

# NRDC Reports Record Highs for Beach Closings, Cites Stormwater Runoff as Cause of Increased Infections

by James Hart

Beach closings and advisories continue to hit record highs along U.S. coastal zones, the **National Resources Defense Council** (NRDC) stated in a recent report. The Council claims that the incidence of infections associated with recreational water use has steadily increased over the past several decades, and that stormwater runoff continues to be the most frequently identified source of beach closing and advisory days throughout the nation.

The report, titled *Testing the Waters: A Guide to Water Quality at Vacation Beaches*, stated that last year, beach closings and advisories hit their sixth-highest level in the 20 years that NRDC has been tracking them. Further, the continuing high number of closing and advisory days, combined with a relatively constant level of bacterial contamination at ocean, bay and Great Lakes beaches suggests that our nation's beaches require a more concerted effort to identify and control the sources of water pollution that puts swimmers at risk.

While authorities are doing a better job monitoring beaches than in the past, the report states that the improved monitoring further reveals the extent to which the nation's beachwaters continue to be polluted and unfortunately, monitoring has not revealed the total causes of pollution. In 2009, more than half of the beach closing and advisory days were reported as due to unknown sources of contamination. The Council also warns that dirty coastal waters threaten the nation's economy as much as its public and environmental health. "A stark illustration of the devastation that polluted ocean water can wreak on coastal economies is playing out this summer as a result of the *Deepwater Horizon* oil spill in the Gulf of Mexico," the report states. Coastal tourism and recreation is one of the fastest growing business sectors, enriching economies and supporting jobs in communities along U.S. shores and those of its tributaries. In 2000, U.S. coastal tourism and recreation created 1.6 million jobs.

Despite the public benefits and economic necessity of coastal areas and beaches, these areas continue to be

plagued by pollution and contaminated runoff, particularly from stormwater. According to the report, polluted runoff and stormwater caused or contributed to 7,282 beach closing and advisory days in 2009. Although this is a three percent decrease from 2008, stormwater runoff still contributed to more than 80 percent of the total number of beach closings and advisory days with a reported contamination source.

The problem will also likely worsen as urban areas continue to grow. **The U.S. Environmental Protection Agency** (EPA) currently estimates that more than 10 trillion gallons of untreated stormwater is discharged into surface waters each year, and by 2025, more than a quarter of the nation's total coastal acreage will be developed.

The report also claims that combined sewer overflows (CSOs) are a major cause of pathogen contamination in marine and Great Lakes waters near urban areas. As of 2002, CSOs discharged 850 billion gallons of raw sewage and stormwater, and 43,000 CSO events occurred throughout the nation. In addition, nearly 70 percent of all sewage overflows from human waste sewage lines have been due to obstructions such as tree roots or grease clogs, line breaks and mechanical failures. "Wet weather places demands on sanitary sewer systems even though these systems do not treat stormwater runoff," the report states. "This is because even when there are no improper connections between stormwater and sanitary sewers, water seeps through manholes and into the sewer lines and also falls onto the surface of the treatment units during rain events."

According to the Council, this can lead to raw sewage discharges from manholes, overflowing pipes and treatment plant bypasses. Although only 26 percent of sanitary sewer overflows nationwide were caused by wet weather events, they accounted for nearly 75 percent of the total sanitary sewer overflow volume discharged.

The report also warned of the environmental costs created by concentrated animal feeding operations (CAFOs) and their stormwater discharges.

EPA estimates that confined livestock produce about three times the amount of waste as people nationwide, but CAFOs typically lack treatment facilities for livestock waste even remotely comparable to those that treat human sewage. In addition, many large feedlot operations have historically avoided getting Clean Water Act (CWA) permits.

Due to these stressors, the most recent **Center for Disease Control** report on waterborne disease and outbreaks associated with recreational water concluded that the incidence of infections associated with recreational water use has steadily increased over the past several decades.

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“Finally,” the report states, “it is time for the EPA and state and local authorities to seriously address the sources of beachwater pollution, which most often are stormwater and sewage pollution. Prevention is the best way to make sure that a day at the beach will not turn into a night in the bathroom or worse, in a hospital emergency room.”

NRDC stated that there are “a myriad of solutions” for these environmental problems that can stop stormwater runoff and sewage overflows before they can happen. “Utilizing methods like green roofs, permeable pavement, roadside plantings and rain barrels” are often the cheapest and most effective way to address these problem sources, the council stated. “By stopping rain where it falls – allowing it to filter into the ground or strong it – green infrastructure prevents runoff and overflows from the start.”

The report also suggests that Congress enact more comprehensive legislation to help communities prepare for increased stormwater pollution and sewer overflows, and voters in turn should support increased federal, state and local funding for urban stormwater programs and for repairing, rehabilitating and upgrading their aging sewer systems.

NRDC also stated that to fix these issues, EPA needs to plug the loopholes that allow industrial livestock operations to continue discharging animal wastes into U.S. waters. Specifically, EPA must revise its rules to require all feedlots to keep animal waste out of these waterways.