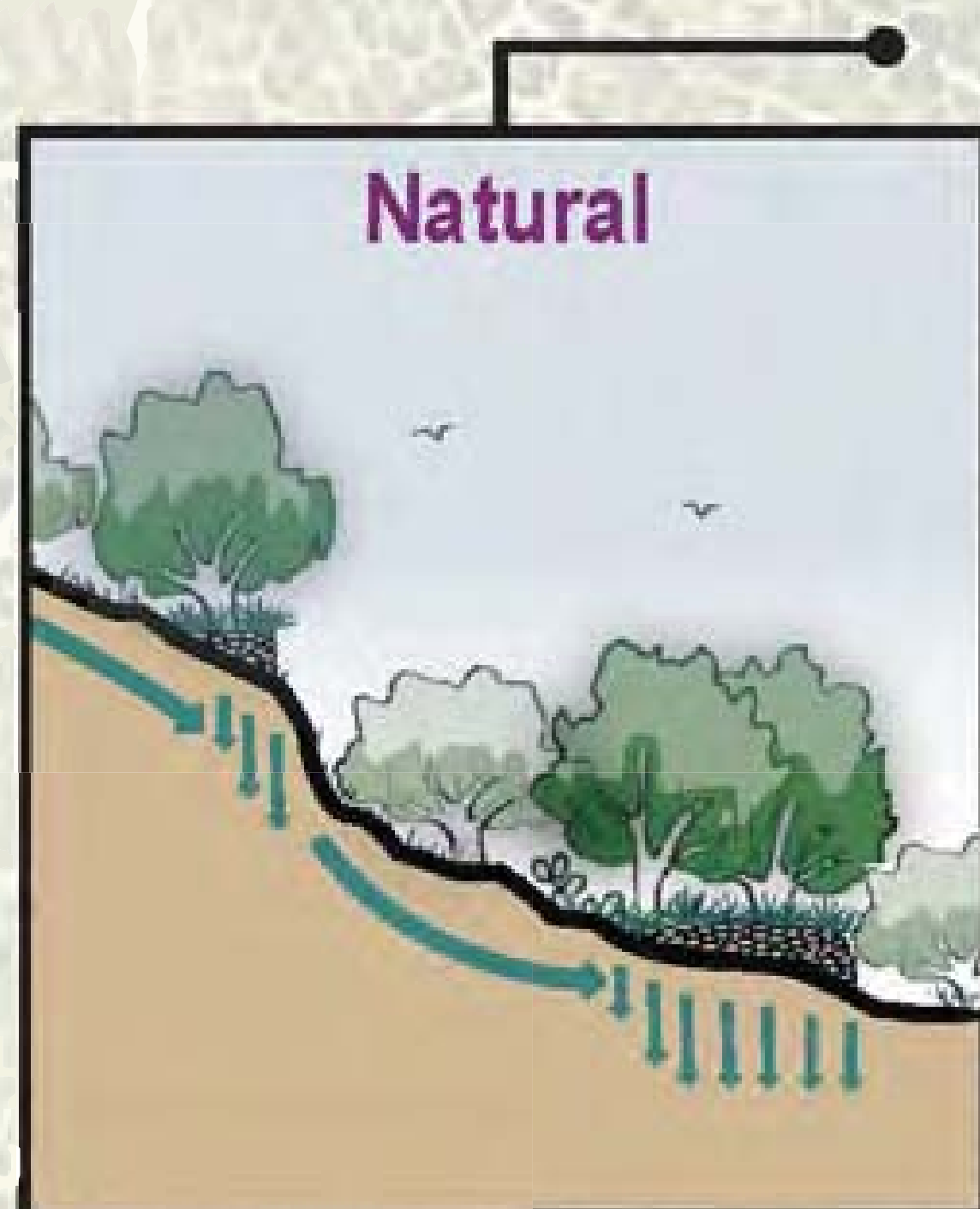


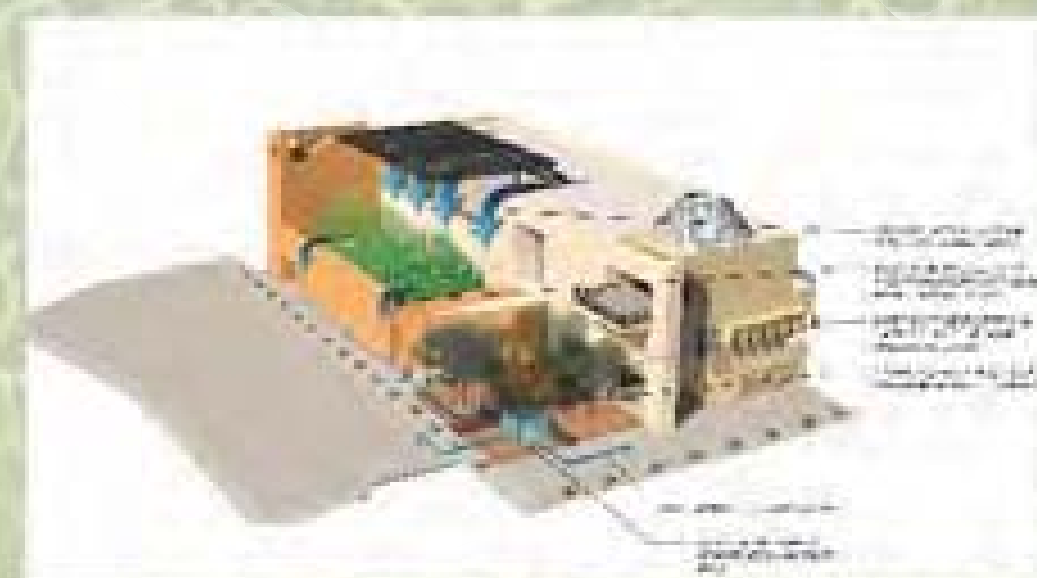
Watershed Health and the Urban/Rural Transect



Natural

Natural - The forests and grasslands of the Natural World should be encouraged through the use of simple water capture and distribution techniques to enhance the watershed.

- **Check Dams** - the use of check dams in natural forested areas can help improve ecosystem health and aid in reforestation efforts.
- **Shallow Swales** - wide shallow swales can slow water velocities and provide for the even application of storm water to reclamation efforts.
- **Soil Imprinting** - soil imprinting can increase germination success rates in the seeding process by more than 50% if applied during monsoon seasons.



