

## Addendum to Sanitary Survey of West Duart Bay (AB 406 807 13)

Report date: March 2009

Review date: 12 November, 2010

### Overview

A sanitary survey was undertaken on the Pacific oyster farm at West Duart Bay in 2007. At that time, the site was new and did not lie within an existing classified production area. At the time of shoreline survey, only a small area of trestles was in place at Port an Eathair, along the northwest shore Duart Bay. The sanitary survey recommended that the new production area be restricted to the area at Port an Eathair due to observed sources of contamination to the bay at Camas Mor. In response to feedback received from the harvester, the boundaries were expanded and parallel sampling points recommended in order to determine whether it was more appropriate to place the RMP nearer the inner boundary of the production area or at the existing oyster farm. Between April and August 2010, three sets of paired samples were collected by the official control sampling officers for Argyll & Bute Council and submitted to VeroMara for *E. coli* analysis. The results are summarised in Table 1 and represented geographically in Figure 1.

Table 1. Paired monitoring results for West Duart Bay (*E. coli* MPN/100 g)

Date	West Duart Inner NM 7327 3543	West Duart Outer NM 7343 3557
13/04/2010	230	40
15/06/2010	230	80
10/08/2010	>18000	9200

Recorded salinities varied markedly between samples, with the lower salinity generally recorded at the outer site for each paired sample. The August samples were collected during a period of heavy rainfall, whilst no rainfall had been recorded for the previous two sampling dates. Exceptionally high *E. coli* concentrations were found in the August samples, indicating that results for this site may be heavily influenced by contaminated rainfall runoff. There were insufficient samples to undertake a more detailed statistical analysis of the interaction between environmental variables and *E. coli* results at the parallel monitoring locations.

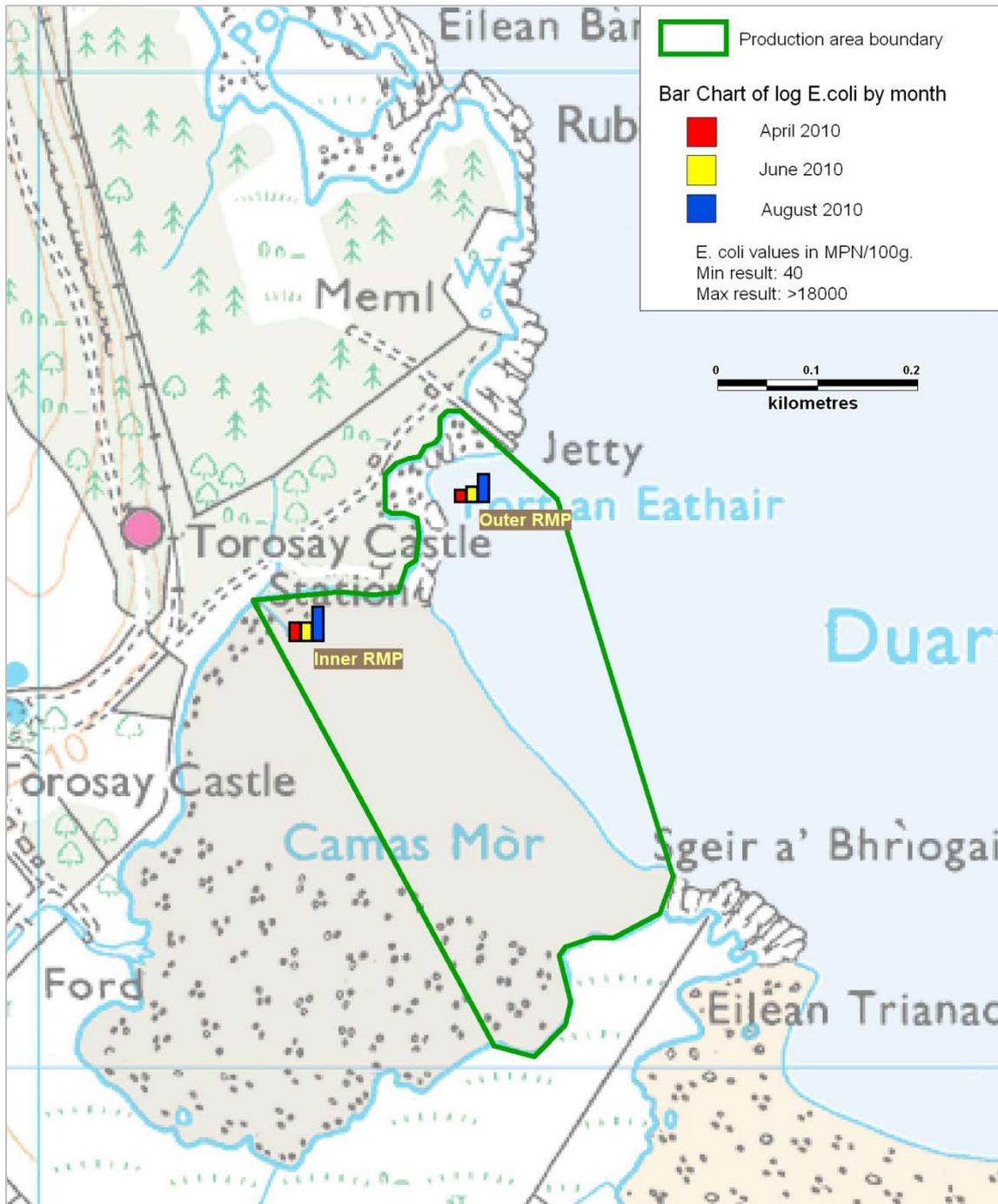


Figure 1. Map of West Duart Bay production area and parallel sampling results

### Conclusions

The three sets of parallel monitoring results showed consistently higher levels of contamination were present at the inner monitoring site than at the outer site. The sanitary survey suggested that higher E. coli levels might be expected in shellfish kept closer to sources at Camas Mor. Therefore, it is recommended that the RMP be established at NM 7327 3543, the Inner RMP, as sampling at this location would be most protective of public health.