



## GROUNDWATER FACTS FOR HAMILTON COUNTY

### How much groundwater is used in Hamilton County?

Nearly 154,000 people in Hamilton County -- about 18% of the population -- rely on groundwater. In fact, there are 16 different locations or wellfields in the county where water is withdrawn for public supply. The total daily withdrawal is almost 27 million gallons.

The communities that withdraw groundwater and their average daily withdrawal rates are shown below:

<u>Community</u>	<u>Average Withdrawal (millions of gal./day)</u>
Addyston	0.50
Cincinnati	16.61*
Cleves	0.61
Glendale	0.28
Harrison	0.92
Indian Hill	2.65
Lockland	0.84
Loveland	1.20
Reading	1.70
Wyoming	1.50

\*Withdrawn from the Bolton wellfield in southern Butler County

In addition to public water supply withdrawals, more than 22 million gallons are withdrawn in Hamilton County for industrial use.

### What are the groundwater pollution threats in the county?

In the past five years, the Ohio-Kentucky-Indiana Regional Council of Governments (OKI) has inventoried numerous potential sources of groundwater pollution in 14 categories. These sources are not necessarily causing pollution at this time, but they have the potential to do so unless managed properly. The areas surrounding water wells and contributing to their supplies can be particularly vulnerable because contaminants can travel and be drawn toward a well by its pumping action.

From a regional perspective, the inventory of potential pollution sources is very helpful in identifying groundwater management needs that cross political boundaries.

OKI's inventory of potential groundwater pollution sites in Hamilton County is summarized below:

<u>Site Category</u>	<u>No. in County</u>
Auto/Scrap Metal Salvage Yards	31
Cemeteries	21
Commodity Transfer Points	19
Demolition Landfills	19
Farm Livestock Operations	11
Hazardous Material Sites	184
Liquid Waste Disposal Sites	21
Municipal Sewage Sludge Sites	2
Onsite System Concentrations	7
Road Salt Storage Sites	28
Sand or Gravel Extraction Sites	28
Sites of Reported Spills	41
Solid Waste Disposal Sites	75
Wastewater Treatment Plants	7
County Total	494

**What can be done to manage and protect our valuable groundwater resources?**

Designating protection areas around drinking water wells in one way to protect underground water supplies. Provisions for these wellhead protection areas were adopted as part of the reauthorization of the federal Safe Drinking Water Act in 1986. This legislation calls for states to develop comprehensive programs to protect public water supply wells and wellfields from contamination from all human activities.

Management activities commonly employed within wellhead protection areas include regulation of land use through special ordinances and permits, prohibition of specific activities, and acquisition of land. These activities require local government action to be effective, and it is not unusual for one community to have its wellfields actually located within another community's jurisdiction. For that reason, interjurisdictional cooperation and strong public education are also needed for the success of wellhead protection programs.