Groundwater Recharge

About This Map

GIV Version 2.3 provides an estimate of the economic benefits of the Chicago Wilderness Green Infrastructure Vision that can be reliably measured.

The Groundwater Recharge ecosystem service helps maintain natural rates of groundwater recharge and aquifer replenishment, which is particularly important for those municipalities that rely on groundwater aquifers for their drinking water supplies. Significant costs can be incurred when there is a need to develop, treat, and maintain deeper wells and associated treatment systems. Groundwater also helps maintain the natural base flow of rivers and streams, which is important for human health and ecosystem health. The geology of groundwater infiltration and capture is complex, but one of the keys is minimizing impervious surface that diverts water into combined sewers and other stormwater management infrastructure before it can soak into the ground. The Chicago Wilderness GIV includes the natural river and stream network, and lands that serve as infiltration areas to underground aquifers.

Approximate value of Groundwater Recharge services provided by the GIV:

$1.5 Billion

KEY
Groundwater Recharge
(2014 dollars/acre/year)

$4,806
$857
$266

Water Supply by Municipality
Water Source

combo
ground
lake
lake*
river
Streams