

FAO Reference Centre for Bivalve Sanitation workshop on the development of bivalve production in Africa

8th – 10th July 2025, Nairobi, Kenya

Growing Area Assessments 1

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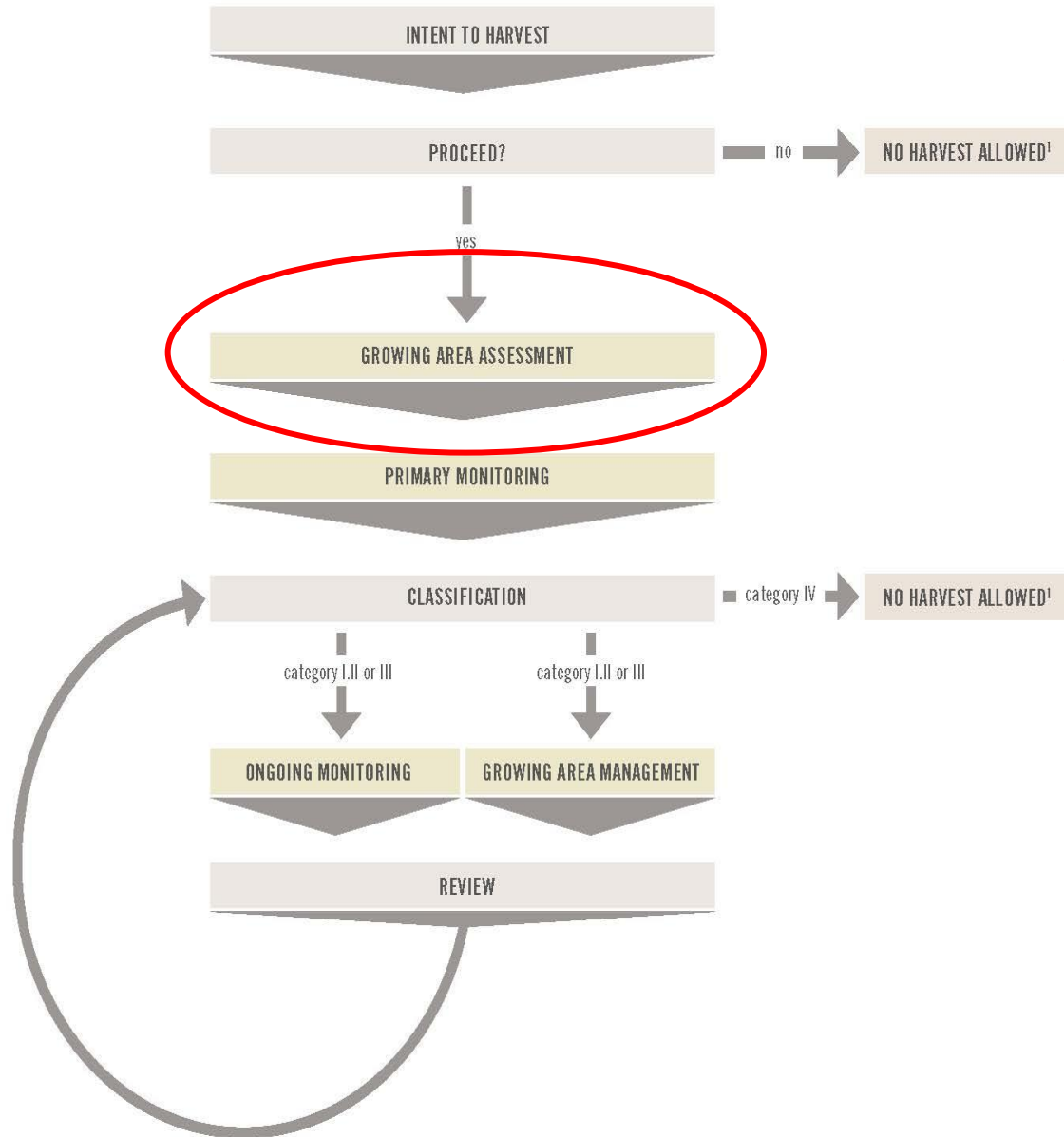


