BREMERTON-KITSAP COUNTY HEALTH DISTRICT ENVIRONMENTAL HEALTH DIVISION WATER QUALITY PROGRAM

1997 TRACYTON SANITARY SURVEY PROJECT

FINAL REPORT

By:

Mike McNickle Sanitary Survey Program Coordinator Water Quality Program

and

Leslie Banigan Environmental Health Technician Water Quality Program

December 1997

This project made possible by funding from Centennial Clean Water Fund Grant #G9600217

and



BREMERTON-KITSAP COUNTY HEALTH DISTRICT ENVIRONMENTAL HEALTH DIVISION WATER QUALITY PROGRAM

1997 TRACYTON SANITARY SURVEY PROJECT

FINAL REPORT

By:

Mike McNickle Sanitary Survey Program Coordinator Water Quality Program

and

Leslie Banigan Environmental Health Technician Water Quality Program

December 1997

This project made possible by funding from Centennial Clean Water Fund Grant #G9600217

and



CONTENTS

List of	f Figures		i
List of	f Tables		ii
List of	f Append	lices	iii
Acknowledgments			iv
Execu	tive Sum	nmary	v
1.0	INTR	RODUCTION	1
2.0	PRO.	JECT AREA DESCRIPTION	2
3.0		ORY OF ON-SITE SEWAGE SYSTEM PERFORMANCE RACYTON	7
4.0	GOA	LS AND OBJECTIVES	8
5.0	PRO	JECT DESIGNS AND METHODS	8
6.0	RESU	JLTS	10
	6.1	OSS Sanitary Survey Results	10
	6.2	Shoreline Survey Results	16
	6.3	Stormwater Survey Results	18
	6.4	Marine Water Monitoring Results	21
7.0	CON	CLUSIONS	24
8.0	REC	OMMENDATIONS	25
9.0	REFI	ERENCES	26

LIST OF FIGURES

Figure #	Description	Page #
1	Sanitary Survey Location Map	3
2	Project Area Boundary	4
3	Stormwater Drainage Patterns	5
4	Soil Types Found in Project Area	6
5	Summary of Visited Residences/Businesses in Project Area	13
6	Summary of Surveyed Residences/Businesses in the Project Area	13
7	Summary of the 1997 Tracyton Sanitary Survey Results	14
8	Summary of the 1997 Shoreline Survey Results	17
9	Summary of the 1997 Stormwater Survey Results	19
10	Location of the 1991 and 1997 Marine Water Monitoring Station	23

LIST OF TABLES	LIST	OF	TA	BL	ES
----------------	------	----	----	----	----

Table #	Description	Page #
1	Results of the 1991 Tracyton OSS Sanitary Survey	7
2	Summary of the Visited Residences/Businesses in Project Area	12
3	Summary of the Surveyed Residences/Businesses in Project Area	12
4	Summary of the 1997 Shoreline Survey Results	16
5	Comparison of the 1991 to the 1997 Shoreline Sampling Results	18
6	Summary of the 1997 Stormwater Sampling Results	20
7	Comparison of the 1991 to the 1997 Stormwater Sampling Results	20
8	Comparison of the 1991 to the 1997 Marine Water Monitoring Results	21
9	Comparison Of Wet Vs. Dry Fecal Coliform Results For	
	Station DY32 (DY25)	22

LIST OF APPENDICES

Appendix #	Description	Page#
A	Criteria for Rating On-Site Sewage System Sanitary Survey Results	27
В	Descriptive List of Identified Failures	29
С	Descriptive List of Shoreline Sampling Stations (1991 & 1996-97)	31
D	Descriptive List of Stormwater Sampling Stations (1991 & 1996-97)	33
E	1996-97 Marine Water Monitoring Data	36

ACKNOWLEDGMENTS

The authors would like to thank the following Bremerton-Kitsap County Health District staff for their assistance in completing the Tracyton Area Sanitary Survey Project: Keith Grellner, Susie Magdamit, Diane Thon, Stuart Whitford and Tim Quayle.

<u>1997 TRACYTON SANITARY SURVEY PROJECT</u> <u>FINAL REPORT</u>

EXECUTIVE SUMMARY

The Water Quality Program of the Bremerton-Kitsap County Health District (Health District) conducted a sanitary survey of the on-site sewage systems (OSS) in the Tracyton area during the spring of 1997. The purpose of this project was to identify and correct sources of nonpoint pollution, especially failing OSS, from the Tracyton area to Dyes Inlet, and to prevent future OSS failures by providing OSS operation and maintenance information to residents and business owners of the area.

Four work elements were completed during the project: marine water quality monitoring, a shoreline survey, a stormwater survey, and a sanitary survey and inspection of OSS. The survey and inspection of OSS was the major work element for this project. All project work followed applicable and accepted protocols.

Sanitary survey results showed that seven percent (7%, 9 of 137) of Tracyton's OSS were found failing during the project. Project area marine waters and stormwaters were found to contain elevated levels of fecal coliform bacteria, which appeared to be at least partially attributable to these local failing OSS. Sanitary survey results and field observations suggest that most, if not all, of the property parcels in the project area are individually repairable, if necessary, according to current OSS regulations and technology. All nine of the OSS failures were repaired by October 1, 1997. Tracyton's seven (7%) percent OSS failure rate falls within the range of OSS failure rates for other Kitsap County areas surveyed by the Health District in the last 10 years (3% to 18%).

The Health District recommends that these seven OSS listed as "suspect" be re-inspected during the 1997-98 wet season to ensure that they, too, are not failing and contributing contamination to area marine waters and stormwaters. The Health District should continue OSS information distribution, and property owners should be cognizant of the location of their OSS, and the proper operation and maintenance guidelines/requirements associated with their OSS. The Health District should track water quality improvements and/or declines in the Tracyton area, and continue to work to correct sources of nonpoint pollution as they are identified through the Kitsap County Surface and Storm Water Management Program.