

## Potomac River Watershed

- 4th Largest river on the Atlantic Coast
- Watershed covers 14,670 square miles
  - Larger than Connecticut and New Jersey Combined
- Over 5 million people live in the watershed
  - Covers Parts of VA, MD, WV, PA and all of DC
- Provides almost 25% of the fresh water to the Bay and 34% of the sediment and 24% of the nutrient pollution

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Potomac RIVERKEEPER®  
Shenandoah RIVERKEEPER®

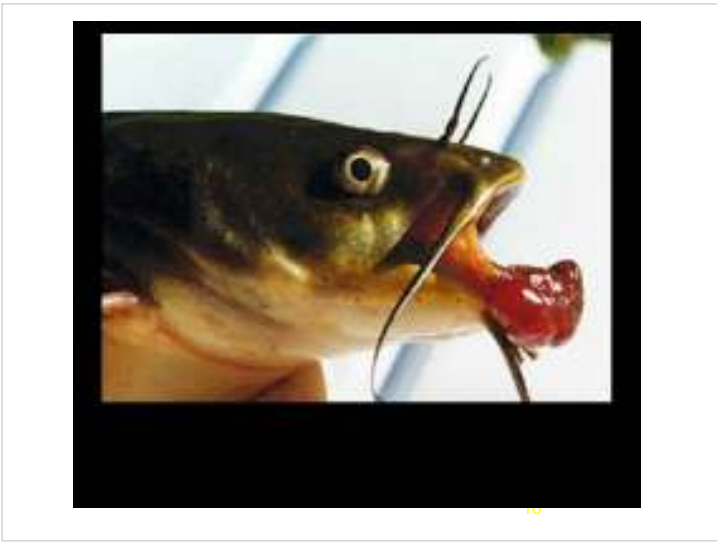
*Stopping Pollution and Restoring Clean Water*

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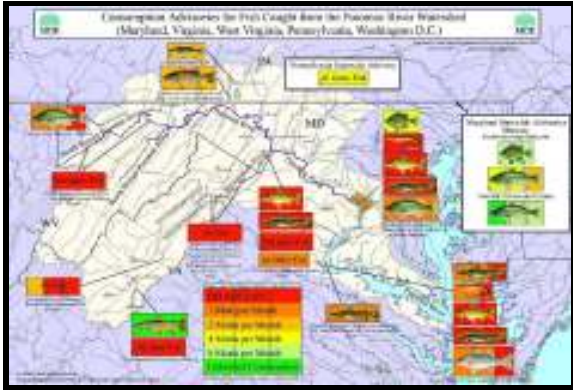


In the District  
there are 60  
combined sewer  
overflows  
spewing 2.5  
billion gallons  
every year into  
OUR NATION's  
RIVER





### Fish Consumption Advisories in the Potomac Watershed





## THE CANARY IN THE RIVER

SOMETHING IN THE SOUTH BRANCH OF THE POTOMAC RIVER IS NOT RIGHT

**It's one thing** to see a fish with a wound, or a fish that has died. It's another thing to see a fish that has died with a large, pinkish, irregular mass inside its body. This is what happened to a fish caught in a net in the South Branch of the Potomac River. The fish was found dead, and its internal organs were exposed. A large, pinkish, irregular mass was visible inside the fish's body. This is a sign of a serious health problem, possibly a tumor or a parasite. The fish was found in a net in the South Branch of the Potomac River, which is a tributary of the main Potomac River. The fish was found in a net in the South Branch of the Potomac River, which is a tributary of the main Potomac River. The fish was found in a net in the South Branch of the Potomac River, which is a tributary of the main Potomac River.



**More Amphibians Now Endangered**

An alarming worldwide increase in amphibians that face extinction, such as the tiger salamander, shows, say, signs of environmental degradation that could threaten humans.

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## Male Bass in Potomac Producing Eggs

### Pollution Suspected Cause of Anomaly in River's South Branch

By DAVID A. FORESTERFIELD  
Washington Post Staff Writer

MOOREFIELD, W.Va.—The South Branch of the Potomac River is as clear as bottled water here, where it runs over a bed of smooth stones about 230 miles upstream from Washington. But there is a mystery beneath this glassy surface. Many of the river's male bass are producing eggs.

Scientists believe this inversion of nature is being caused by pollution in the water. But they say the exact culprit is still unknown. It might be dioxin, estrogen, or perhaps human hormones dumped in the river with processed sewage. Chances are, it is not something that federal and state regulatory agencies test for in local waters.

The discovery has made the South Branch the latest example of an emerging national problem: Hormones, drugs and other man-made pollutants appear to be interfering with the chemical signals that make fish grow and reproduce.

While researchers look for answers in West Virginia, other scientists are testing Rock Creek, and another group is seeking financial support to test the rest of the Potomac to see whether they can find the same troubling effects downstream.

