Site P3B - Armoured bottom

Site P4A Mud bottom with burrows

Site 4B - Mud, dead green-lipped mussel, ascidian (?)

Site 5A - Shell armoured bottom

Site M2B - grab sample

Site M2A - grab sample

Site M4A Mud

Site M4B - Hydroid mats

Site P1B - Sea whip (?)

Site P4B - Dead large green-lipped mussel shell

Appendix 2: Combination of Hauraki Gulf and Firth of Thames acoustic datasets

The previous report on the Firth of Thames acoustic seafloor mapping (Morrison et al. 2002) used the same approaches as in this present report. More specifically, the same base setting parameters were used in the QTC data collection, allowing for the two datasets to be combined and run through an integrated analysis. The two series of data files were combined, and run through the same analysis as documented in this current report, and the previous Firth of Thames report. Figure 17 shows the underlying data run-lines from the two surveys.

Combining of the two datasets resulted in five acoustic classes being identified. Overall, these classes fell out in a very similar spatial pattern to that of the two individual surveys, although the strong acoustic class ordering in the Firth of Thames appeared to dominate over that of the east and west of the general survey extent (Figure 18). The Firth of Thames showed a strong ordering down its length, with class 3 being found only at the southern end, and not being present in any other survey areas. Class 4 was present north of class 3, and also occurred to the south of Tamaki Strait. Class 5 was next in the Firth of Thames, also occurring through Tamaki Strait, and north and south of Whangaparoa Peninsula. Class 2 occurred in the central Firth of Thames, through the Motiuhe Channel, and to seaward of class 5, north and south of Whangaparoa Peninsula. Class 1 overall dominated the survey area, occurring to seaward of the inner islands of the Hauraki Gulf, and east of Waiheke Island.

Overall, the combined data set was spatially consistent in its assignment of acoustic class areas, with that of the individual Hauraki Gulf and Firth of Thames datasets, identifying similar spatial trends, and areas of higher acoustic class heterogeneity (Motuihe and Ponui Channels).

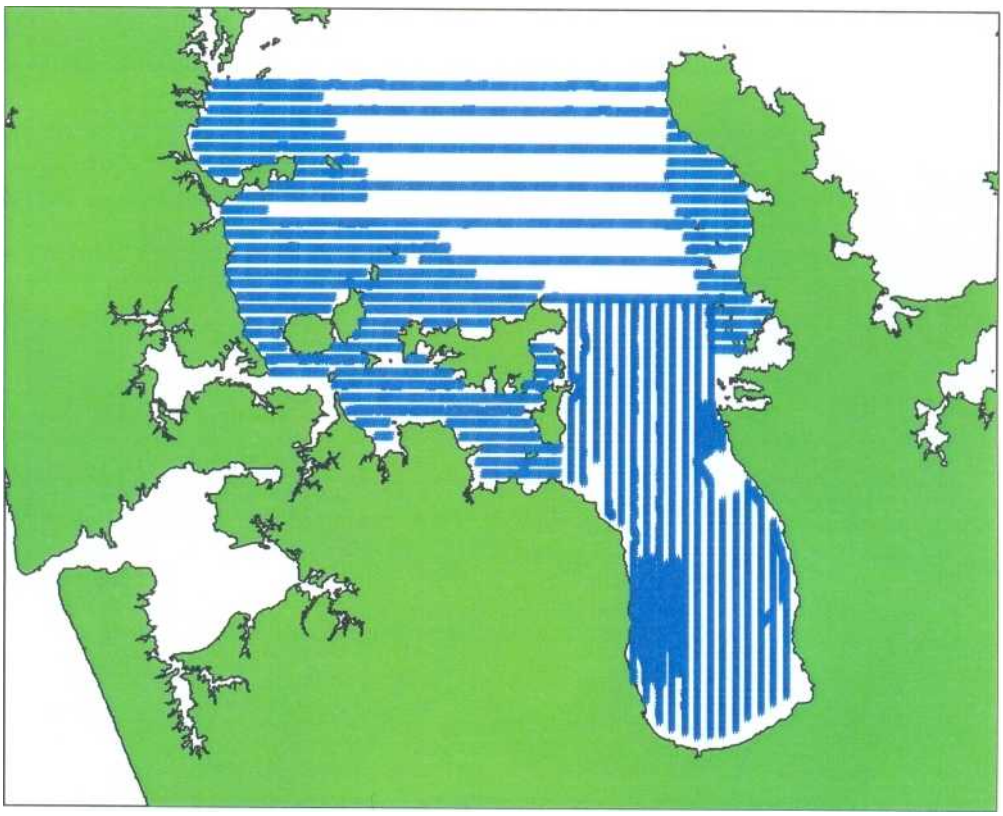

Figure 17: Combined Hauraki Gulf and Firth of Thames runlines

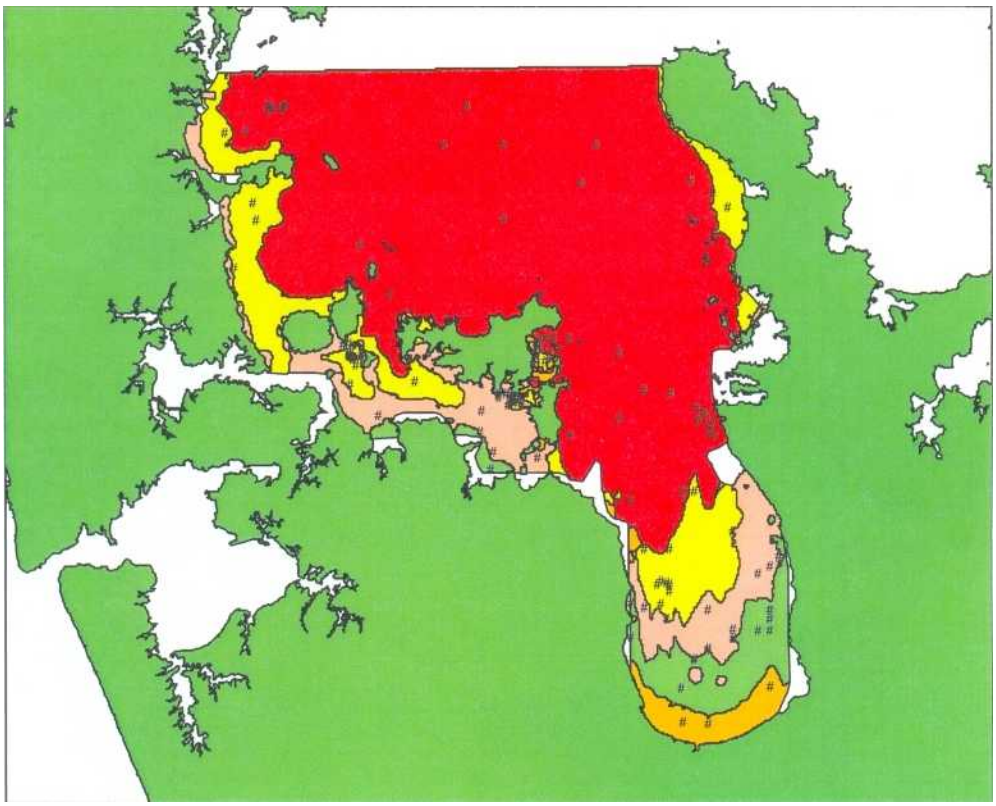

Figure 18: Combined acoustic class classification.
Black dotes show ground-truth sites from both Hauraki Gulf and Firth of Thames sites.