

A Request to the TOC to Remove NH₄ from Monitoring by Autosamplers at Seven Stations
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In an attempt to properly distribute resources, the SFWMD is in the process of reevaluating and analyzing our monitoring projects. This review has identified redundancies and inefficiencies in some programs. One such inefficiency is the collection of Ammonia (NH₄) in autosamplers. The stability of NH₄ held in an autosampler environment for up to seven days was shown to be significantly degraded when compared to NH₄ samples analyzed immediately after collection¹. Based on this data, SFWMD staff and the SFWMD Quality Assurance Officer have recommended the elimination of ammonia collections from 16 autosamplers throughout the District. Seven of these stations are mandated by the Settlement Agreement and are related to the following section of Appendix D:

“All water control structures for the Refuge, Park, and the WCAs will be monitored, as is done by the present SFWMD CAMB, ENP, and LEC programs. Monitoring will be extended to any new water control structures added to the delivery system. The monitoring program shall include water quality sampling every other week at all Park and Refuge delivery points and at representative internal marsh stations including monthly sampling at the 14 permanent Refuge stations. The District’s current water quality program shall continue with emphasis on total phosphorus, orthophosphate, ammonia, nitrate/nitrite, total nitrogen, chlorophyll-*a*, alkaline phosphatase, physical parameters, ions, heavy metals (especially mercury), and pesticides/herbicides.”

These seven stations will still have ammonia collected by grab sample, thereby meeting the requirements of the Settlement Agreement for monitoring of ammonia, in a more scientifically defensible manner. Staff recommends that the current sampling schedule for ammonia in grab samples, biweekly if flowing, otherwise monthly, remain unchanged. Specific stations and the number of grab samples collected and analyzed for ammonia in 2004 and 2003 are shown below.

Station	#of NH ₄ Grabs	
	2004	2003
S150	12	12
S5A	42	26
S6	25	26
S7	17	15
S8	21	19
S9	14	14
S332DAS*	14	13

*Collected at nearby station S176

Staff of the SFWMD’s Environmental Resource Assessment Department respectfully request that the collection of ammonia in autosamplers be eliminated at sixteen stations throughout the District, including seven stations associated with the Settlement Agreement.

1. Burke, P. M., S. Hill, N. Iricanin, C. Douglas, P. Essex, and D. Tharin, 2002. Evaluation of preservation methods for nutrient species collected by automatic samplers. *Environmental Monitoring and Assessment*, 80: 149-173.

SETTLEMENT AGREEMENT AUTOSAMPLERS COLLECTING AMMONIA

