

NCPR  
September 8, 2011

## Irene's environmental legacy: wildlife, habitat hit hard by storm

Scientists, state officials and green groups are beginning to assess the widespread environmental damage caused by tropical storm Irene in the Adirondacks.

Some of the North Country's most important trout streams, including the Boquet and the Ausable Rivers, suffered severe erosion. The rain also caused oil, chemical and sewage spills.

Clean-up efforts could also cause more disruption and damage to wetlands and fish habitat.

The day after tropical storm Irene swept through New York and Vermont, Governor Andrew Cuomo described the power of all that rain and wind in this way:

“Mother nature wins at the end of the day, and I think that’s what this was,” the governor said.

But this wasn’t just a story of man vs. nature. It was also a story of nature vs. nature. While pummeling human communities in the North Country, Irene was simultaneously battering ecosystems, rivers, and natural habitats.

Larry Eichler is a research scientist with the Darrin Freshwater Institute in Bolton Landing. He says the kind of environmental trauma caused by a storm like Irene can be severe.

"Nutrients and contaminants certainly can be a major impact on lakes and river systems. All the eroded materials can create sediment issues, can create oxygen and habitat issues within those rivers and streams. So it can have a very dramatic effect."

Irene was so violent that a lot of the Freshwater Institute’s water quality testing stations around Lake George were washed away or destroyed.

Eichler says it’s clear that a lot of stuff wound up in places it’s not supposed to be:

"They estimate as many as a hundred boats sank in Lake George, so there's probably a certain amount of fuel leakage and things like that. Other lakes in the Adirondacks, I'm sure, suffered the same."

There are so many sources of pollution following this storm that scientists say it will be hard to sort out where contamination is coming from.

In many cases, the source will be the basements in homes like this one in Ausable Forks, right on the bank of the Ausable River.

Inside, you can smell the reek of fuel oil from where the tank tipped over in the flooded basement.

All along this river valley, people say their septic systems – full of chemicals and human waste – simply washed away.

"It kind of washed out our whole back yard, our septic systems came up, it flooded our basement," said John Marshall, who owns a home in Keene on the banks of Dart Brook.

John Sheehan, with the Adirondack Council, says all that stuff poses environmental hazards, not just to fish and wildlife, but to people as well.

"An awful lot of stuff washed into rivers and, downstream, that's going to be dangerous to remove. There are pesticide containers and fuel tanks sitting in places they don't belong."

But Irene didn't just contaminate these rivers – in many cases, it actually reshaped the riverbeds by destroying the deep channels and pools that have existed for decades.

In the days after Irene, backhoes have been working in the gravel bed of Dart Brook in Keene, digging at massive boulders, trying to rechannel the river – to put the water back where it used to flow.

Mark Gerstman, deputy executive commissioner for the Department of Environmental Conservation, says his researchers are still unsure what all this damage has done to fish and wildlife.

"The streams look very different [after Irene]," Gerstman said. "The fishery will rebound. It may take time. They've been subject to a lot of duress as a result of a lot of stuff winding up in the river."

Another big question going forward surrounds the environmental impacts of the clean-up itself.

Governor Cuomo has already suspended most permitting requirements in the Adirondacks and in other flood-hit areas of New York state.

Speaking this week in Keene, the governor said he would ask the legislature to roll back even more environmental rules to expedite road rebuilding and other recovery efforts.

"We've come up with some very creative governmental initiatives," Cuomo said. "We want to waive certain DEC regulations and permits which normally eat up some time."

That move has drawn praise from many local residents and elected officials, including state Senator Betty Little.

"I think that was a great decision. A couple of the town supervisors I've talked to they've said, for our highway departments to be able to go in and do the work that needs to be done, and they have to do the work in record time."

Environmental groups have generally backed the governor's decision to suspend environmental rules in flood-hit areas.

But John Sheehan, with the Adirondack Council, says they want to make sure only legitimate emergency efforts are allowed.

"We are very concerned about what will happen long-term. But I think in the next couple of months we want to be as flexible as possible in trying to get people's lives back in order and in terms of getting transportation and the Park itself kind of stitched back together."

The Adirondack Park Agency's Keith McKeever says the state is keeping tabs on clean-up projects now underway—especially those in wetlands and riverbeds—to make sure they're necessary.

"We will provide a legally binding determination to municipalities or to private landowners if they are concerned or have any doubts about what constitutes an emergency activity," McKeever said.

State officials and scientists interviewed for this story say it is tricky and risky to have so many people doing work in rivers and wetlands so quickly without coordination and thorough review. With backhoes and bulldozers working in trout streams, there is the potential for more ecological damage.

Mark Gerstman with the DEC, says the state is trying to balance those concerns with the priority of helping people rebuild.

"Our staff is going to be out there, taking a look at that, trying to figure out how we can help people get the streams out of their lives."

Gerstman said the state will also "make sure going forward habitat is not lost and that we're not exacerbating future problems by channelizing [rivers] in ways that aren't called for by the emergency."