



# **Wellfield Protection Program**

**A Local Program Working On A Global Issue**

**Where Does Our Drinking Water Come From?**

**What Are Public Wellfields? What Are Wellfield Zones?**

**What Regulations Protect Public Wellfields? What Part Do Cities Play In Wellfield Protection?**

**Our Mission --- Our Organization --- Our Goals --- Major Accomplishments**

**You Can Help Protect Our Drinking Water Supply By:**

## **Where Does Our Drinking Water Come From?**



Broward County obtains its drinking water from underground deposits of limestone and sandstone called the Biscayne Aquifer. Drinking water is extracted from supply wells that pump water from 60 to 160 feet below the surface. The raw water is pumped to treatment plants where it is treated and disinfected to kill potentially harmful microbes, then it is distributed to the public.

## **What Are Public Wellfields?**

A public wellfield is a tract of land which contains one or more wells for supplying potable water to the public. As of June 2000 there were 41 wellfields consisting of 340 wells throughout Broward County.

# What Are Wellfield Zones?

Wellfield zones are delineated by computer models and depict the time it takes a theoretical contaminant to travel from the point it enters the ground to a supply well. Broward County has three delineated protective wellfield zones; Zone 1, Zone 2 and Zone 3.

## **Zone 1:**

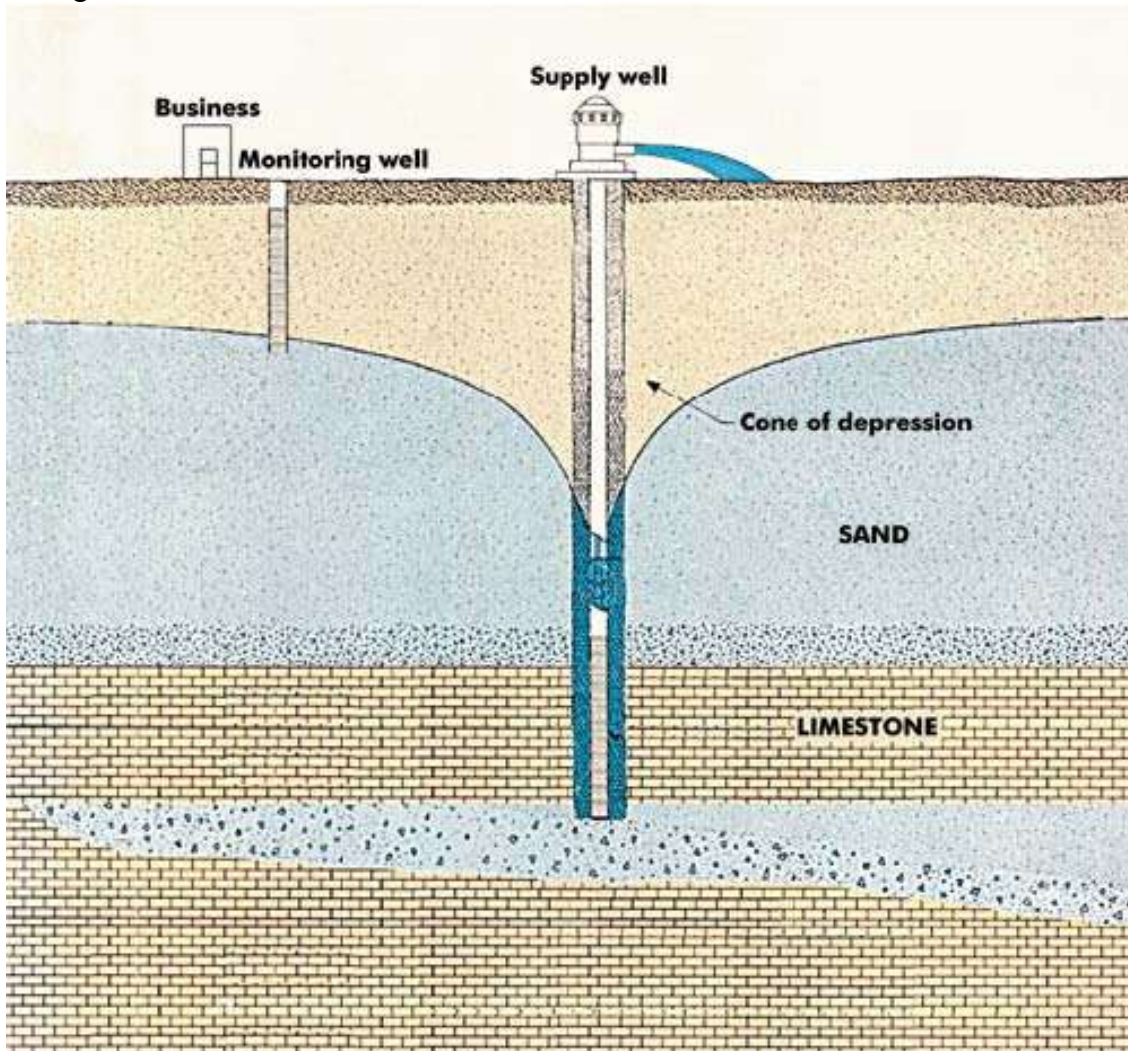
Provides for up to a 10-day buffer around the wellfield. No hazardous chemicals (regulated substances) are permitted within Zone 1.

