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**NRDC/EIP Report: *Swimming in Sewage*: Frequently Asked Questions**

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**Q:** Do we know how many people get sick each year from swimming in sewage or drinking sewage-contaminated water?

**A:** There are a variety of estimates, ranging from several hundred thousand to several million each year (see page 18 of *Swimming in Sewage*), but none of them are very good because we do not have good information on sewage releases, on cases of waterborne illness, or on the link between the two.

**Q:** Is sewage treatment the most important water pollution issue in the United States?

**A:** Sewage treatment plants are one of the largest controllable sources of pollution and sewage pollution has many damaging consequences, including drinking water contamination, beach closings, algal blooms, contaminated shellfish beds, basement backups, waterborne illness, coral reef damage, and depressed property values. While the Environmental Protection Agency has identified polluted runoff from agriculture as the largest source of water pollution, the Clean Water Act contains no effective controls for this industry.

**Q:** Are sewage discharges nationwide increasing?

**A:** Again, available data are very poor, especially for unpermitted discharges such as sanitary sewer overflows, but EPA says that, without substantial additional investment, the overall trend is for sewage pollution to increase over time. “[W]ithout substantially increasing investment and treatment efficiency,” EPA has stated, “by 2025 U.S. waters will again suffer from sewage-related pollutant loadings that are as high as they were in 1968—the highest in our nation’s history.” (See page 2 of *Swimming in Sewage*.)

**Q:** What is the difference between a combined sewer system and a sanitary sewer system?

**A:** Combined systems, located mostly in older cities in the East and Great Lakes region, were often built before there were sewage treatment plants, so they are designed to overflow and discharge raw sewage into waterways when it rains. Sanitary sewer systems were designed to carry sewage to the treatment plant. They are not designed to overflow, but may do so if a pipe breaks, a pipe is clogged, if a pump is malfunctioning, or for other reasons. A discharge from a sanitary sewer system is called a sanitary sewer overflow. Both combined sewer overflows and sanitary sewer overflows discharge raw sewage. Combined sewer overflows tend to be higher in volume and more diluted since the overflow contains storm water and sewage. They also usually occur in waterways through well-defined and permitted discharge points. Sanitary sewer overflows contain largely undiluted sewage that discharges wherever the overflow occurs, including homes, street, playgrounds, and waterways. The Clean Water Act prohibits all sanitary sewer overflows, but it authorizes discharges from combined sewer systems that meet the terms of EPA’s combined sewer overflow policy.

**Q:** What role has the Bush administration played in preventing sewage pollution?

**A:** The Bush administration has slashed funding for wastewater treatment and water enforcement, has withdrawn a Clinton administration regulatory proposal designed to control sanitary sewer

overflows, and has proposed to allow routine discharges of inadequately treated sewage when it rains. In general, Bush administration policies have made the problem worse, not better.

**Q:** Cities, counties and sewer operators are urging EPA to issue a new policy that would allow them to mix fully treated and partially treated sewage during heavy rains so long as the resulting discharge meets permit limits. Why do environmental and public health groups oppose this proposed EPA policy?

**A:** EPA's proposed policy would allow sewage to be discharged without effective treatment during routine rain events. Environmental and public health groups oppose it because it would increase sewage pollution into the environment, make more people sick from exposure to contaminated beachwater and drinking water sources, and cause more beach closings, shellfish bed closings, coral reef damage and fish kills – and lower property values. EPA's proposal would set Clean Water Act policy back nearly 30 years by allowing sewer operators to substitute dilution for effective sewage treatment to the detriment of public health and the environment.

**Q:** How can I find out about sewage pollution in my community?

**A:** There is not one comprehensive source that tracks sewage pollution. NRDC and EIP are recommending that the federal government establish a national sewage inventory modeled on the Toxics Release Inventory. In the meantime, there are EPA Web sites with information about beach water quality and beach closings (<http://www.epa.gov/waterscience/beaches>), compliance records of sewage treatment plants in your area (<http://www.epa.gov/echo>), and the lakes and rivers in your area that are polluted with sewage (<http://www.epa.gov/waters>). The Centers for Disease Control and Prevention also tracks waterborne disease outbreaks, and, when known, identifies the source of the outbreak (<http://www.cdc.gov/mmwr>).

