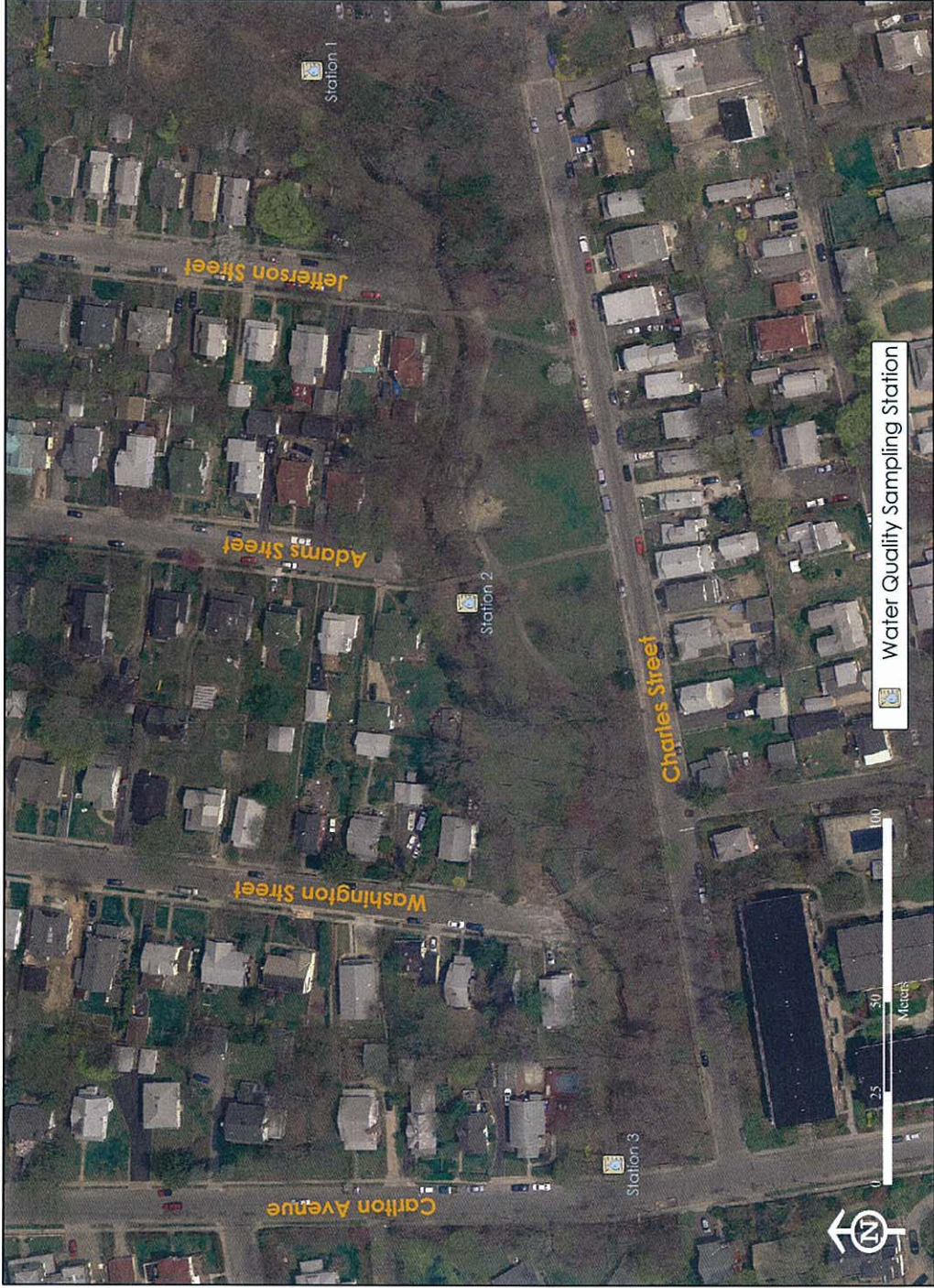
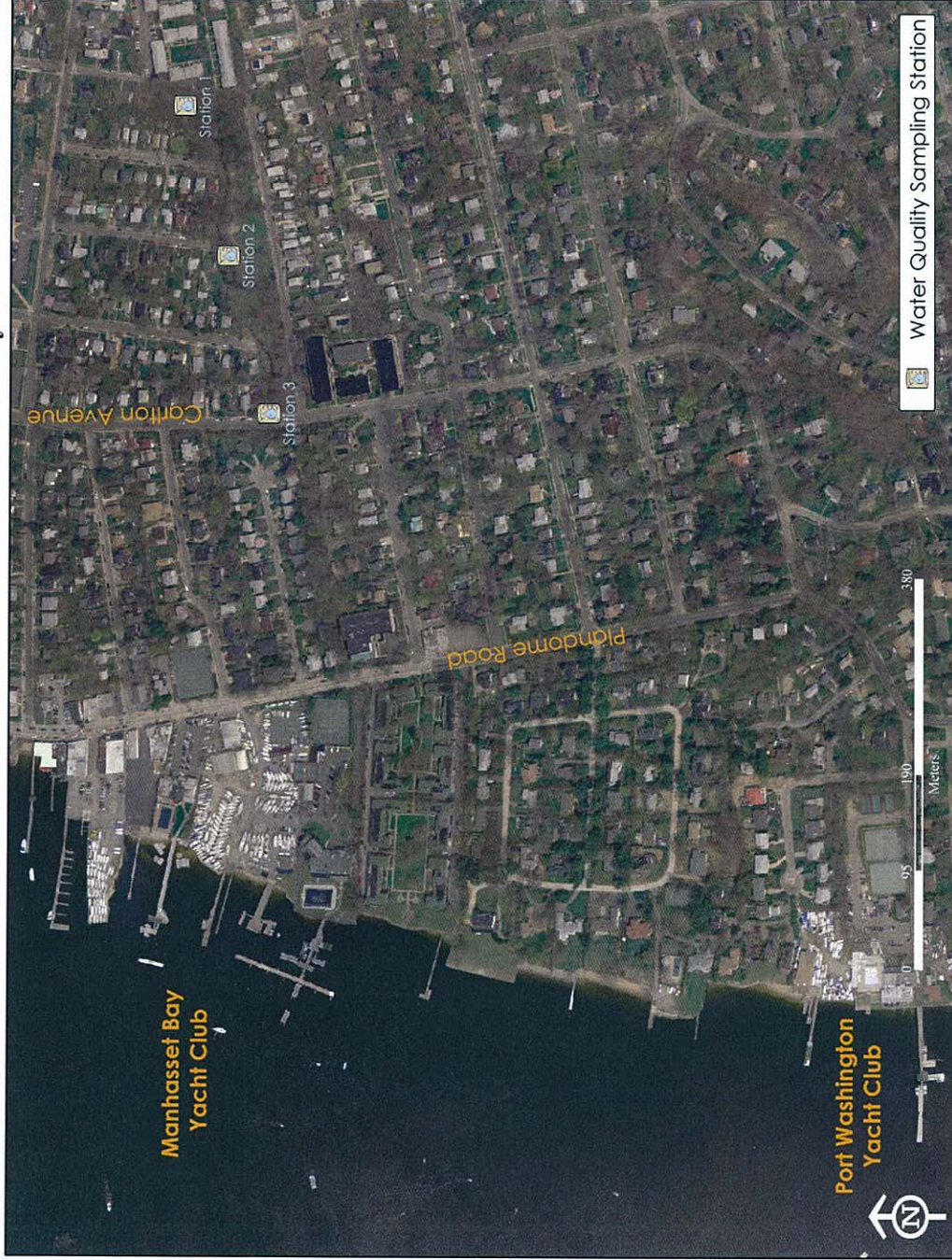


Figure 1A
Stannards Brook Location and Sampling Station Map



2004 Aerial Imagery from New York State GIS Clearing House: <http://www.nysgis.state.ny.us/>

Figure 1B
Stannards Brook in Relation to Manhasset Bay



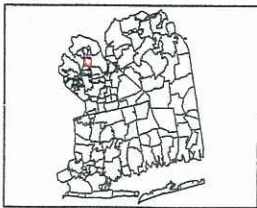
2004 Aerial Imagery from New York State GIS Clearing House: <http://www.nysgis.state.ny.us/>

Figure 1C: Stannard Brook Watershed



Legend

- NASSAU Drainage Outfall
- Stannards Brook Watershed
- Contour Lines
 - Index Contour
 - Index Obs. Contour
 - Inter Contour
 - Inter Obs. Contour
- Water
- Parks
- Roadway
 - Other
 - County
 - Federal
 - State



Map Location

**STANNARD
BROOK
TRIBUTARY**

Prepared By: - NCDPW - Water/Wastewater
Engineering Unit



1 Inch equals 200 Feet

Nassau County



Geographic Information System

Copyright 1993-2002
County of Nassau, New York

Date: 3/24/2005

Figure 2
Field Sampling Pictures



Summer: View looking upstream at Station 1 in the background and old sewage pipe in foreground.



Summer: View looking upstream from Station 3. *Impatiens capensis* (Jewel weed) line the banks of Stannards Brook.



Summer: Negotiating the steep bank to reach sampling Station 3, the grated discharge under Carlton Avenue.



Fall: View looking upstream from Station 2 (just below the outfalls). The outfalls are seen in the right corner foreground.

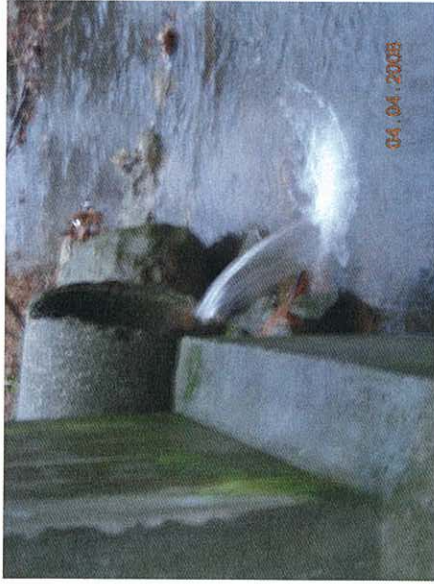


Fall: View looking upstream from Station 3. The Jewel weed that occupied this area in the summer is now dying off.



Fall: View looking down the steep bank at Station 3, the grated discharge under Carlton Avenue.

Figure 2
Field Sampling Pictures



Spring 2008: View looking downstream from Station 2 at culvert pipe stormwater flow.



Spring 2008: High flow between Station 1 and Station 2.



Spring 2008: Stormwater runoff from north side street .



Spring 2008: Dry flow possibility spring fed, observed during site reconnaissance in March.



Spring 2008: Sewage pipe remnants next to active sewage line running through Stannards Brook.



Spring 2008: Dog feces within close proximity to Stannards Brook, observed during site reconnaissance in March.

Table 3
Summer Sampling Data: July 6, 2005

Station	Location	Event (Time)	Bacteria Levels (count/ 100 mL)		
			Total Coliform	Fecal Coliform	Enterococci
1	Head of Stream	First Flush (11:02 AM)	30000	3000	26000
		Post Flush (12:30 PM)	30000	8000	40000
2	Midstream	First Flush (11:18 AM)	8000	3000	33000
		Post Flush (12:42 PM)	3000	500	37000
3	Discharge	First Flush (11:27 AM)	5000	2300	36000
		Post Flush (12:58 PM)	28000	17000	35000

Highlighted values are those exceeding the NYSDEC parameter standard.
 Bolded enterococci values are those exceeding the NCSWMP standard.

