

MEMORANDUM

January 28, 1976

To: Dick Cunningham

From: Roger Stanley

Subject: Coliform densities in Grays Harbor

Existing coliform bacteria data covering the Grays Harbor area is, at the present time, insufficient in quantity to reveal any detrimental effects arising from local sewage bypasses.

The routine monitoring data we are presently "stockpiling" via the air flights is good enough to observe in general the concentrations existing in Grays Harbor, but is not of sufficient quantity to determine the origin of observed violations. In order to be better able to "point the finger" we would have to

- a.) know where the major bypass points are,
- b.) increase our present number of stations (we'd probably have to at least double it - from 4 to 8),
- c.) increase our air flight time span to include the winter and early spring months when bypasses are most common.

It seems to me that the best way to find out how seriously local bypasses effect inner harbor water quality would be through receiving water studies conducted during the times that the STP's are dumping. The recent coliform data we've accumulated from Grays Harbor does reveal violations in the inner harbor as indicated by the summary below.

Water Year 75 (T. Coli)

	+	+	+		+	+	+
	Oct.	Nov.	Apr.	May	Jun.	Jul.	Sept.
GYS004 (S.O. Cosmo.)	800L 1600L	1600L 8600L	6000 3700	1200 3200	1100 950	1000 5900	55 500
GYS008 (So. Chanel)	1000 240	4000L	8000L	1000	4000L	14000	600 5
GYS009 (No. Chanel)	300 110	1600L	1600L 800L	200 1200	4000 8000	42000 2000	500 250
GYS014 (Westport)	2 6	160L 190	800L 370	200 5	36 6	260 22	5 2

+ = increase in bacterial concentration noted between Cosmopolis and just beyond the inner harbor

Water Year 76 (T. Coli)

	Oct.	↓ Nov.	Dec.	
GYS004 (S.O. Cosmo.)		3600 4600	1200 2800	
GYS008 (So. Chanel)	1800	80,000L		(FC 80)
GYS009 (No. Chanel)	4700L 180	80,000L 8,000L		(FC 100)
GYS014 (Westport)		4,000 100		

Water Year 75 (F. Coli)

	Oct.	Nov.	↓ Apr.	May	↓ Jun.	↓ Jul.	Sep.
GYS004 (S.O. Cosmo.)	70 80	170 220	67 34	200 180	46 66	76 220	20 18
GYS008 (So. Chanel)	4 4	80	160	20	1400	100	15 5
GYS009 (No. Chanel)	6 6	80L	300 80	10 16	210 300	440 45	5 5
GYS014 (Westport)	1 1	4 1	63 2	2 1	2 2	6 2	2 2

Water Year 76 (F. Coli)

	Oct.	Nov.
GYS004 (S.O. Cosmo.)	180 140	60 80
GYS008 (So. Chanel)	70	80
GYS009 (No. Chanel)	120 4	100 10
GYS014 (Westport)		2

