

WHERE IS THE SAND COMING FROM?

Much of the Boquet River is currently listed as a NYSDEC "priority water problem" due to the amount of sand and fine sediments embedding fisheries habitat. The source of most of the sediment, according to NYSDEC, is winter road sanding. BRASS wondered if this were true. We wondered how much road sand is applied annually compared to the amount of sandy streambanks eroded yearly into the river. (A previous DEC & Soil Conservation Service study documented nearly 8,000 tons per year of eroded sediments from streambanks, the vast majority of which were listed as "sand" or "sand and gravel.")

BRASS hoped to re-survey the Boquet's streambanks in order to up-date the amount of sediment being deposited yearly, and obtain information on the amount of road sand applied to areas near the river. But, since most of the streambanks are owned by private landowners, BRASS needed permission to survey.

Unfortunately, only a few landowners responded. BRASS conducted surveys at these locations, utilizing the same parameters and formula used in the old DEC/SCS study. Some streambanks surveyed were the same ones studied by DEC/SCS; others were new locations. Re-survey results on old sites indicated little change in sediment contribution over the years. Therefore, BRASS decided to compare sediment tonnages from the old study (7,486 total tons) with highway sand tons applied during the '93-'94 winter (a heavy snow winter requiring increased road sand applications).

Road sanding amounts (892 total tons) were those supplied by highway departments and/or their contractors. Areas recorded for winter sand applications were: any road area within 100 feet of the river or a tributary; road areas in excess of 100 feet if there were a likelihood of run-off due to long hills, curves and/or dangerous intersections where sand is applied more liberally; and all bridges over rivers and tributaries.

As you can see, even if every grain of sand applied on nearby roads and bridges last winter went into the river, it would only be 12% of what was contributed by eroded streambanks.

In addition, sand from a town highway department's pile was sieved for coarseness by BRASS. Results showed the highway sand to be much finer than sands found in BRASS' Whitlock/Vibert boxes or in the larger pit samplers which sample sands from the river bed:

	>4.75mm	4.75- 1.0mm	1.0- .075mm	<.075mm
road sand %	3.5%	1.2%	11.4%	83.9%
Whitlock/Vibert %	0.5%	38%	60%	1.5%
Pit Boxes %	38.5%	31%	30%	0.5%