Station	Location	Event (Time)	Nutrient Concentrations (mg/L)						
			NH ₃	NO ₃	NO ₂	TKN	Total N	TP	TSS
1	Head of Stream	First Flush (11:02 AM)	< 0.05	2.5	0.008	0.4	2.9	0.07	5
		Post Flush (12:30 PM)	< 0.05	2.8	0.011	0.2	3	0.08	3
2	Midstream	First Flush (11:18 AM)	< 0.05	2.9	0.013	0.4	3.3	0.08	5
		Post Flush (12:42 PM)	< 0.05	2.8	0.014	0.3	3.1	0.09	6
3	Discharge	First Flush (11:27 AM)	< 0.05	3.6	0.013	0.1	3.7	0.05	6
		Post Flush (12:58 PM)	< 0.05	2.8	0.006	0.2	3	0.09	5

< indicates below laboratory detection limits

Station	Location	Event (Time)	Physical Parameters					
			Depth (cm)	Flow (cm/sec)	pH	Temp (oC)	DO (mg/L)	Salinity (ppt)
1	Head of Stream	First Flush (11:02 AM)	12.1	2.3	ND	15.3	7.1	0.28
		Post Flush (12:30 PM)	15.2	3.1	6.71	15.65	7.21	0.22
2	Midstream	First Flush (11:18 AM)	22.2	5.2	7.49	18.17	8.4	0.24
		Post Flush (12:42 PM)	28.6	2.6	7.61	18.66	8.01	0.25
3	Discharge	First Flush (11:27 AM)	12.7	4.7	7.74	18.39	8.3	0.24
		Post Flush (12:58 PM)	9.5	4.0	7.71	18.82	8.06	0.25

ND means data not collected

Table 4
Fall Sampling Data: December 9, 2005

Station	Location	Event (Time)	Bacteria Levels (count/ 100 mL)		
			Total Coliform	Fecal Coliform	Enterococci
1	Head of Stream	First Flush (1:07 PM)	90000	13000	> 6000
		Post Flush (2:10 PM)	30000	30000	> 6000
2	Midstream	First Flush (1:24 PM)	24000	5000	> 6000
		Post Flush (2:25 PM)	> 160000	160000	> 6000
3	Discharge	First Flush (1:38 PM)	30000	24000	> 6000
		Post Flush (2:39 PM)	90000	30000	> 6000

Highlighted values are those exceeding the NYSDEC parameter standard.
 Bolded enterococci values are those exceeding the NCSWMP standard.
 > Indicates value above laboratory detection limit

Station	Location	Event (Time)	Nutrient Concentrations (mg/L)						
			NH ₃	NO ₃	NO ₂	TKN	Total N	TP	TSS
1	Head of Stream	First Flush (1:07 PM)	0.9	0.5	0.04	3.7	4.2	0.39	110
		Post Flush (2:10 PM)	0.4	0.6	0.03	2.4	3.0	0.39	110
2	Midstream	First Flush (1:24 PM)	0.39	0.9	0.04	1.3	2.2	0.27	46
		Post Flush (2:25 PM)	0.31	1.0	0.03	2.9	3.9	0.26	56
3	Discharge	First Flush (1:38 PM)	0.37	0.8	0.03	2.2	3.0	0.23	56
		Post Flush (2:39 PM)	0.27	1.0	0.03	2.5	3.5	0.2	45

Highlighted values are those exceeding the parameter standard.

Station	Location	Event (Time)	Physical Parameters					
			Depth (cm)	Flow (cm/sec)	pH	Temp (oC)	DO (mg/L)	Salinity (ppt)
1	Head of Stream	First Flush (1:07 PM)	10.2	42.8	ND	2.7	14.15	1.8
		Post Flush (2:10 PM)	12.1	37.5	ND	2.9	14.9	1.3
2	Midstream	First Flush (1:24 PM)	12.7	37.5	ND	3.9	14.01	1.7
		Post Flush (2:25 PM)	8.9	37.5	ND	4.3	13.48	1.3
3	Discharge	First Flush (1:38 PM)	15.2	75.0	ND	4.0	13.95	1.8
		Post Flush (2:39 PM)	15.2	60.0	ND	4.2	13.66	1.3

ND means data not collected

Table 5
Spring Sampling Data: April 4, 2008

Bacteria Levels (MPN / 100mL)						
Station	Location	Event (Time)	Total Coliform	Fecal Coliform	Enterococci	
1	Head of Stream	First Flush (03:30 AM)	240000	11000	11000	
		Post Flush (05:30 AM)	24000	2400	2400	
2	Midstream	First Flush (03:40 AM)	11000	4600	11000	
		Post Flush (05:40 AM)	460000	11000	1100	
3	Discharge	First Flush (03:50 AM)	24000	460	4600	
		Post Flush (05:50 AM)	24000	460	460	

Nutrient Concentrations (mg / mL)										
Station	Location	Event (Time)	NH3	NO3	NO2	TKN	Organic N	TP	TSS	
1	Head of Stream	First Flush (03:30 AM)	0.39	0.8	0.018	1.3	2.5	0.16	16	
		Post Flush (05:30 AM)	0.2	0.7	0.012	0.6	1.5	0.11	5	
2	Midstream	First Flush (03:40 AM)	0.24	1.6	0.017	0.8	2.7	0.1	13	
		Post Flush (05:40 AM)	0.15	1	0.009	0.5	1.7	0.065	35	
3	Discharge	First Flush (03:50 AM)	0.24	1.3	0.017	0.9	2.5	0.14	8	
		Post Flush (05:50 AM)	0.18	0.71	0.008	0.4	1.3	0.08	7	

Physical Parameters								
Station	Location	Event (Time)	Depth (cm)	Flow (cm/sec)	pH	Temp (oC)	DO (mg/L)	Salinity (ppt)
1	Head of Stream	First Flush (03:30 AM)	22		6.5	7.6	10.66	0
		Post Flush (05:30 AM)	20	50.8	6.5	7.9	11.71	0
2	Midstream	First Flush (03:40 AM)	25		6.5	7.8	11.19	0
		Post Flush (05:40 AM)	29	101.5	6.6	8	11.51	0
3	Discharge	First Flush (03:50 AM)	23		6.4	7.8	11.32	0
		Post Flush (05:50 AM)	26	61.0	6.5	7.9	11.51	0

