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Sent: Monday, December 08, 2008 2:17 PM

To: Morrison, John; Kellam, Dave; Sowers, Derek; Jean Brochi; Hunter, Jennifer; Pennock, Jonathan; Kathy Mills; Ballestero, Thomas; Comstock, Gregg; Currier, Paul M.; Diers, Ted; Rubin, Fay; Short, Frederick; Lucey, Kevin; Nash, Chris; Langan, Richard; Roseen, Robert; Jones, Stephen; William Clifton; Andrew Fisk; Rosenberg, Andy; Mathieson, Arthur; Al Basile; McDowell, Bill; Carl Paulsen; Phil Colarusso; Mel Cote; Dave Courtemanch; Dean Peschel; Ed Dettmann; Dave Funk; Peter Goodwin; Diane Gould; Jim Fitch; Eileen Miller; Mike Kappler; Jim Latimer; Matt Liebman; Linda Kalnejais; Mark Allenwood; Peter Atherton; Peter Rice; Ray Konisky; Peeri, Shachak; Susan Davies; Tom Irwin; Hal Walker; William Brown

Subject: Composition of organic matter in Great Bay

The typical speciation of nitrogen in Great Bay is shown in the following table. The majority (62%) of the total nitrogen is associated with organic matter but only 1% is associated with living phytoplankton. It would be helpful to have some information on the composition of organic matter (both dissolved and particulate) in the bay. Is it leaf litter from upland watersheds, salt marsh/eelgrass/macroalgae debris, detrital phytoplankton and zooplankton, or something else? If you have any information that might shed some light on this question, please contact me as soon as possible. Thank you.

GRBAP - Great Bay

N=48

Fraction	Species	Median (mg N/L)	Percent of Total
Dissolved	Ammonia	0.048	13%
	Nitrate+Nitrite	0.092	24%
	In Organic Matter	0.148	39%
Particulate	In Phytoplankton	0.005	1%
	In Organic Matter	0.084	22%
Total		0.375	100%

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