

COMPREHENSIVE DISCHARGE REGISTER**CWR NO.118****TITLE: Maraetai Catchment.****WATER RIGHT/RESOURCE CONSENT No.-****COMPREHENSIVE DISCHARGE CONSENT No.-****EXPIRY DATE: -****CATCHMENT SIZE: 210 ha.****POINT OF DISCHARGE: Refer to attached Diagram (Fig. 1). 20 outfalls: A-T****PEAK DISCHARGE:**

Outfall	Catchment Area (ha)	Peak Flow (m ³ /s) - 1% AEP
A	39.0	7.0
B	0.7	0.15
C	0.6	0.15
D	0.5	0.15
E	2.5	0.6
F	0.4	0.1
G	5.3	0.95
H	0.8	0.3
I	6.7	1.5
J	3.0	0.9
K	1.5	0.35
L	0.6	0.15
M	0.9	0.2
N	2.3	0.55
O	3.5	0.85
P	Combined with Q	Combined with Q
Q	132	25
R	0.9	0.2
S	5.7	1.5
T	1.0	0.1

*Refer to Financial Contributions Register for updated figures.

PRIMARY DESIGN STANDARD: 20% AEP.

SECONDARY DESIGN STANDARD: 1% AEP.

FLOOR LEVEL RESTRICTION:

0.5m above 1% AEP, where flowpath is intercepted by roadways 1m above roadway level, or refer to the Proposed District Plan (Section 9.9.1.2 (c)), **whichever is the more rigorous.**

OTHER CONDITIONS: -

COMPREHENSIVE DISCHARGE CONSENT LEVY: N/A*

S.W. QUALITY LEVY: N/A*

PROPOSED WORK:

This is outlined on the accompanying Figure 2 'Management Plan Key Features'.

COST:* \$1,501,000 (approx.)(excluding both design costs and GST), as at June 1993.

COMMENTS:

25% maximum impervious surface cover.

Allowance needs to be made for possible sea level rise. Floor levels of new developments in low-lying areas of the catchment should be above the minimum site level of 3.40m above DOSLI datum (refer to Proposed District Plan, Rule 9.9.1.2).

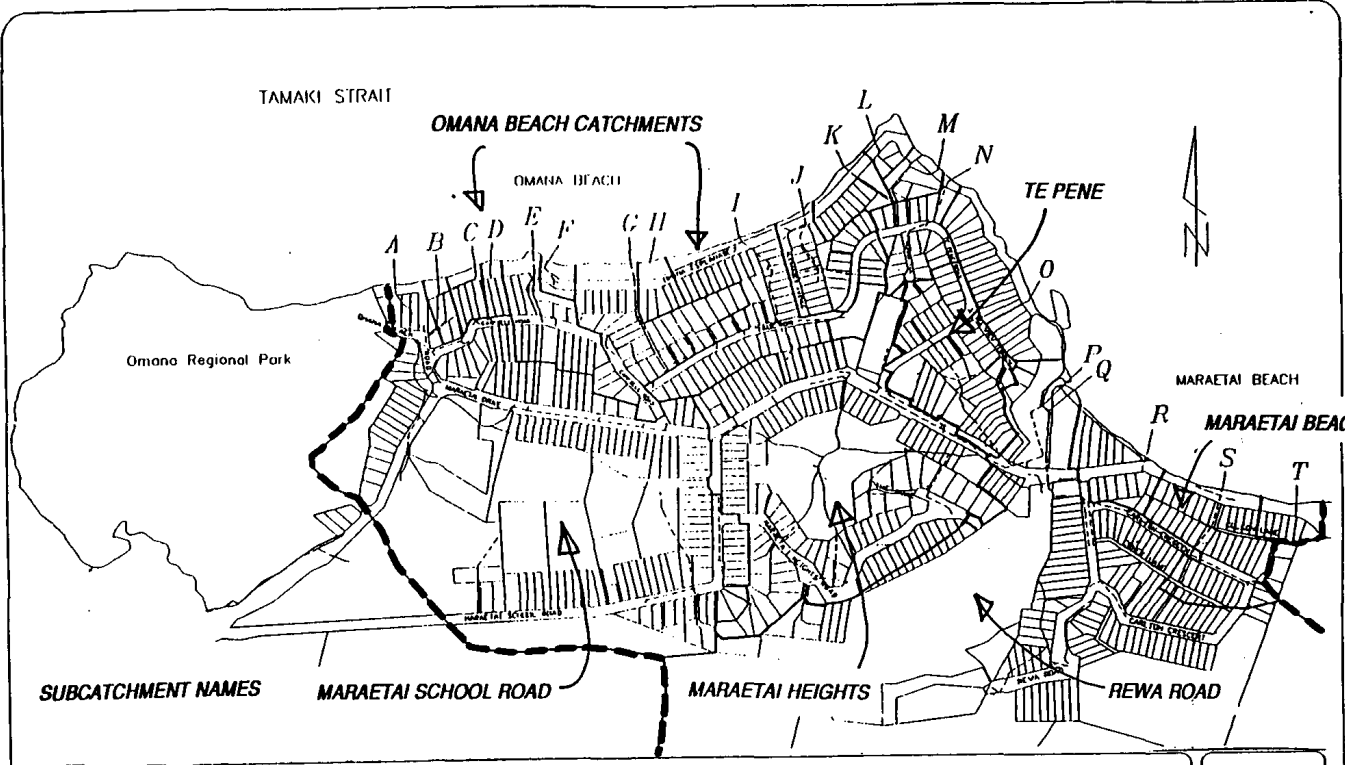
Coastal permits will be required for any upgrading of outfalls which will have works below the mean high water level. This includes Outfalls C, S, and P.