Figure 3
Stannards Brook Summer Sampling 2005: Bacterial Counts

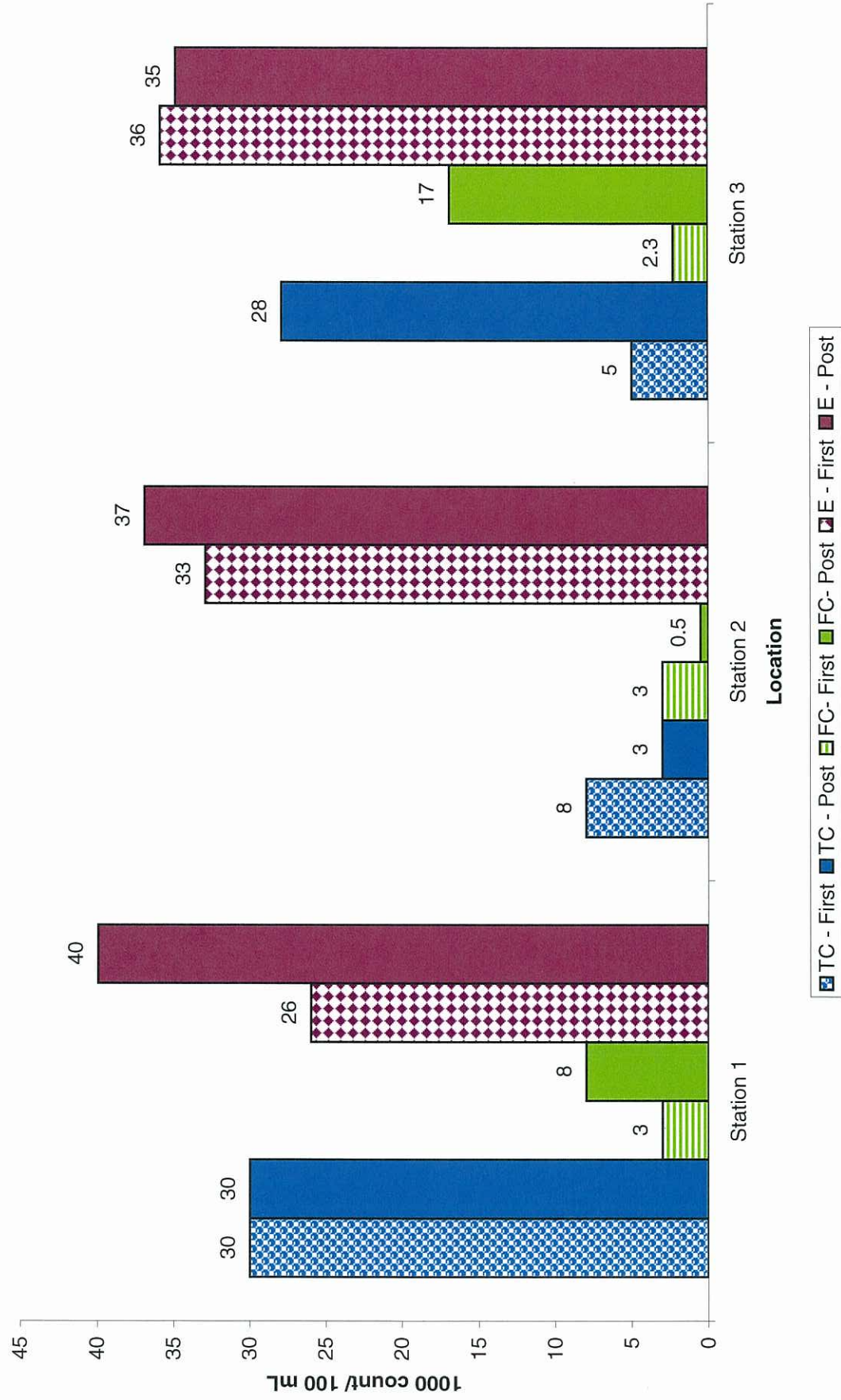


Figure 4
Stannards Brook Summer Sampling 2005: Nitrogen Species

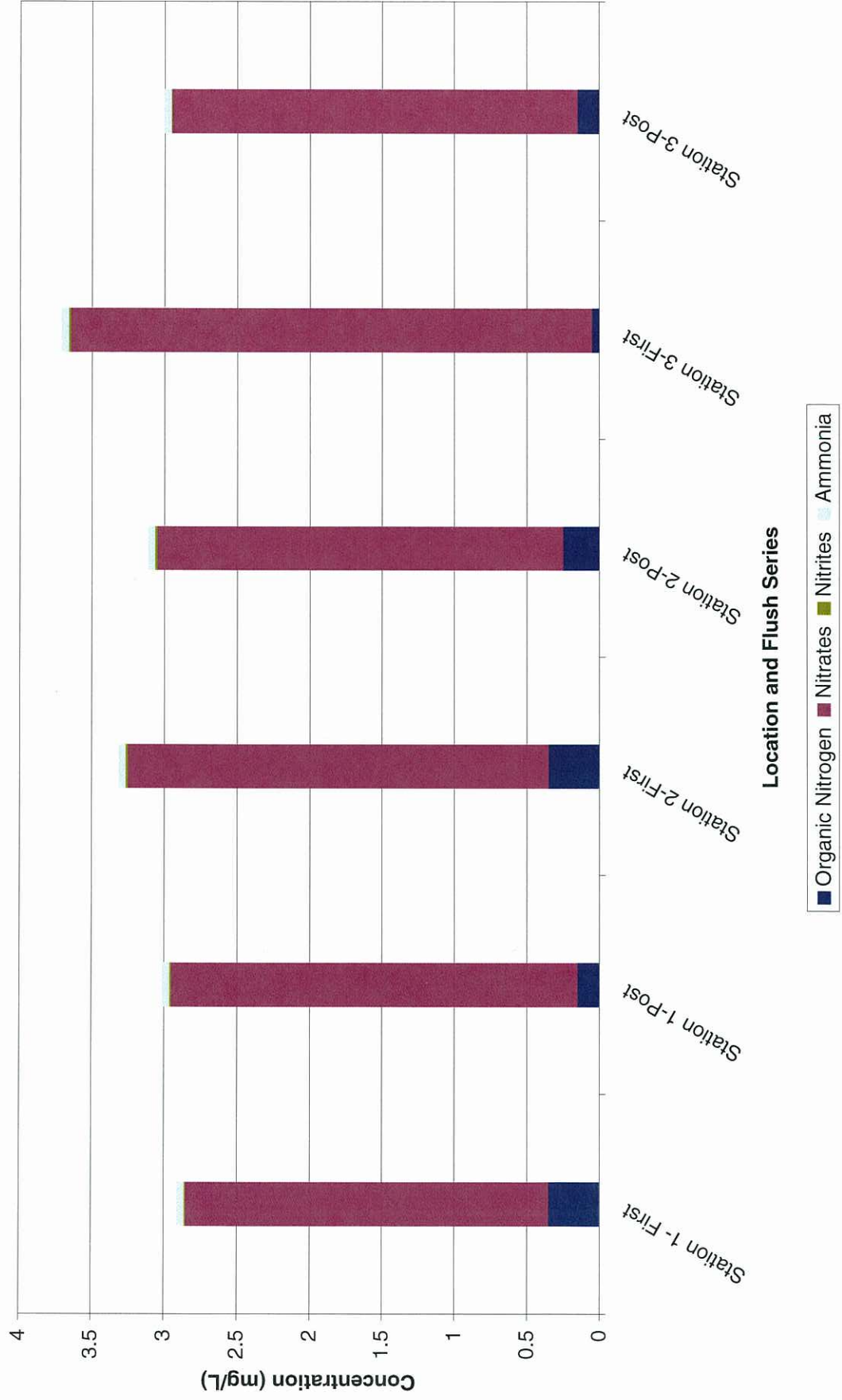


Figure 5
Stannards Brook Summer Sampling 2005: Total Phosphates

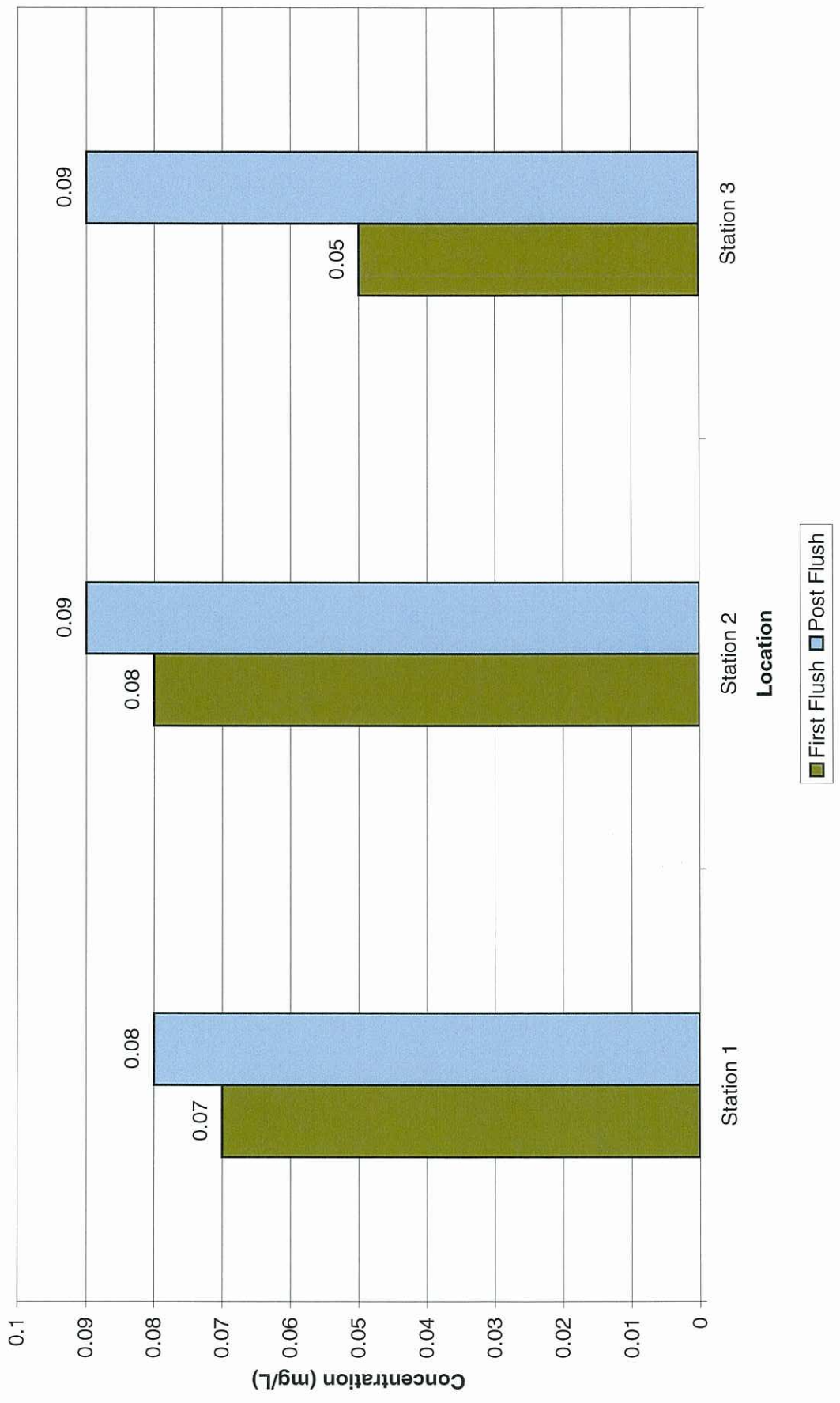


