

*What not to
put down the
drain*

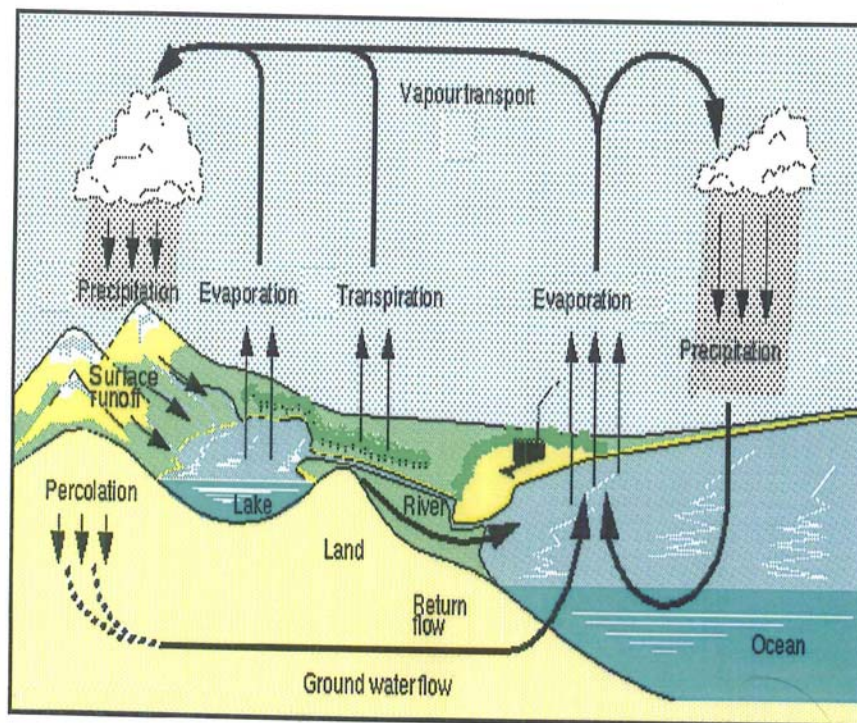
Presenter:
Jim Miskis,
Peters Township
Sanitary Authority

Why is protecting our water supply important?

Water on earth moves in a continuous cycle. This is called THE WATER CYCLE. There is about the same amount of water on earth now that there was when the dinosaurs roamed our planet.

How is this possible?

Water travels to many places in many different ways. Where does it go and how does it get there?



Courtesy Erich Roeckner, Max Planck Institute for Meteorology

Why is protecting our water supply important?

- Waterborne Diseases
 - Cholera
 - Dysentery
 - Typhoid
- What do these diseases have in common?
 - Cause Diarrhea, which helps spread the disease
- Think about Haiti.

Why is protecting our water supply important?

- Someone downstream is drinking our wastewater
- And we are downstream of many communities discharging wastewater
- Also
 - Protect fish, aquatic life
 - Recreation

Bacteria in Sewage

- Fecal Coliforms, indicators
- Raw Sewage
 - 100,000,000 per Liter!
- Treated, Disinfected Sewage
 - Less than 200 per Liter
- How many in disinfected drinking water?
- 0 (hopefully)

Overview of Wastewater Treatment Process

5 Steps to Clean Water





Reasons to be careful in what goes down the drain

- Treatment process designed to remove certain things only
- Can cause explosive atmosphere in the sewer
 - Gasoline,
 - Paint thinner
- Can be toxic to biology used to accomplish treatment
 - Herbicide,
 - Weed killer

Things that should not go down the drain

- Water!
 - That is rain water or groundwater
 - Why?
 - Can overload the sewers



Prescription Drugs



Proper Disposal of Prescription Drugs

Office of National Drug Control Policy February 2007

Federal Guidelines:

- Take unused, unneeded, or expired prescription drugs out of their original containers and throw them in the trash.
- Mixing prescription drugs with an undesirable substance, such as used coffee grounds or kitty litter, and putting them in impermeable, non-descript containers, such as empty cans or sealable bags, will further ensure the drugs are not diverted.
- Flush prescription drugs down the toilet *only* if the label or accompanying patient information specifically instructs doing so (see box).
- Take advantage of community pharmaceutical take-back programs that allow the public to bring unused drugs to a central location for proper disposal. Some communities have pharmaceutical take-back programs or community solid-waste programs that allow the public to bring unused drugs to a central location for proper disposal. Where these exist, they are a good way to dispose of unused pharmaceuticals.

The FDA advises that the following drugs be flushed down the toilet instead of thrown in the trash:

Actiq (fentanyl citrate)
Daytrana Transdermal Patch (methylphenidate)
Duragesic Transdermal System (fentanyl)
OxyContin Tablets (oxycodone)
Avinza Capsules (morphine sulfate)
Baraclude Tablets (entecavir)
Reyataz Capsules (atazanavir sulfate)
Tequin Tablets (gatifloxacin)
Zerit for Oral Solution (stavudine)
Meperidine HCl Tablets
Percocet (Oxycodone and Acetaminophen)
Xyrem (Sodium Oxybate)
Fentora (fentanyl buccal tablet)

Note: Patients should always refer to printed material accompanying their medication for specific instructions.