Reference is made to slope instability in the Comprehensive Flood Management Plan (pg. 29). In summary the issues are:

- existing slope instability which could adversely affect proposed stormwater pipes that traverse such areas
- mitigation of existing slope instability by controlling stormwater runoff by stormwater reticulation
- slope instability caused by infiltration of surface water into uncontrolled trench backfill along the proposed stormwater lines

Diagrams Included: Catchment Layout (Fig. 1)
Management Plan Key Features (Fig. 2)
Flood Hazard Map (showing overland flow paths)

*Refer to Financial Contributions Register for updated figures.



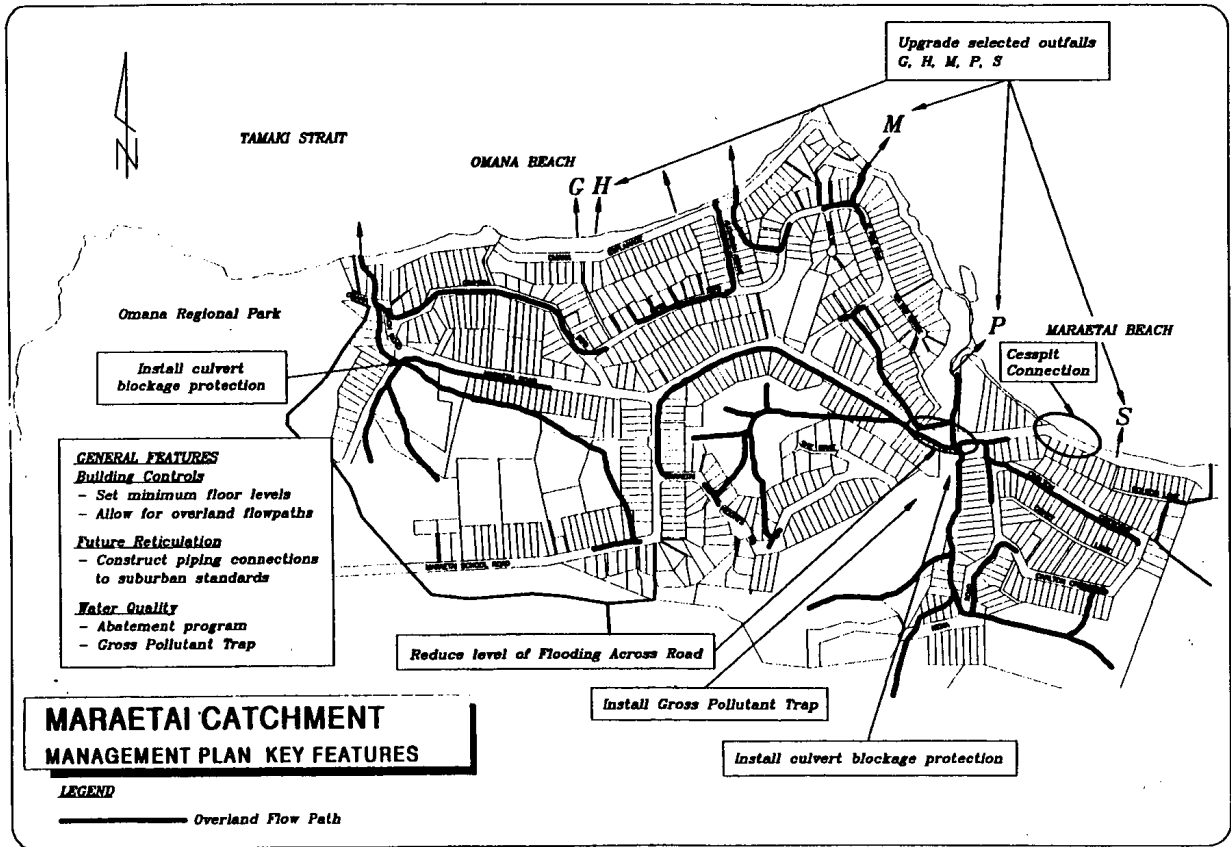
Maraetai Catchment Layout

TECHNICAL SERVICES

MANUKAU CITY COUNCIL

Fig 1



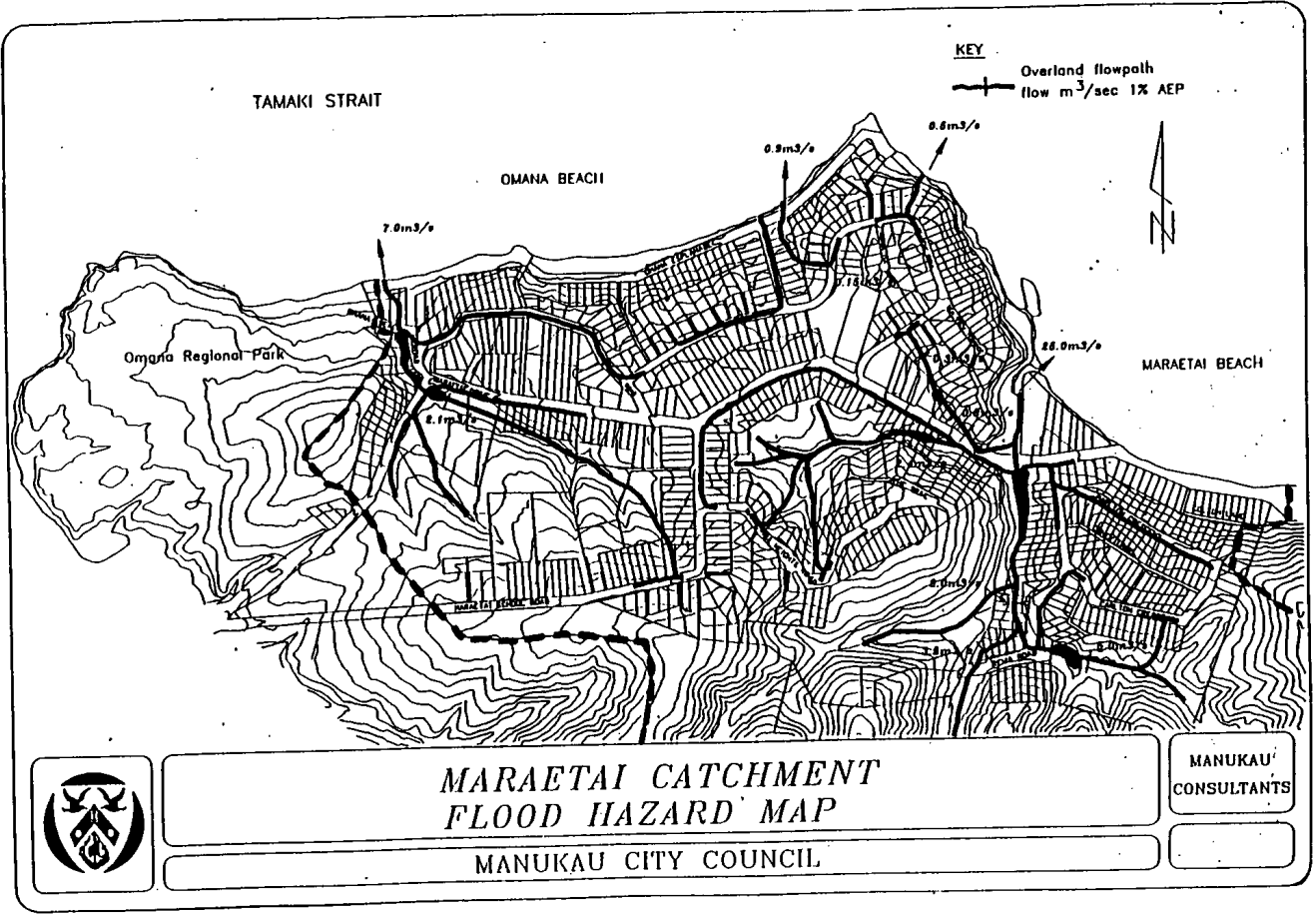


- GENERAL FEATURES**
- Building Controls**
- Set minimum floor levels
 - Allow for overland flowpaths
- Future Reticulation**
- Construct piping connections to suburban standards
- Water Quality**
- Abatement program
 - Gross Pollutant Trap

**MARAETAI CATCHMENT
MANAGEMENT PLAN KEY FEATURES**

LEGEND

————— Overland Flow Path



MARAETAI CATCHMENT
FLOOD HAZARD MAP

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