Rainwater Cistern with Green Roof Schematic



Water Harvesting Median in Shopping Center



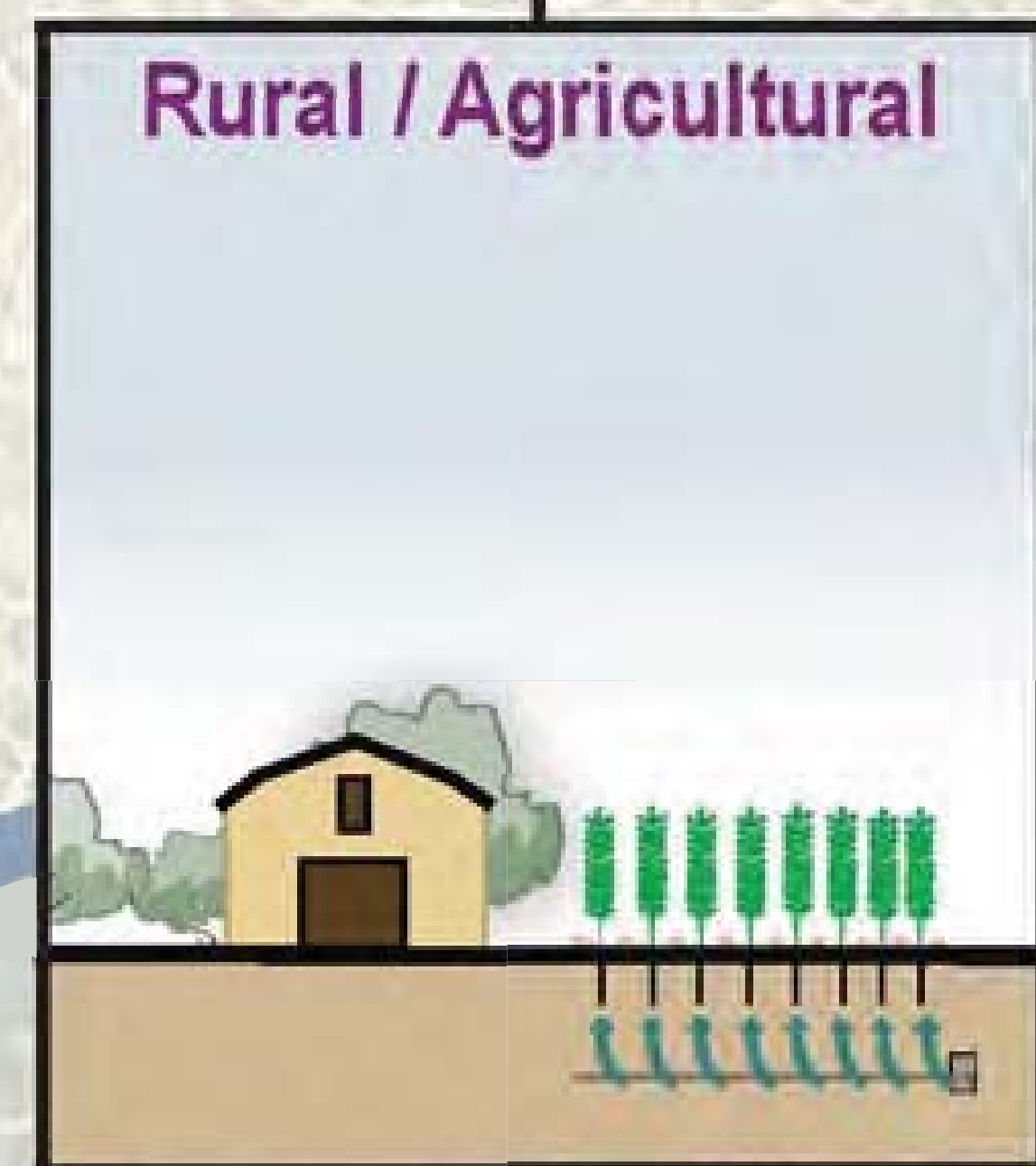
Soil Imprinting Project in Albuquerque, NM

Urban Environments - The Urban Environment is made up of tall buildings, parking lots and expanses of concrete. The runoff water from this infrastructure should be cleansed and these vast impermeable surfaces should be utilized for water collection and retention for water reuse. More permeable surfaces should be used to lessen runoff.

- **Cisterns** - rainwater Cisterns are much more cost effective as a non-evaporative water storage device in urbanized areas due to the ratio of landscape to site.
- **Planters** - green Infrastructure can be concealed in at grade planters more easily in Urban Areas.
- **Low Impact Development** - the use of Low Impact Development methodologies to conserve water in Urbanized Zones can reduce infrastructure and land costs by spreading the expense among smaller devices rather than using large infrastructure projects.
- **Water Harvesting** - water Harvesting Planters create water savings and more space for other land uses such as civic plazas and pedestrian space.
- **LID Economics** - Combining pedestrian and vehicular spaces with water harvesting strategies Integrates Site with land use and reduces cost in urban areas.