Figure 6
Stannards Brook Summer Sampling 2005: Total Suspended Solids

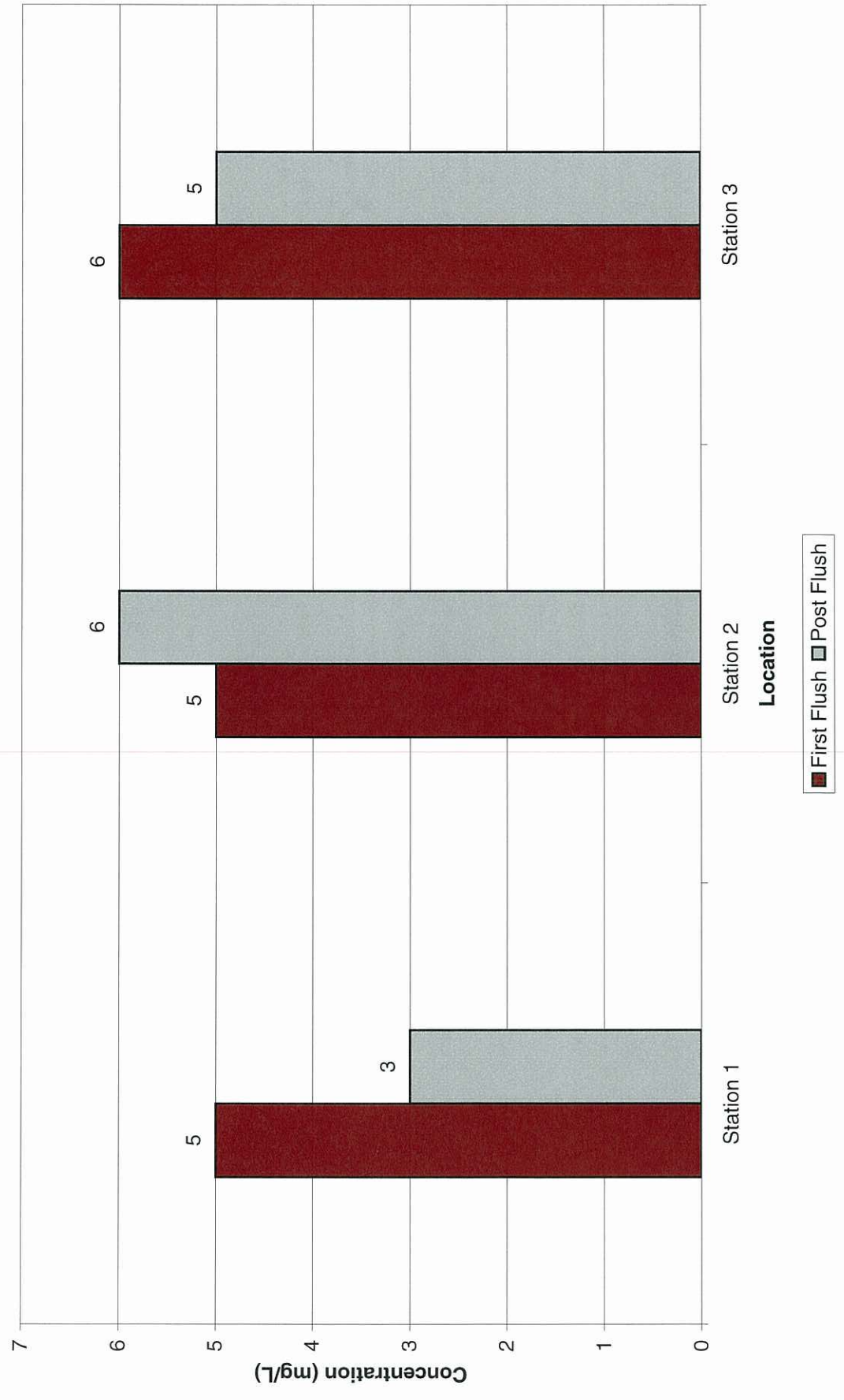


Figure 7
Stannards Brook Fall Sampling 2005: Bacterial Counts

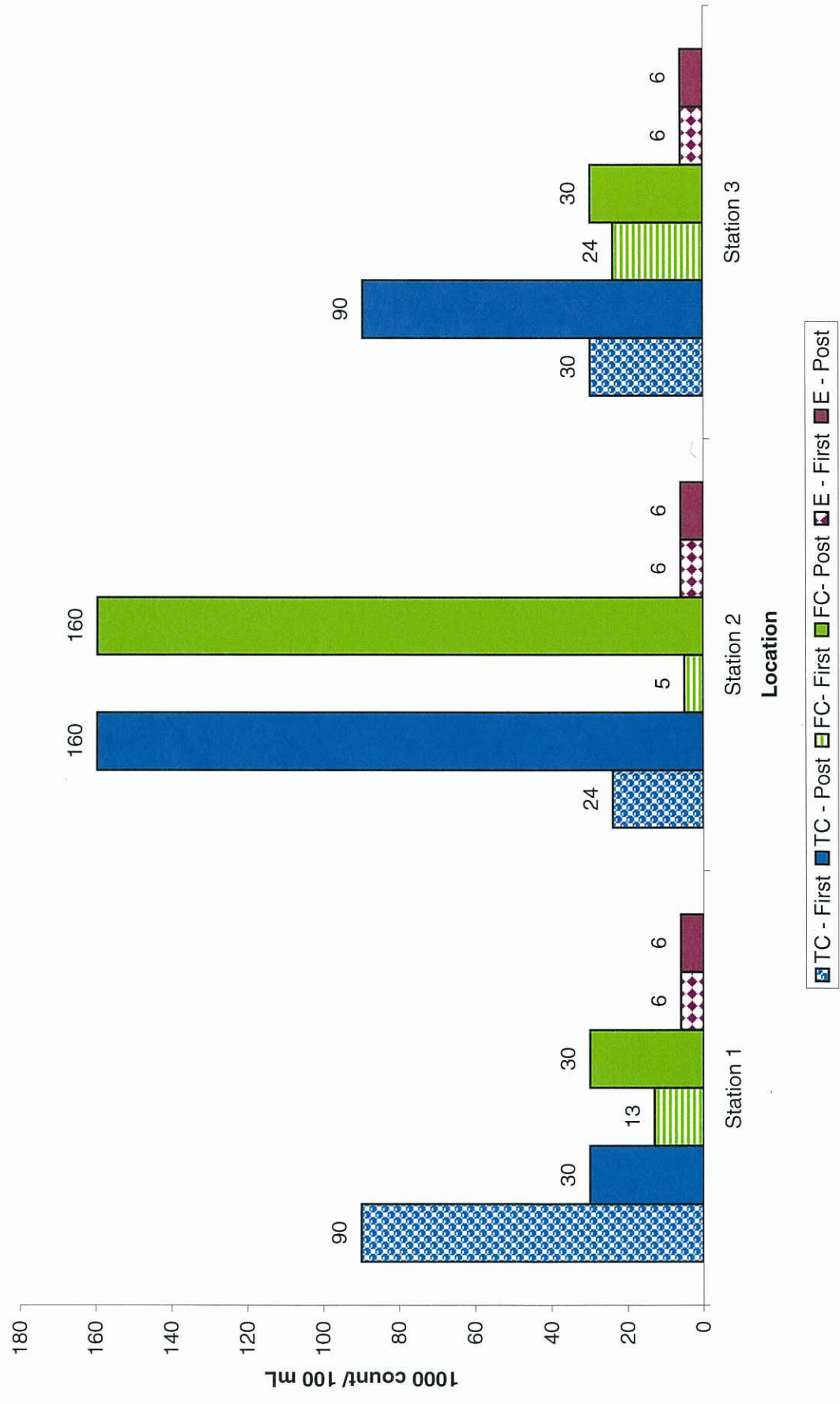


Figure 8
Stannards Brook Fall Sampling 2005: Nitrogen Species

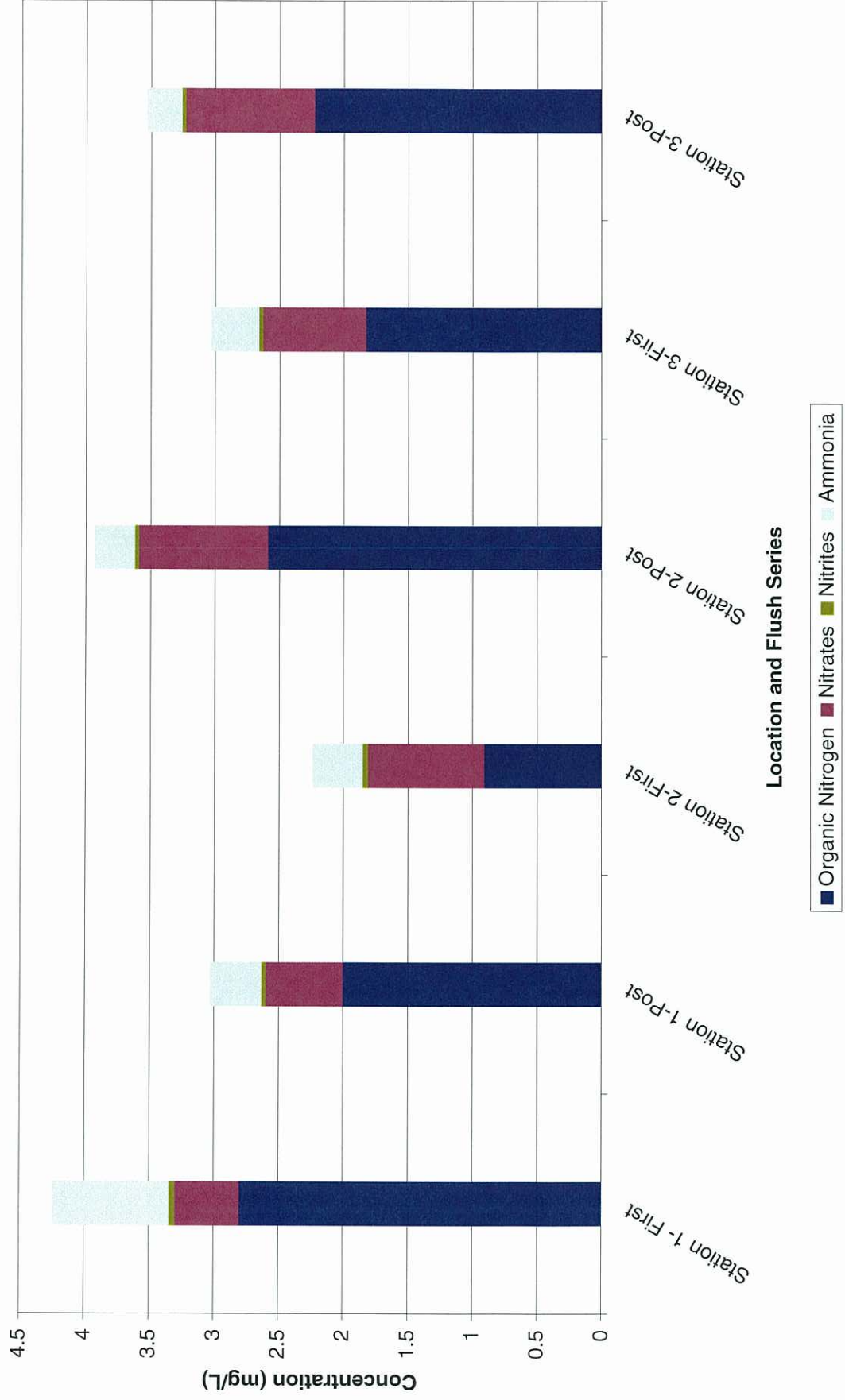