## **Zone 2:**

Provides up to a 30-day buffer. Businesses are required to be licensed and test the ground water at their facility for regulated substances they store or use on site.

## **Zone 3:**

Provides up to a 210-day buffer. Businesses are required to be licensed and secondary containment is mandated for their stored regulated substances.



## What Regulations Protect Public Wellfields?



Chapter 27, Article XIII, Wellfield Protection, of the Broward County Code, controls the non-residential storage, handling, use, or production of regulated substances around supply wells within the wellfield zones. Chapter 62-521, Wellhead Protection Rule of the Florida Administrative Code, and the Safe Drinking Water Act are State and Federal laws that are used to protect and manage wellhead protection areas.

## What Part Do Cities Play In Wellfield Protection?

Broward County recognizes that each of its residents has a right to drink safe water and that Broward County's potable water supply is both a sustainable natural resource and an economic asset.

### Our Mission

The County created its Wellfield Protection Program to preserve a safe and healthful environment and to maintain a high level of environmental quality by protecting Broward County's wellfields.

### Our Organization

The Wellfield Protection Program's responsibility and authority are vested in the Wellfield Protection Team. This team of Field Inspectors and a Program Coordinator are knowledgeable in conducting field inspection activities and have chemical, environmental engineering and hydrogeology experience.

## Our Goals

Protect the quality of Broward County's potable water supply and minimize the presence of hazardous chemicals in protected wellfield areas;

1. Maintain and enforce a licensing, inspection, and monitoring program to abate potential threats to our water supply from hazardous chemicals;
2. Implement Chapter 27, Article XIII Wellfield Protection Ordinance;
3. Conduct inspections in protected wellfield areas to locate possible contamination sources;
4. Foster working relationships with the public drinking water utilities and the regulated public; and
5. Implement the Division's risk-based inspection strategy by inspecting facilities which pose the greatest potential risk most frequently.

## Major Accomplishments

Hundreds of businesses are licensed to operate within the wellfield zones. Some businesses have removed and/or replaced their storage tank systems with double-walled or secondary containment tank systems equipped with upgraded release detection systems to give operators an early warning against a potential release. Some businesses in wellfield Zone 2 test their ground water for chemicals they store or use, and submit the results to the PPRAQD for review every 90 days. Municipal utilities test the raw water for regulated substances stored in Zone 2 and submit the results to the PPRAQD for review every 90 days.

## You Can Help Protect Our Drinking Water Supply By:

- 1) Taking your used oil to a local collection site and all hazardous waste, such as used paint thinners, turpentine, and lead-acid batteries, to proper hazardous waste collection sites.
- 2) Contacting the **Waste and Recycling Services hotline (954-765-4999)** for more information on used oil and hazardous waste collection programs.
- 3) Contacting the **PPRAQD hotline (954-519-1499)** to report illegal dumping of oil or other hazardous materials.