The Obama Administration is struggling to decide whether to keep or scrap the key Bush era policy used to stifle new environmental regulations and limit enforcement of existing laws. And despite the professed openness of this administration and its break with a business-oriented, anti-environment past, the new Environmental Protection Agency has so far refused to alter or discuss the issue or any inter-agency analysis of its far flung impacts.

The lack of action means that more than 500 power plants located on rivers, lakes and estuaries around the nation will continue to kill – by EPA estimates – hundreds of billions of fish annually and dump their rotting mass into public waterways despite provisions of the Clean Water Act designed to prevent such aquatic degradation.

At issue is the use of cost benefit analysis to govern the development or implementation of environmental regulations across a broad spectrum of government agencies. There is nothing particularly new or nefarious about CBA: it is a tool which has been used by many agencies and the private sector for decades. Patricia Roberts Harris, Secretary of Health, Education and Welfare during the Jimmy Carter administration, used it in deciding too few people benefitted from heart transplants – which then cost about $150,000 – for Medicaid to fund such operations. In those days, 15 kidney transplants could be had for the same amount.

Every safety regulation, such as the level of medical equipment mandated on airplanes, involves weighing the number of lives saved against the cost of mini-emergency rooms on every flight. But the use of CBA was an option providing guiding information, not a mandate with road blocking qualities.

Under President Bush, however, all proposed regulations had to be subject to CBA and if there were any costs to business, it either had to be scrapped, or justified to the Office of Management and Budget. Since approval was unlikely in an administration openly hostile to regulations in general and environmental rules in particular, agencies such as the EPA chose to drop the regulation, suggest voluntary programs, or propose substitutes which may not be as comprehensive. The EPA shied away from mandating regulations even if the costs were relatively small, or existing laws seemed to dictate the expense.

The issue was publicly dumped into the lap of EPA Administrator Lisa Jackson April 1 when the U.S. Supreme Court, in a 6-3 decision, upheld the right of the agency to use CBA to allow the Indian Point nuclear power plants to continue killing more than two billion fish in New York’s Hudson River annually rather than impose the cost of retrofitting a less destructive cooling system for its massive electric generators.

The conflict between the environmental group Riverkeeper and Entergy Corp., the nation’s second largest nuclear energy company (Entergy Corp. V. Riverkeeper, Inc. ) grew out of decisions first at the state level by Republican Gov. George Pataki and, subsequently, the EPA, to ignore requirements of the 1972 Clean Water Act they felt were not in Entergy’s best financial interest. Under terms of the Act, discharge permits into the nation’s waterways are to be reviewed every five years and companies are required to use the “Best Technology Available” to minimize the impact of their discharges on the local aquatic system. But retrofitting a power plant for an environmentally benign cooling system costs money – which is where BTA came in second to the administration’s use of CBA.

At issue is the use of “once-through” cooling systems for power plants, in which massive amounts of water are sucked into the plant, run through heat exchangers to cool the generators, and then
dumped back into the public water. In the process, literally billions of fish – particularly the small fry and eggs – are sucked into conduits up to 40 feet wide and, essentially, baked to death during the heat exchange.

When the heated water is dumped back into the waterway it creates a thermal barrier which fatally shocks passing fish. In this case, the twin nuclear reactors at Indian Point occupy one side of a three-mile-wide bend in the Hudson River just south of West point. Across from these are two, smaller, coal fired power plants: Roseton, and Bowline.

The plants’ effect on the river is due to the enormous volumes of water they use. Indian Point, Roseton and Bowline are the first-, sixth- and seventh-largest users of water in the state, respectively, taking in 1.69 trillion gallons annually, according to an assessment by the State Department of Environmental Conservation. That is twice the volume of water in the entire 153-mile Hudson River estuary from the Battery in southern Manhattan to the city of Troy, and 3.5 times the amount of water used annually by 9 million residents in New York City and its northern suburbs of Westchester and Putnam counties.

According to the state’s environmental impact assessment, the plants generate a three-mile thermal barrier across the Hudson by pumping a total of 220 trillion BTUs of waste heat to the river. That amount of heat is equal to the heat that would be generated by the daily detonation of a 15-kiloton nuclear bomb – the type that leveled Hiroshima – approximately every two hours, every day of the year. The State DEC counted more than two billion fish killed annually, either when they are cooked in the plant or shocked by the thermal barrier in the river.

While a majority of the conservative Supreme Court decreed it is permissible for the EPA to use cost benefit analysis when determining compliance with the Clean Water Act, the dissent written by Justice John Paul Stevens and backed by Justices Ruth Bader Ginsburg and David Souter is instructive.

In their view, Stevens wrote, “Unless costs are so high that the best technology is not ‘available,’ Congress has decided that they are outweighed by the benefits of minimizing adverse environmental impact. Section 316(b) neither expressly nor implicitly authorizes the EPA to use cost-benefit analysis when setting regulatory standards; fairly read, it prohibits such use.”

The reason Congress did not authorize such use is because the factors considered are arbitrarily chosen. “The process is particularly controversial in the environmental context in which a regulation’s financial costs are often more obvious and easier to quantify than its environmental benefits” Stevens observed. “And cost-benefit analysis often, if not always, yields a result that does not maximize environmental protection.”

In this case, the EPA estimated that some 3.4 billion fish and shellfish were killed each year – a figure 75% higher than the estimate of the state’s environmental agency – but then struggled to put a value on the fish.

“To compensate,” stated Stevens, “the EPA took a shortcut: Instead of monetizing all aquatic life, the Agency counted only those species that are commercially or recreationally harvested, a tiny slice (1.8 percent to be precise) of all impacted fish and shellfish. This narrow focus in turn skewed the Agency’s calculation of benefits.

“When the EPA attempted to value all aquatic life, the benefits measured $735 million. But when the EPA decided to give zero value to the 98.2 percent of fish not commercially or recreationally harvested, the benefits calculation dropped dramatically—to $83 million. The Agency acknowledged that its failure to monetize the other 98.2 percent of affected species ‘could result in serious misallocation of resources,’ because its ‘comparison of complete costs and incomplete benefits does not provide an accurate picture of net benefits to society’.”
One reason for the disparity in numbers is that the Hudson River is contaminated with PCBs and has been designated the nation’s largest Superfund Site. Commercial fishing has been banned from the river for more than a decade.

These vastly different numbers are significant since the EPA estimated that it would cost Entergy about $300 million to retrofit a closed-cycle cooling system at Indian Point which would eliminate the thermal barrier and reduce the annual fish carnage by about 98%. That is far more than the value of the commercial or recreational harvest, though far less than the straight value of the destroyed aquatic life.

Following the Supreme Court decision, the Obama administration could have announced a change in policy in which CBA is but a tool, not a requirement or a standard. Instead the EPA, in response to a query, issued a terse statement that “the subject is under review.” They refused, however, to explain what that meant: who is conducting a review, under what time frame, in conjunction with what other agencies, and to what end?

Spokesmen for the White House and OMB declined to comment at all.

Which is both unfortunate and baffling. This administration took office proclaiming that the days when politics and business interests trumped the law and environmental protections were over. EPA Administrator Jackson has stated frequently that enforcing the Clean Water Act is a priority – hence the new attention to the destructive coal mining practice of mountain top removal.

But if cost benefit analysis remains the operative word in this administration, then the best intentions of officials charged with protecting the nation’s environment will remain little more than wishes.