Figure 9
Stannards Brook Fall Sampling 2005: Total Phosphates

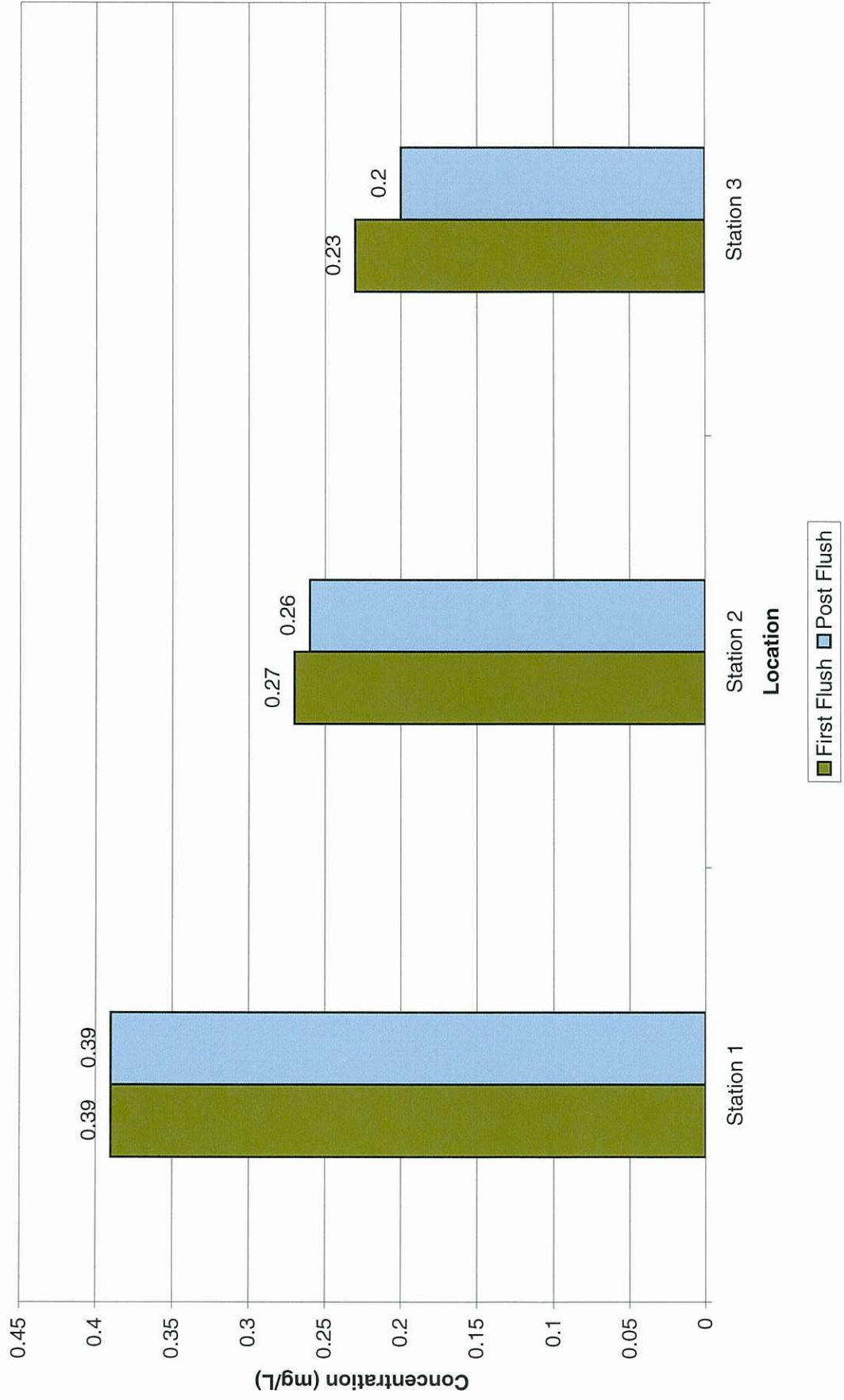
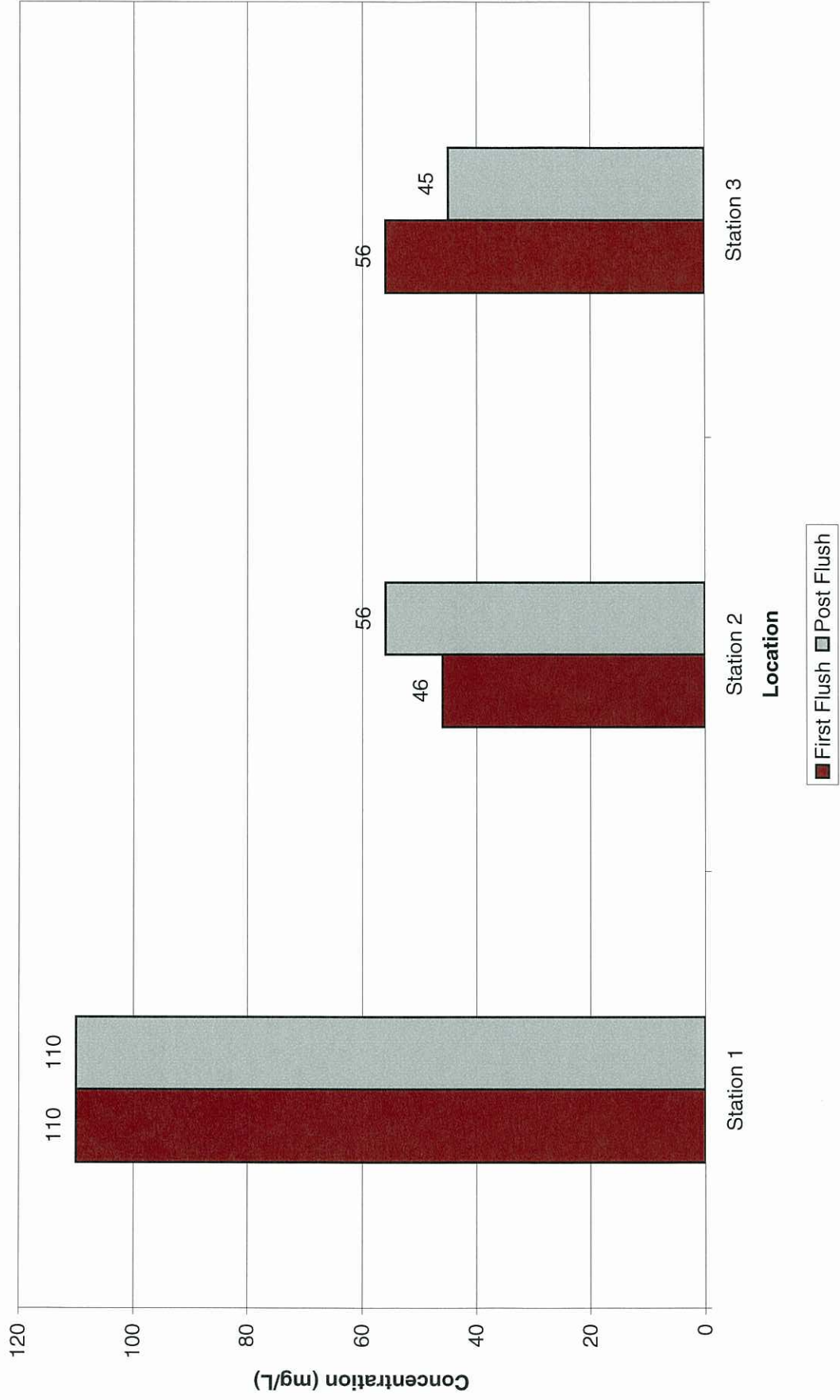
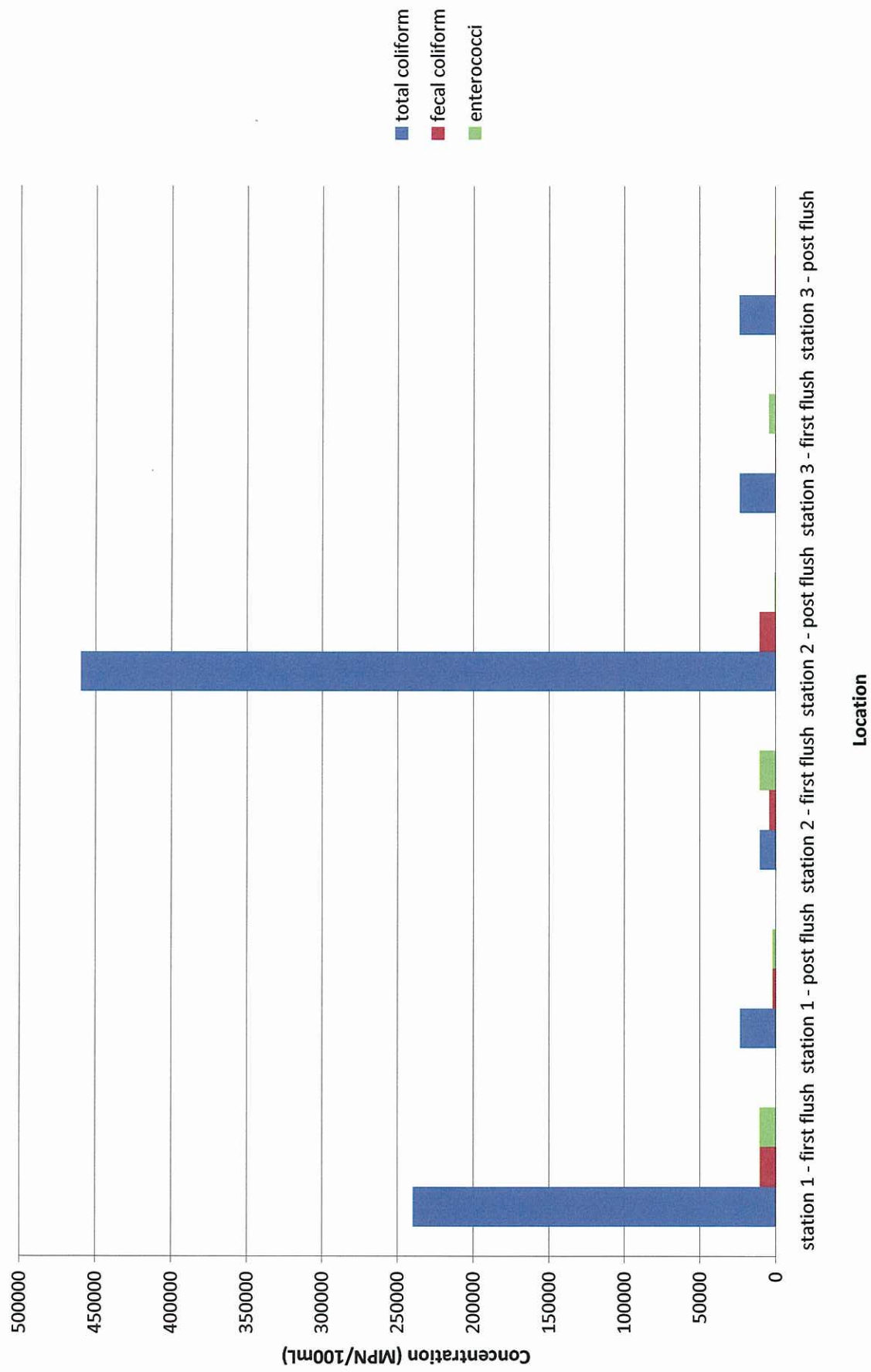


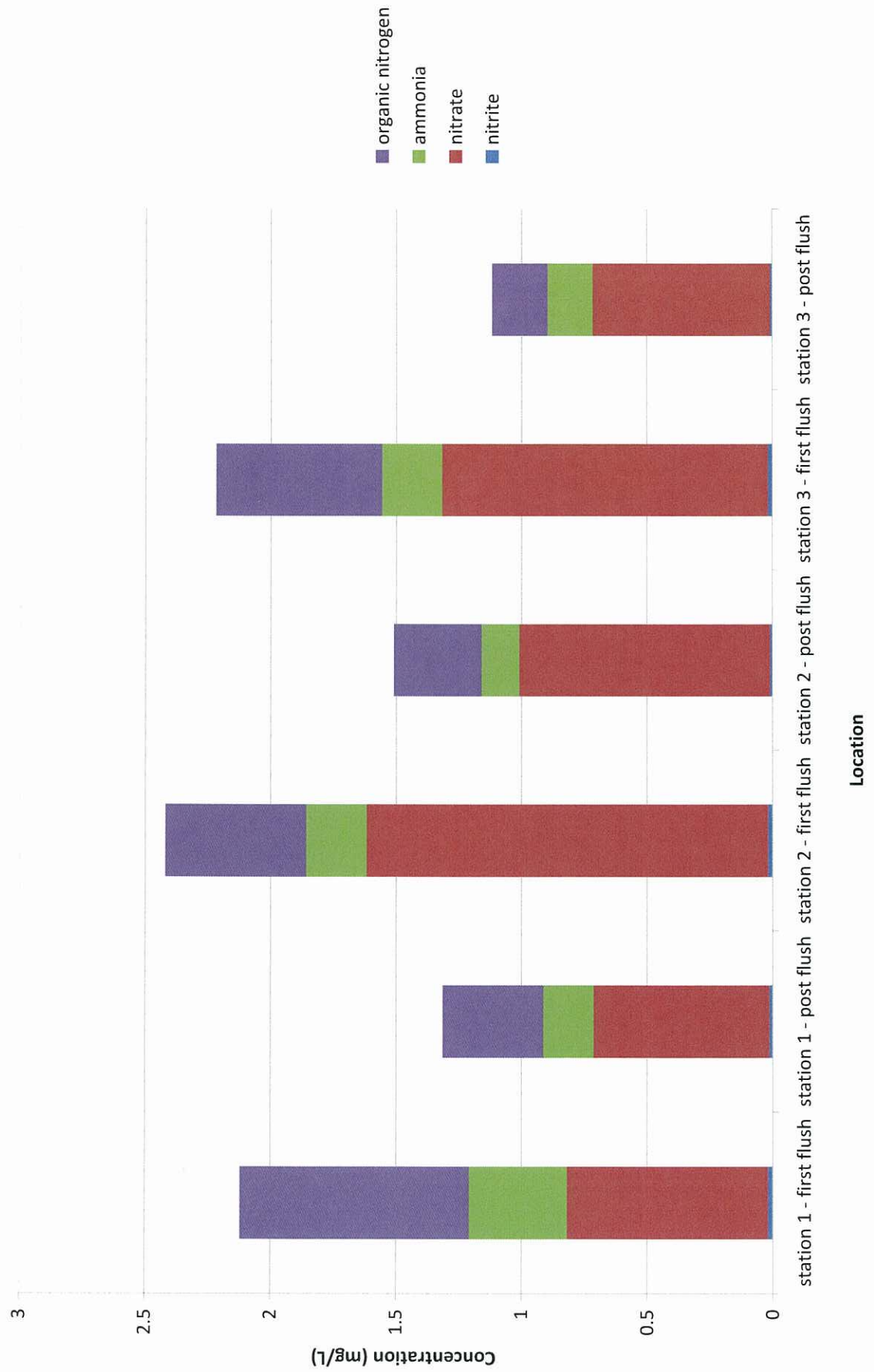
Figure 10
Stannards Brook Fall Sampling 2005: Total Suspended Solids



