



Photo: Martin Neptune

Pəskehtək^wok

Joining of the Branches

Summer 2007 ~ Issue 1b

Penobscot Indian Nation
 Department of Natural Resources
www.penobscotnation.org/DNR/DNR1.htm

Phone Extensions

David Almenas, <i>Forest Technician</i>	7335
Ron Bear, <i>Forest Technician</i>	7335
John Banks, <i>DNR Director</i>	7330
Rhonda Daigle, <i>Water Quality Monitoring Program Coordinator</i>	7326
Kristin Dilworth, <i>Big Game Biologist</i>	7363
Yvonne "Cookie" Francis, <i>Administrative Assistant</i>	7331
Tim Gould, <i>Game Warden Supervisor</i>	7395
Dan Kusnierz, <i>Water Resources Program Manager</i>	7361
Jason Mitchell, <i>Water Resources Field Coordinator</i>	7381
Ed Paul, <i>Game Warden</i>	7392
Jan Paul, <i>Water Resources Field and Lab Technician</i>	7382
Angie Reed, <i>Water Resources Planner</i>	7360
Russ Roy, <i>Forest Manager</i>	7339
Jason Sockbeson, <i>Water Resources Trainee</i>	7381
Dennis Stevens, <i>Forester</i>	7337
Bill Thompson, <i>Air Quality Program</i>	7340
Binke Wang, <i>GIS Specialist</i>	7341

The bloom is back: Caution advised

WHAT IS GOING ON!? Similar to what happened back in the summer of 2004, the Penobscot River is experiencing a "bloom" of a particular kind of cyanobacteria named *Anabaena*.

Cyanobacteria are tiny organisms who float in the water and get their food (energy) from either the sun or things in the water. (See Summer 2004 Issue 3a of the DNR newsletter for more information on them.) A bloom is

the commonly used word to describe times of high concentrations of these organisms in the water - sometimes forming thick layers or scum on the surface. Currently, the highest concentrations are up at Weldon Dam. However our aerial surveys and water quality monitoring show that it extends well past Indian Island. While you may not have seen the river around Indian Island turn an intense blue-green color, **it is down here.**

WHY IS THIS HAPPENING AGAIN!? Also similar to the summer of 2004, the bloom is being caused by too much phosphorus (food for cyanobacteria) being dumped (discharged) into the West Branch by Katahdin Paper in Millinocket. The increased use of phosphorus was not as extreme as in 2004 but, obviously, enough to cause another bloom - even though not as severe. Phosphorus, in the form of phosphoric acid, is being

(Continued on next page)



The joining of East Branch (on the right) with the West Branch on August 9.

CAUTION ~ CAUTION

As a precaution, we recommend that you and your pets DO NOT ingest any river water at this time - especially near or in areas of large accumulations that look very blue-green in color.

(Continued from previous page)

used to brighten the pulp that the mill is buying so that we can all have whiter paper products.

There have been agreements in place that all mills on the river would monitor how much phosphorus they were putting into the river. This process was aimed toward voluntary limits so that blooms could be avoided. Currently there are no regulations on how much phosphorus can be discharged into rivers.

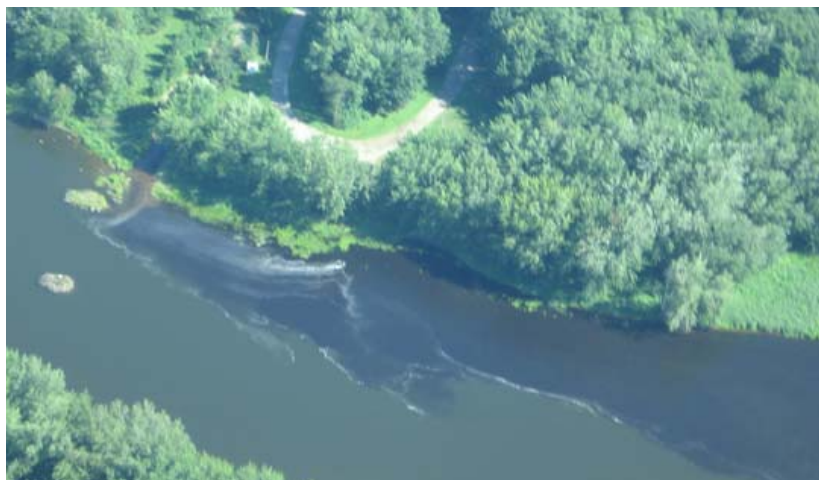
WHAT IS BEING DONE? Especially since the latest developments, PIN Water Resources staff are working even more closely with Maine Department of Environmental Protection (DEP) on putting legal requirements in place that would limit the discharges of phosphorus and other similar kinds of nutrients.

The presence of the bloom was found on the first day of an intensive three-day monitoring effort that combined staff from PIN, DEP, Environmental Protection Agency (EPA), paper mills and wastewater treatment plants. This monitoring was done to collect information that will help to better understand the current status of the main stem of the river. There were five teams out who were taking samples and measurements along more than 75 miles of the Penobscot twice each day at the same time - starting at 5am and ending at 5pm.

Since this intensive monitoring PIN staff have been the primary players in assessing the severity and extent of the bloom. There have been many more samples taken, aerial pictures taken and equipment put out in the river that takes measurements at regular intervals. PIN staff have also involved colleagues from the Bigelow Laboratory for Ocean Sciences (www.bigelow.org) who can help to get more and better data. Collin Roesler, with Bigelow, has generously offered staff time, equipment and analyses all free of charge.



Joining of the Mattwamkeag River (on the right) with the main stem of the Penobscot on Aug 9.



Discharge from the Lincoln Paper and Tissue mill on Aug 9.

Unfortunately, Katahdin Paper has not yet reduced the amount of phosphorus they are discharging.

We will keep you posted on any changes in the situation.

**If you have any questions about this bloom please call:
Angie Reed at 817-7360 or
Dan Kusnierz at 817-7361.**