"Whatever's doing this to the fish may be the canary in the branch," says BASS, a 14-foot-long



## Endocrine Disruptors

### Potential endocrine disruptor:

PCBs  
pesticides  
CAFO waste  
pharmaceuticals  
contraceptive pill  
personal care products  
herbicides



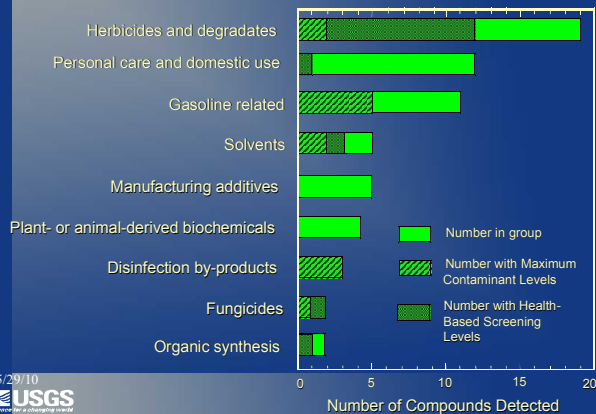
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## Emerging Contaminants

- Pesticides, pharmaceuticals, personal care products, plastics
- Intersex fish & fish kills
- EPA has been slow
- USGS studies
- Drinking water issues

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## Diverse groups of compounds detected in source water

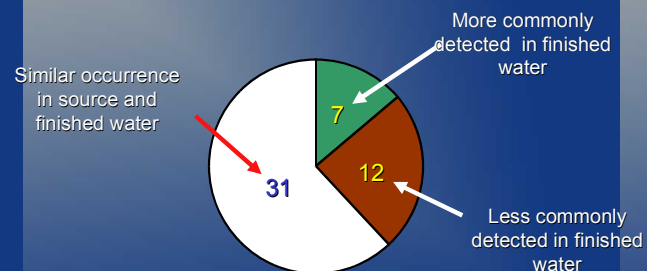


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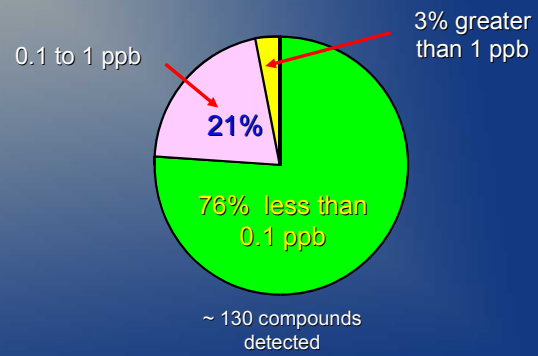
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## Compounds in Source Water Were Often in Finished Water

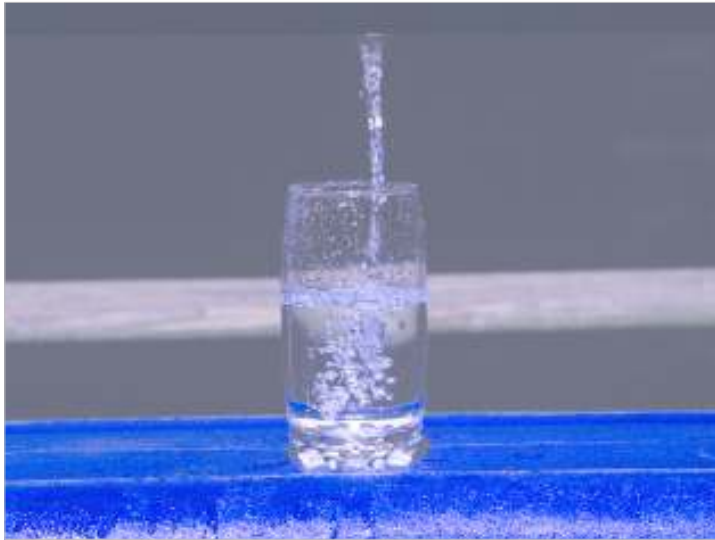
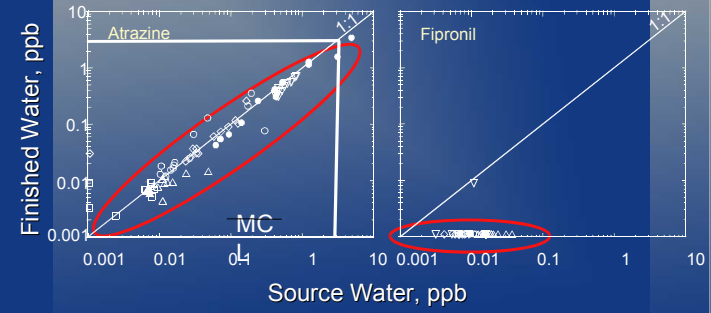


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## Concentrations are low in source water



## Concentrations of Some Compounds are Similar for Source and Finished Water



## How Do We Make the Change?

To get someone's attention,  
speak to their:

Health

Money

Children

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## Soap Box Final Three Minutes

Getting attention for  
the issue

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## Approach #1

“The Safety of our drinking water  
depends on the health of our rivers  
and streams.”

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## Is There a Better Approach for the Public?

### One That:

- Keeps People Interested
- Doesn't Scare Them
- Let's Us Work Together

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## Approach #2

“The best drinking water comes from a healthy river.”

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## Can We Work Together So People ...

Understand they are getting “safe” drinking water at the lowest price possible

Realize that if we don't stop polluting, today's intersex fish will be tomorrow's three-eyed or five-legged amphibian

Ask (without our prompting) those in power to do everything necessary to truly protect our source water by creating a healthy river.

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“The best drinking water comes from a healthy river.”

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