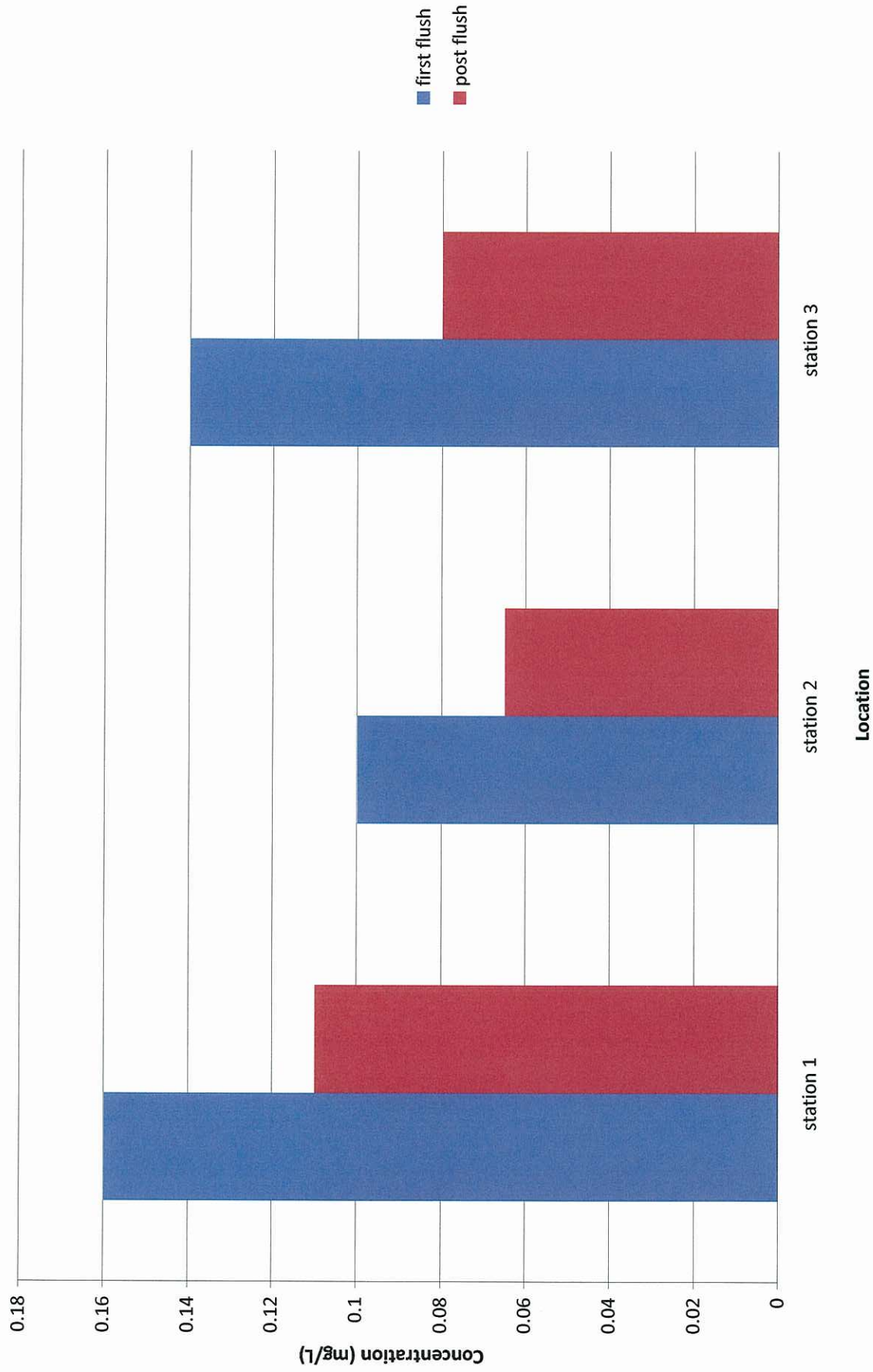
**Figure 11:
Stannards Brook Spring Sampling 2008 Bacteria Counts**



**Figure 12:
Stannards Brook Spring Sampling 2008 Nitrogen Species**



**Figure 13:
Stannards Brook Spring Sampling 2008 Total Phosphate**



**Figure 14:
Stannards Brook Spring Sampling 2008 Total Suspended Solids**

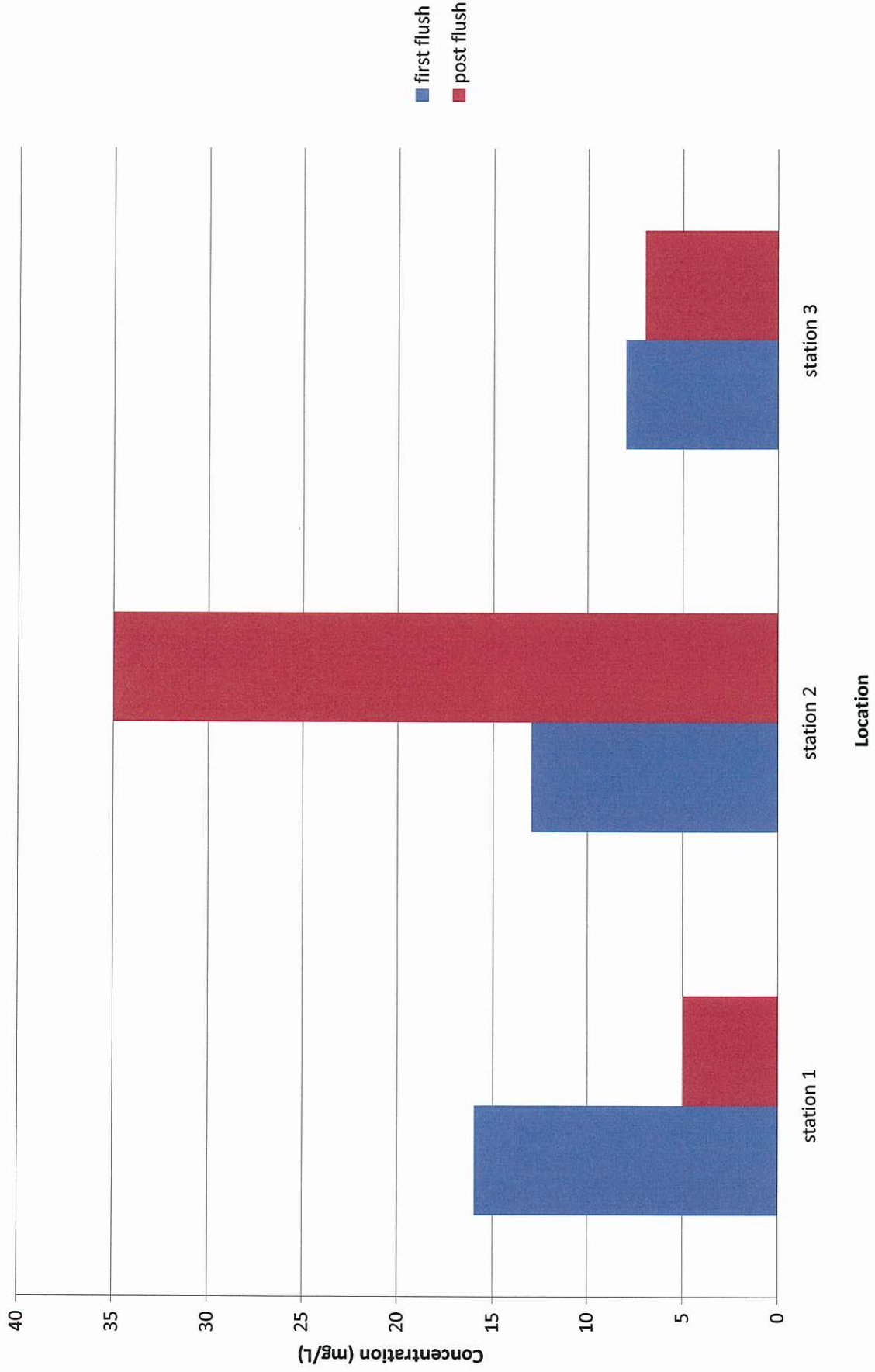


Figure 15: Stannards Brook Seasonal Storm Event Sampling 2005-2008
Total Coliform Concentration Comparison

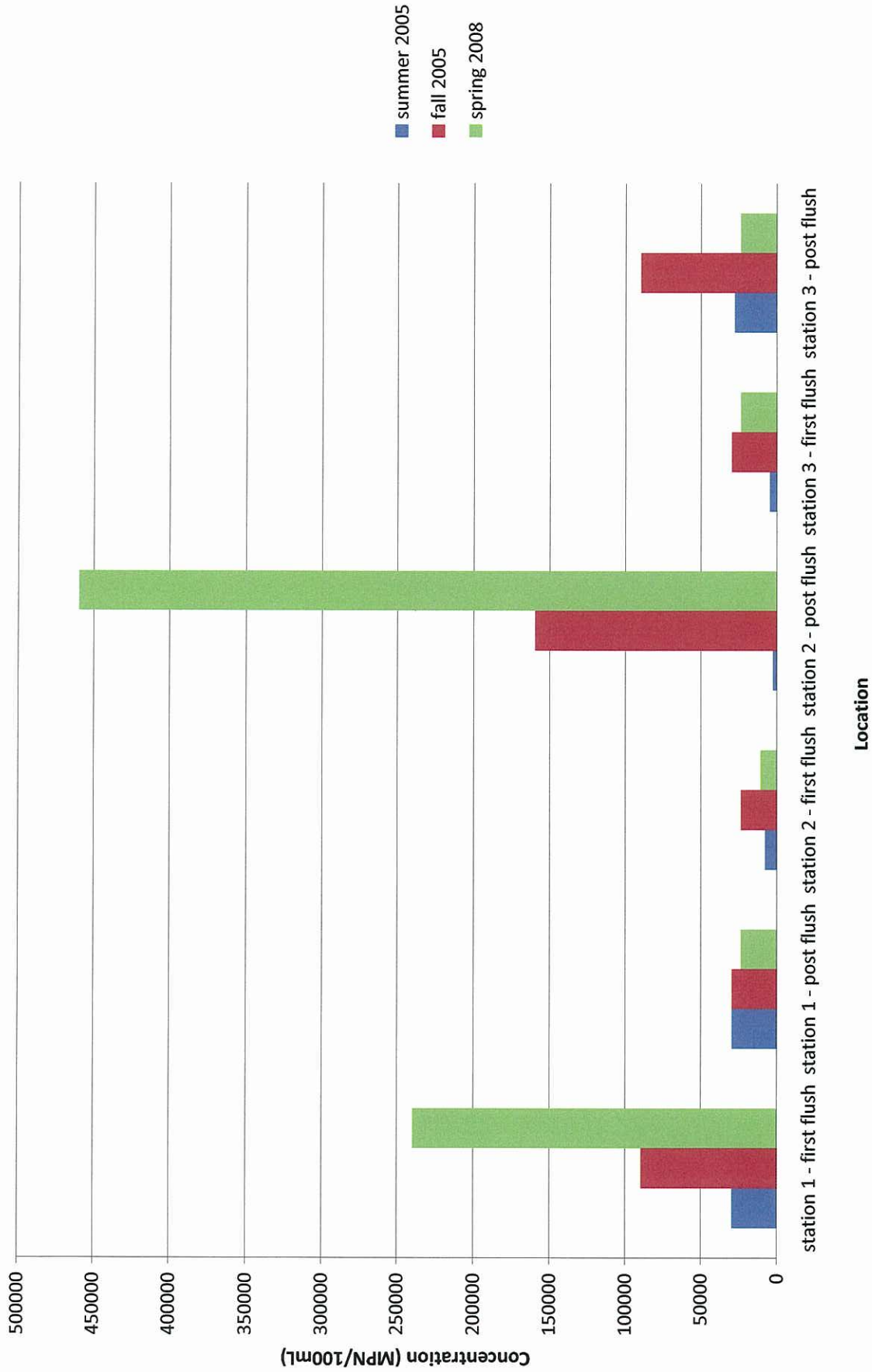


Figure 16: Stannards Brook Seasonal Storm Event Sampling 2005-2008
Fecal Coliform Concentration Comparison