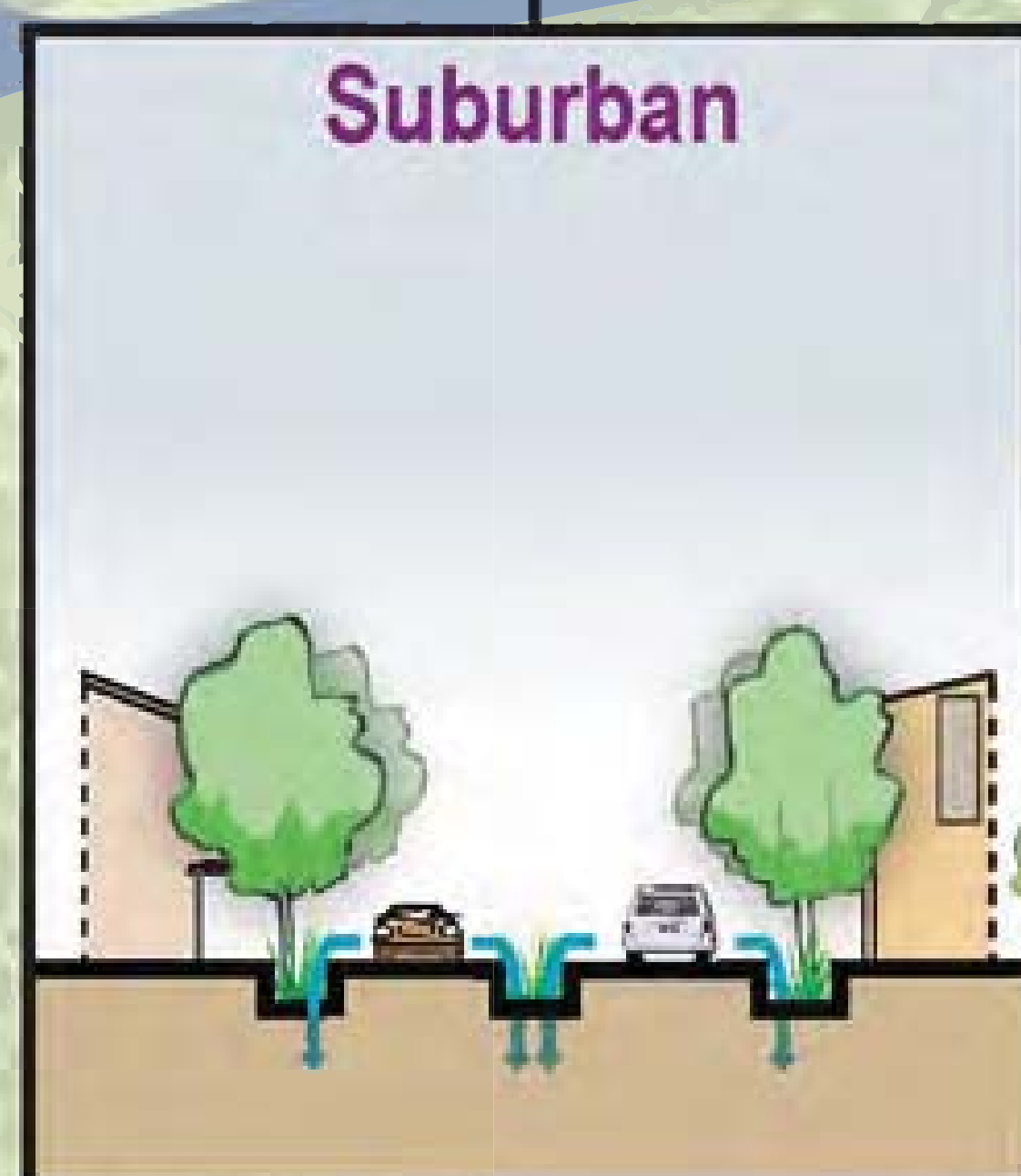
Urban/Neighborhood



Rural / Agricultural

Rural / Agricultural - The Rural Environment is shrinking as people move into urban and suburban environments. Every attempt should be made to protect the landscapes in these places and sustain them through simple water collection schemes.

- **Dry Farming** - dry farming crops in the arid west can save water; however plant selection becomes more important than when using irrigation.
- **Bioswales** - harvesting water into bar ditches or ponds from crowned streets can provide scenic features in rural areas. Water quality can be aided by utilizing planted bioswales.
- **Harvesting Water** - harvesting water off of rooftops can increase the water savings in oases around homes in rural areas.



