

River Run Network: Upper Tanque Verde Creek Streamshed

|| Priority Actions || October 2016 ||

N Houghton Rd



The mesquite bosque, once more extensive along the floodplain of the Tanque Verde Creek, has deeper roots to access shallow groundwater.



A cottonwood tree along the Tanque Verde near the 49ers requires groundwater to be within 3-10 feet of the surface to survive and reproduce. Invasive Giant reed (*Arundo donax*), lower right in photo, can be found in growing clumps and can choke out native plant habitat (see high priority action #3).

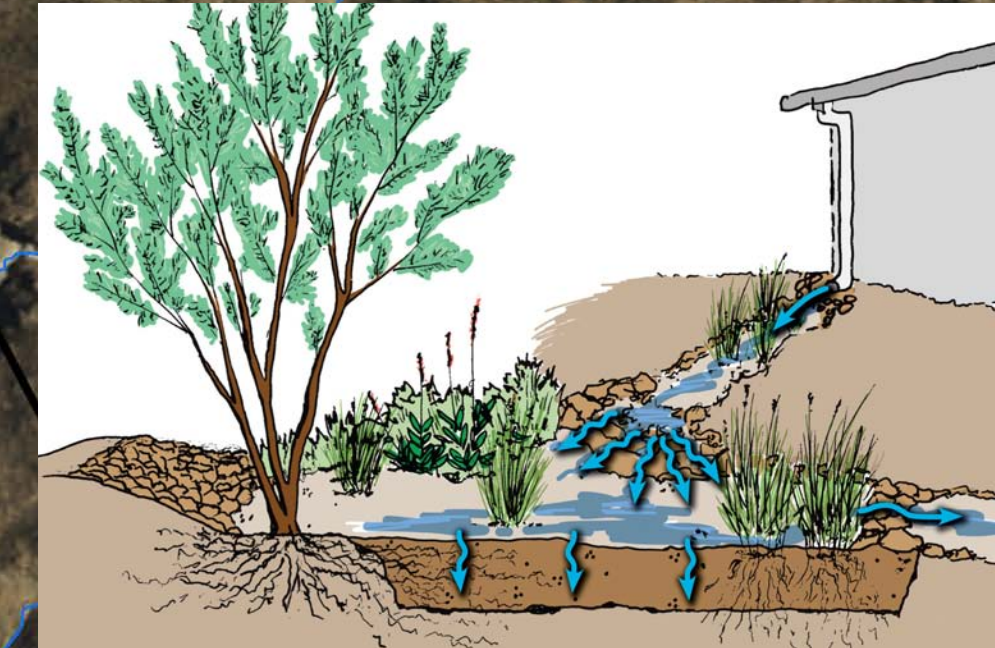
The shallow groundwater aquifer responds quickly to pumping which can lead to critical short-term declines in groundwater levels. Groundwater conservation during dry seasons or low rain-fall years is helpful to stabilize groundwater levels critical to flow in the creek and supporting riparian trees (e.g. cottonwoods, sycamores, and ash trees) along the creek.



Seasonal and annual creek flows have long supported riparian trees, wildlife, agriculture, and communities along Tanque Verde Creek. Unfortunately, most people today see only a sandy wash without flow most of the year.



A one-rock-dam restores degraded arroyos and slows stormwater flows which may enhance aquifer recharge.



Raingardens collect and infiltrate rainwater in your landscape. This reduces irrigation, promotes native plants and wildlife, and may enhance aquifer recharge. Tucson Water customers can participate in a rainwater harvesting incentive program.



High Priority Actions:

(1) Reduce groundwater demands along the creek to help stabilize, restore, and maintain groundwater levels within 1-3 feet of the channel bed surface during dry periods.

(2) Promote stormwater infiltration throughout tributary drainages and floodplains to buffer groundwater levels during drier seasons and drought years in this critical area.

(3) Remove invasive, non-native plants along the creek corridor including Giant reed (*Arundo donax*).



Upper Tanque Verde groundwater supports a vegetable farm and local farm stand. Mulching, windblocks, and drip irrigation help conserve groundwater use. Stabilizing groundwater levels will increase resilience of the riparian systems and water resources supporting community needs.

	Tucson Water Well	Groundwater Conservation Priority Areas
	Non-Reporting Well	High Potential to Reduce Groundwater Demand
	Reporting Well	Low-Moderate Potential for Groundwater Savings
	Golf Courses	Groundwater Recharge Priority Areas
	Schools	Arroyo Restoration Potential
	Parks	High Arroyo Recharge Potential
	Reclaimed Water Main	High Infiltration Potential
	Arroyos	Low Infiltration Potential
	Major Creeks	Streamshed Boundary

Map scale 1:16,000