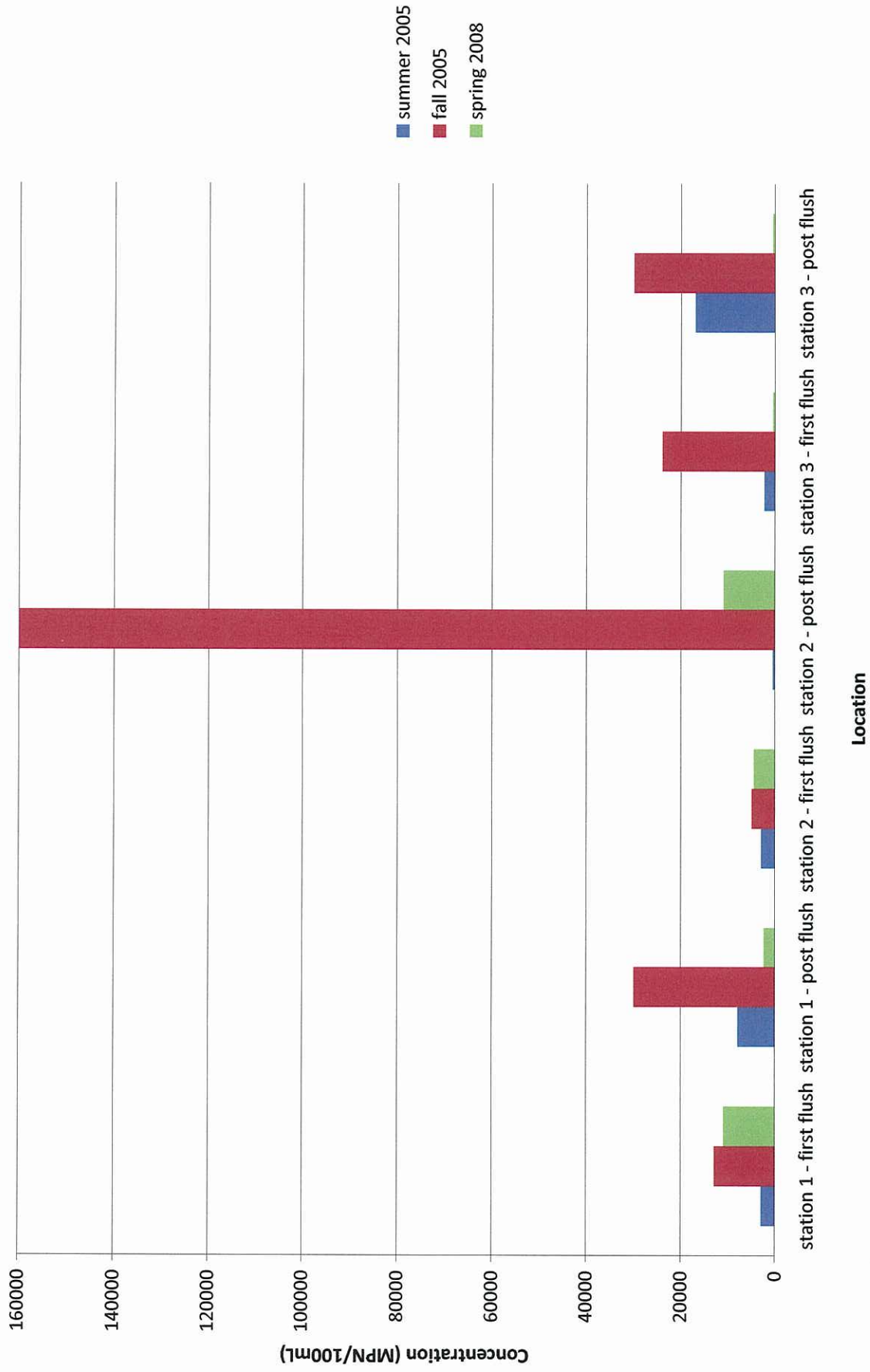


Figure 17: Stannards Brook Seasonal Storm Event Sampling 2005-2008
Enterococci Concentration Comparison

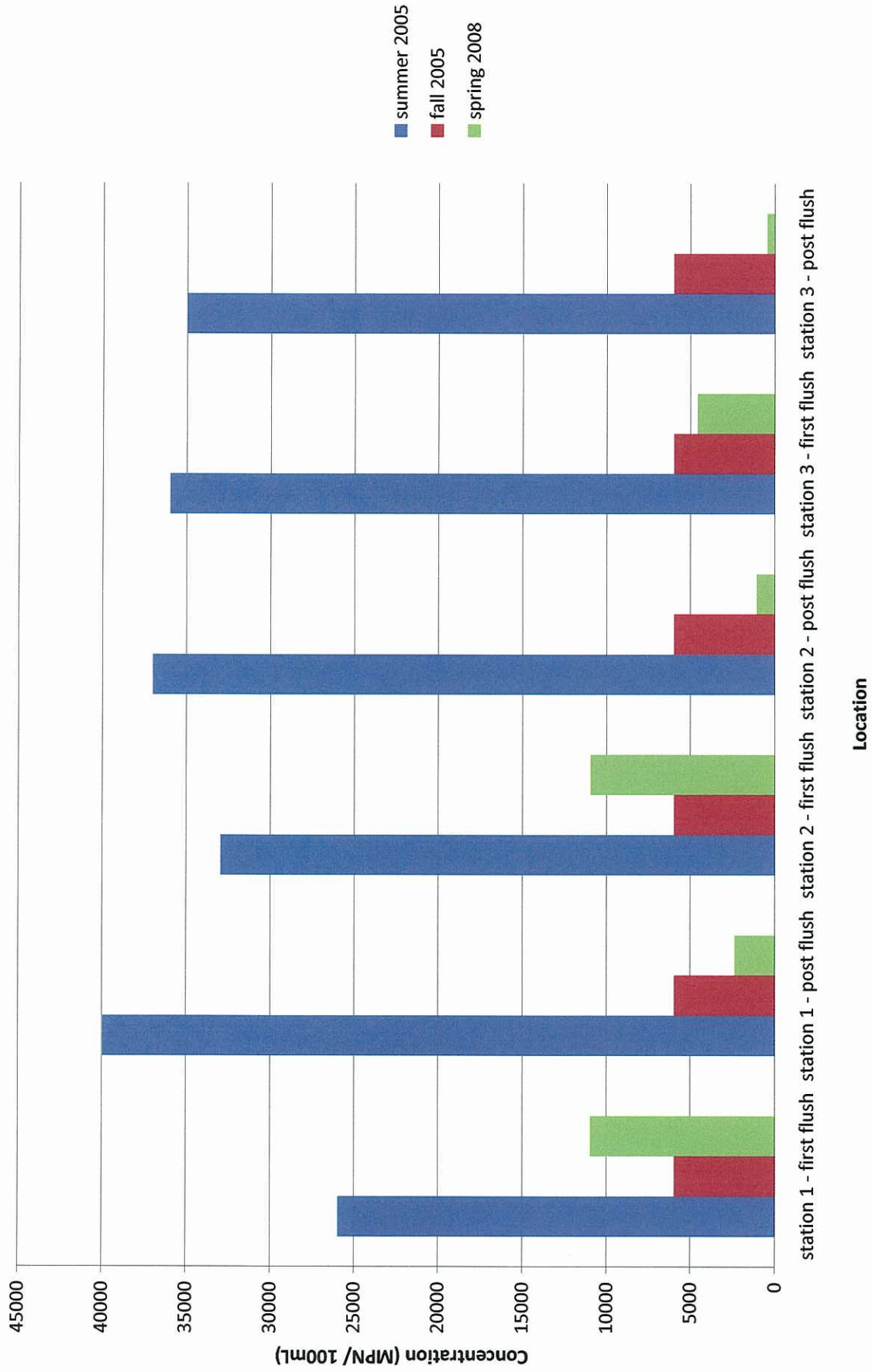


Figure 18: Stannards Brook Seasonal Storm Event Sampling 2005-2008
Nitrate Concentration Comparison

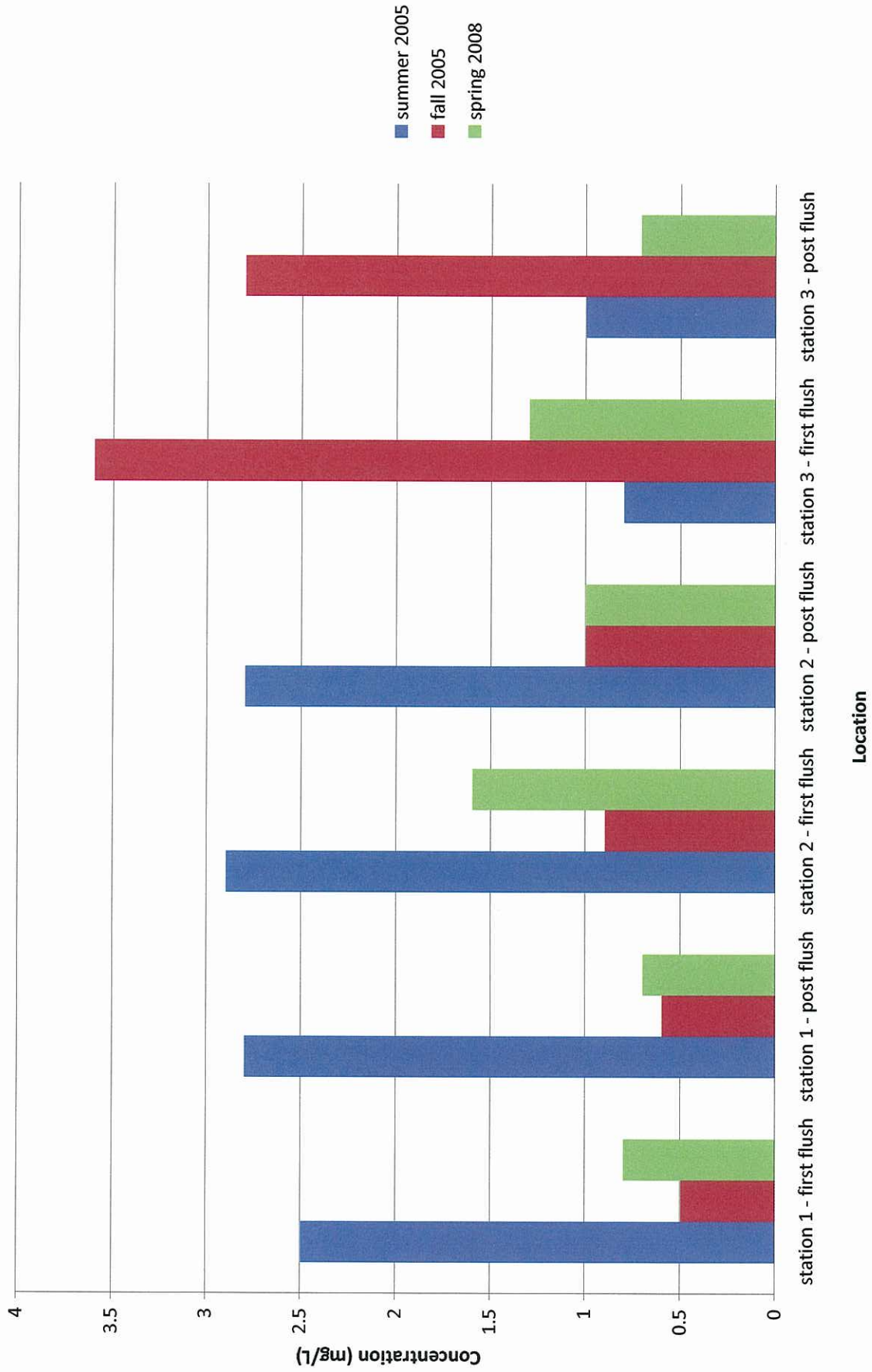
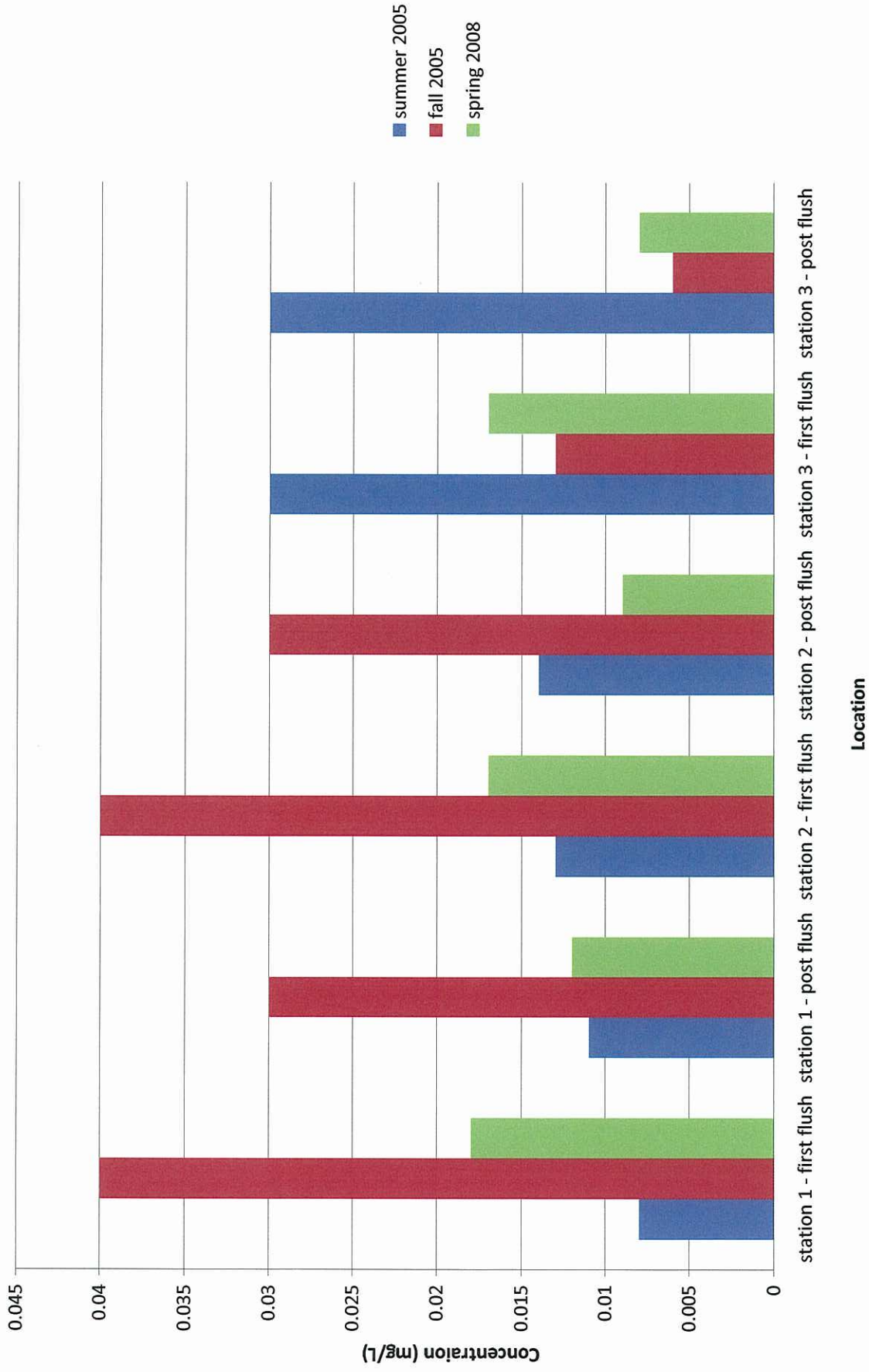