Suburban

Suburban Environments - Suburbia is characterized by large wide buildings like office parks and malls and even larger parking lots. Landscaping surrounding these areas can be used to improve the watershed health by acting as water harvesting and purification devices.

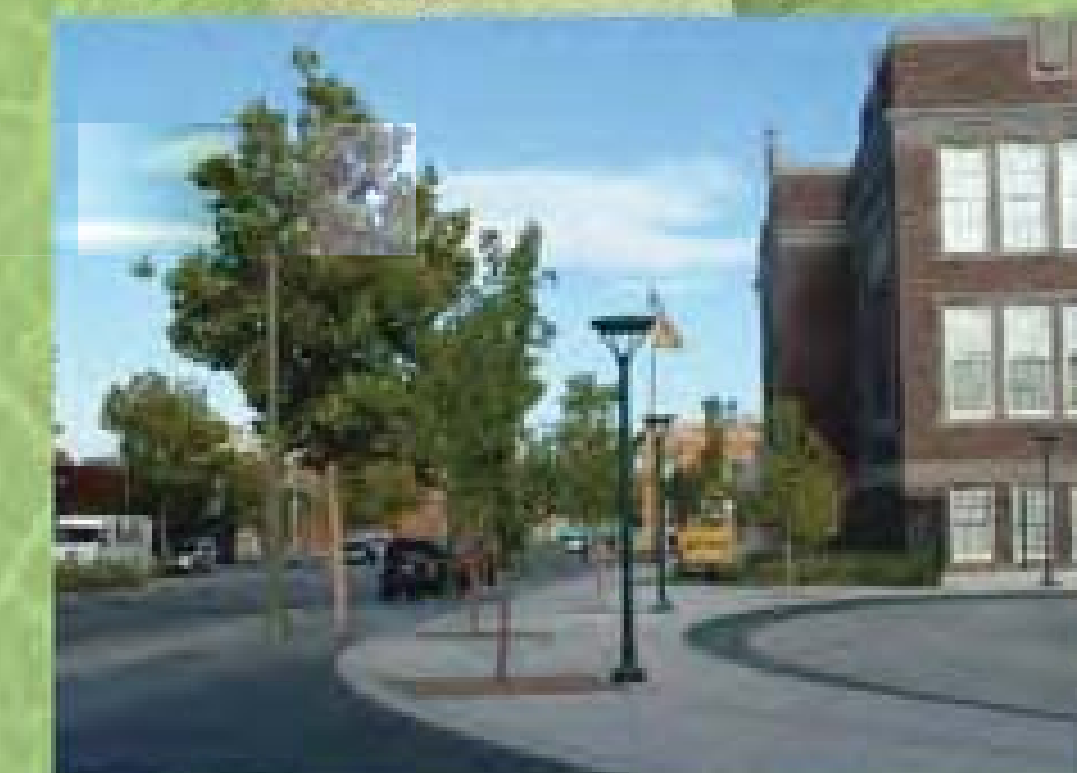
- **Water Harvesting and Green Space** - merging green spaces with water harvesting strategies creates amenity and integrates lifespan savings into infrastructure.
- **Disperse Green Infrastructure** - dispersing Green Infrastructure within larger open spaces makes amenities more accessible to more residents in suburban areas.
- **Low Impact Development** - Low Impact Development methods can save as much as 10% on infrastructure costs in suburban areas because Storm Sewers become smaller or non-existent.
- **Lessen Downstream Impacts** - using Green Infrastructure in suburban areas lessens impacts on communities and ecosystems downstream.
- **Reduce Peak Discharges** - using ponds to harvest water in suburban zones can reduce peak discharges in storm sewers.
- **Structural Soils** - the use of structural soils in parking lots and streets increases the success rate of trees.



Water Collection off of Street and into Landscape



Water Harvesting Park in the High Desert



Trees with Structural Soils at Loft Project in Albuquerque, NM