Office of National Drug Control Policy
ONDCP, Washington, D.C. 20503
p (202) 395-6618 f (202) 395-6730



HOUSEHOLD HAZARDOUS WASTE CHART

The following chart prepared by the Water Environment Federation will help you establish the most effective means of disposing of typical hazardous wastes used around your home or garden.

Blue dots (●) indicate products which can be poured down the drain with plenty of water. If you have a septic tank, additional caution should be exercised when dumping these items down the drain. In fact, there are certain chemical substances that cannot be used with a septic tank. Read the labels to determine if a product could damage the septic tank.

Yellow diamonds (◆) indicate materials which cannot be poured down the drain, but can be safely disposed of in a sanitary landfill. Be certain the material is properly contained before it is put out for collection or carried to the landfill.

The red boxed squares (◻) indicate hazardous wastes which




should be saved for a community wide collection day or given to a licensed hazardous wastes contractor. (Even the empty containers should be taken to a licensed contractor if one is available.)

Green packages (◊) in the fourth column indicate recyclable material. If there is a recycling program in your area, take the materials there. If not, encourage local officials to start such a program.

For more information on the safest way to dispose of these and other products contact your area's solid and hazardous waste department or federal environmental agency. We suggest that you note here these important phone numbers in your local area:

Hazardous Waste Management Agency ☎ _____

Poison Control Center ☎ _____

		TYPE OF WASTE			
		●	◆	◻	◊
 <p>KITCHEN</p>	Aerosol cans (empty)		◆		◊
	Aluminum cleaners	●			
	Ammonia based cleaners	●			
	Bug sprays			◻	
	Drain cleaners	●			
	Floor care products			◻	
	Furniture polish			◻	
	Metal polish with solvent			◻	
	Window cleaner	●			
	Oven cleaner (lye base)		◆		
 <p>BATHROOM</p>	Alcohol based lotions (aftershaves, perfumes, etc.)	●			
	Bathroom cleaners	●			
	Depilatories	●			
	Disinfectants	●			
	Permanent Lotions	●			
	Hair relaxers	●			
	Medicine (expired)	●			
	Nail polish (solidified)		◆		
	Toilet bowl cleaner	●			
	Tub and tile cleaners	●			
 <p>GARAGE</p>	Antifreeze			◻	◊
	Automatic transmission fluid			◻	◊
	Auto body repair products		◆		
	Battery acid (or battery)			◻	◊
	Brake fluid			◻	
	Car wax with solvent			◻	
	Diesel fuel			◻	◊
	Fuel oil			◻	◊
	Gasoline			◻	◊
	Kerosene			◻	◊



WORKSHOP

Motor oil				☐	◆
Other oils				☐	
Windshield washer solution	●				
Paint brush cleaner with solvent				☐	◆
Paint brush cleaner with TSP	●				
Aerosol cans (empty)		◆			◆
Cutting oil				☐	
Glue (solvent based)				☐	
Glue (water based)	●				
Paint — latex		◆			◆
Paint — oil based				☐	
Paint — auto				☐	
Paint — model				☐	
Paint thinner				☐	◆
Paint stripper				☐	
Paint stripper (lye base)	●				
Primer				☐	
Rust remover (with phosphoric acid)	●				
Turpentine				☐	◆
Varnish				☐	
Wood preservative				☐	



GARDEN

Fertilizer		◆			
Fungicide				☐	
Herbicide				☐	
Insecticide				☐	
Rat poison				☐	
Weed killer				☐	



MISCELLANEOUS

Ammunition				☐	
Artists' paints, mediums				☐	
Dry cleaning solvents				☐	◆
Fiberglass epoxy				☐	
Gun cleaning solvents				☐	◆
Lighter fluid				☐	
Mercury batteries				☐	◆
Moth balls				☐	
Old fire alarms				☐	
Photographic chemicals				☐	
Shoe polish		◆			
Swimming pool acid				☐	

The preceding chart is based on information from the United States Environmental Protection Agency's Hazardous Waste regulations. The Water Environment Federation assumes no responsibility and disclaims any liability for any injury or damage resulting from the use or effect of any product or information specified in this publication. The information contained in this pamphlet is intended as a general guideline. Laws and regulations may vary from state to state. Additionally, product formulation can change over time. Be sure to check manufacturer's label for specific disposal guidelines. Above all use common sense!

Pop Quiz

Which would be worse for fish and stream life in Brush Run?:

- A. Pour a million gallons per day of properly treated wastewater into the stream; or
- B. Pour a million gallons per day of drinking water into the stream

Answer:

B. Drinking water will contain chlorine which is toxic to fish and aquatic organisms. While the treated wastewater is disinfected by the use of chlorine, the chlorine is removed to near non-detectable levels before it is discharged to the stream. Therefore, drinking water would cause significantly more harm.