**Q:** Do people really get sick from swimming in sewage?

**A:** Absolutely. While the data are not good enough to show exactly how many people get sick every year, we know that people suffer from diarrhea, vomiting, respiratory infections, ear infections, rashes and even very serious or life-threatening illnesses such as hepatitis and meningitis after swimming in sewage-laced water. In 1994, a surfer who became sick with Hepatitis A (a viral infection) after surfing in Malibu, California, described his symptoms to the Los Angeles Times: "I was bedridden for nearly two months. My urine was like Coca-Cola, my stool was like white glue and my eyes were yellow." Older Americans, infants, cancer patients, and others with compromised immune systems can die from drinking or swimming in sewage-contaminated water.

**Q:** Aren't all the pathogens killed in the sewage treatment process?

**A:** Effective sewage treatment is about minimizing the risk of waterborne illness from the broad range of pathogens in sewage – bacteria, viruses and parasites. Each step of the treatment process removes some pathogens, but some types of organisms, such as *Cryptosporidium*, are very resistant to treatment. Therefore, there is still some danger from exposure to fully treated effluent. The risks are substantially increased, however, when the sewage is treated less, as it would be under the Bush administration proposed "blending" policy, which would allow sewer operators to replace effective treatment with dilution when it rains.

**Q:** When a sewer overflow occurs, how is the public notified?

**A:** Often sewer operators do not notify the public about sewer overflows, especially when the discharge is not into a river or lake, but instead into a street, playground or park. Authorities periodically test coastal waters, including the Great Lakes, for sewage contamination, and when health levels are exceeded, they may close beaches or issue an advisory, but communities are not required to close beaches until the sewage has reached the beach water. NRDC and EIP support a bill in the House of Representatives, H.R. 2215, which would require sewer operators to monitor for overflows and notify the public and local public health officials of an overflow event that may pose a risk to public health.

**Q:** What can I do to prevent sewage pollution?

**A:** You can help reduce sewage pollution from your home by reducing your water use, not pouring grease or oil down the drain where it will block sewer pipes, cleaning out or replacing clogged sewer pipes that lead to the sewer system (called sewer “laterals”), and maintaining your septic system if your home is not connected to a public sewer.

You also can take action to support better sewage treatment:

- Urge the Bush administration to withdraw its proposed sewage treatment “blending” policy and instead require communities to take steps to eliminate sewer overflows.
- Urge Congress to establish a Clean Water Trust Fund to help communities reduce sewage pollution.
- Urge your local sewer authority to provide full treatment for all sewage and not use taxpayer dollars to build new sewer lines.

For more information on beach water pollution, go to

<http://www.nrdc.org/water/oceans/ttw/titinx.asp> and <http://www.nrdc.org/water/oceans/qttw.asp>.

For more information about NRDC’s efforts to clean up sewage pollution in the Anacostia River in Washington, D.C., go to <http://www.nrdc.org/water/pollution/fanacost.asp>.

The Natural Resources Defense Council is a national, non-profit organization of scientists, lawyers and environmental specialists dedicated to protecting public health and the environment. Founded in 1970, NRDC has more than 1 million members and e-activists nationwide, served from offices in New York, Washington, Santa Monica and San Francisco. More information is available at NRDC’s Web site, <http://www.nrdc.org/>.

The Environmental Integrity Project is a nonpartisan, nonprofit organization established in March 2002 to advocate for more effective enforcement of environmental laws. The organization was founded by Eric Schaeffer, former director of the U.S. Environmental Protection Agency’s Office of Regulatory Enforcement, with support from the Rockefeller Family Fund and other foundations. More information is available at the organization’s Web site, <http://www.environmentalintegrity.org>.

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