Figure 19: Stannards Brook Seasonal Storm Event Sampling 2005-2008
Nitrite Concentration Comparison



**Figure 20: Stannards Brook Seasonal Storm Event Sampling 2005-2008
Ammonia Concentration Comparison**

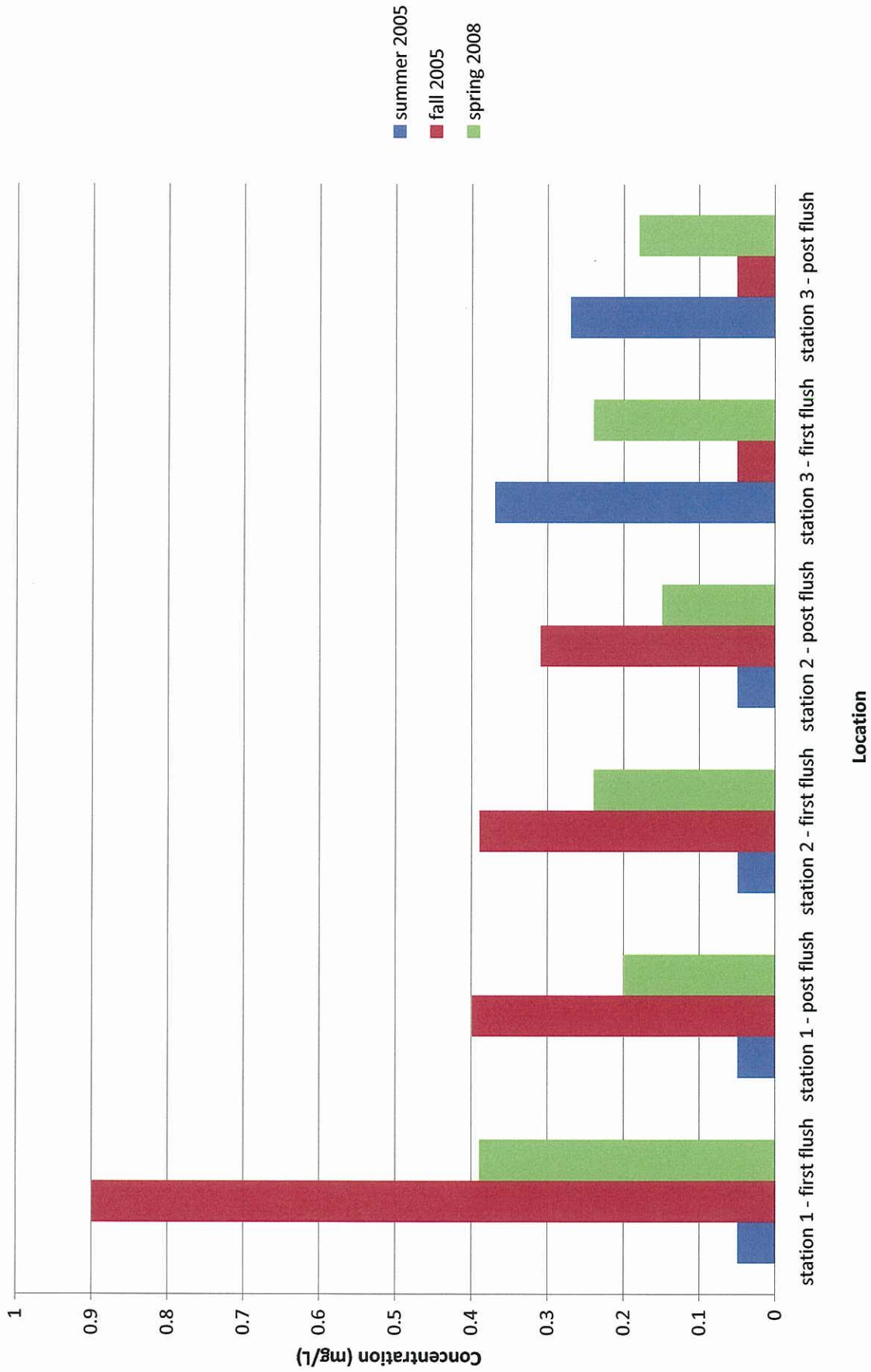
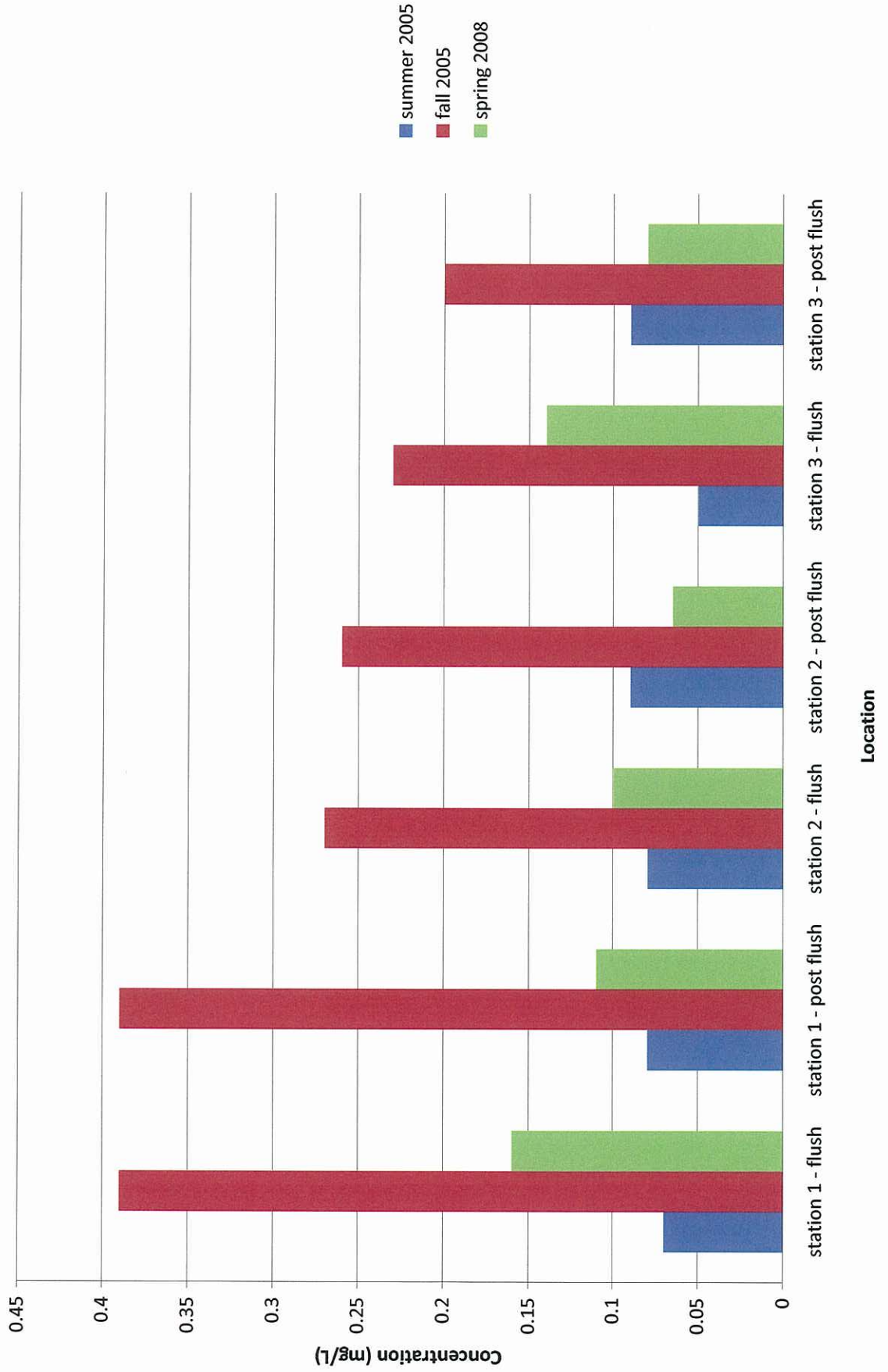


Figure 22: Stannards Brook Seasonal Storm Event Sampling 2005 - 2008
Total Phosphate Concentration Comparison



**Figure 23: Stannards Brook Seasonal Storm Event Sampling 2005-2008
Total Suspended Solids Concentration Comparison**