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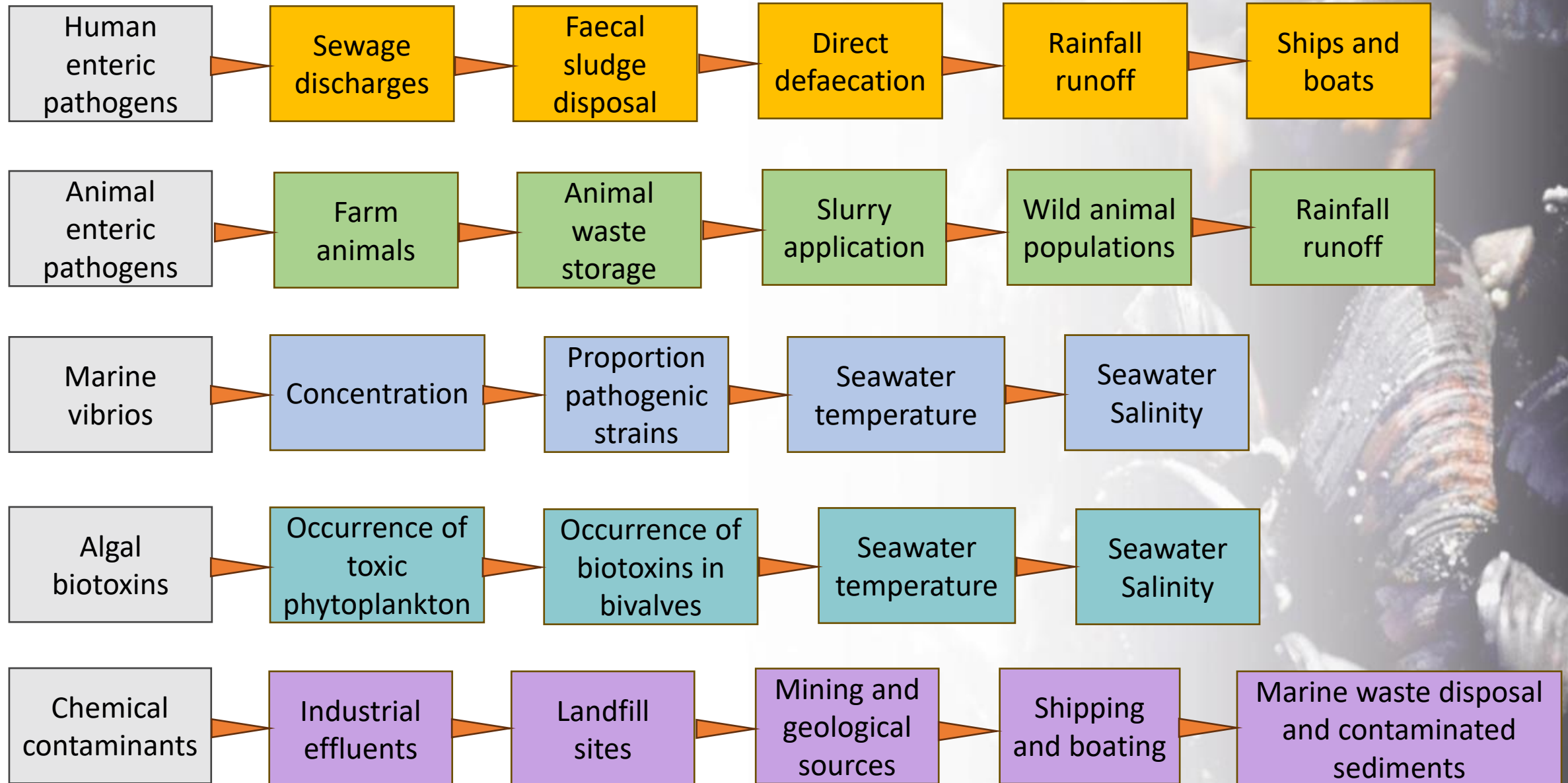


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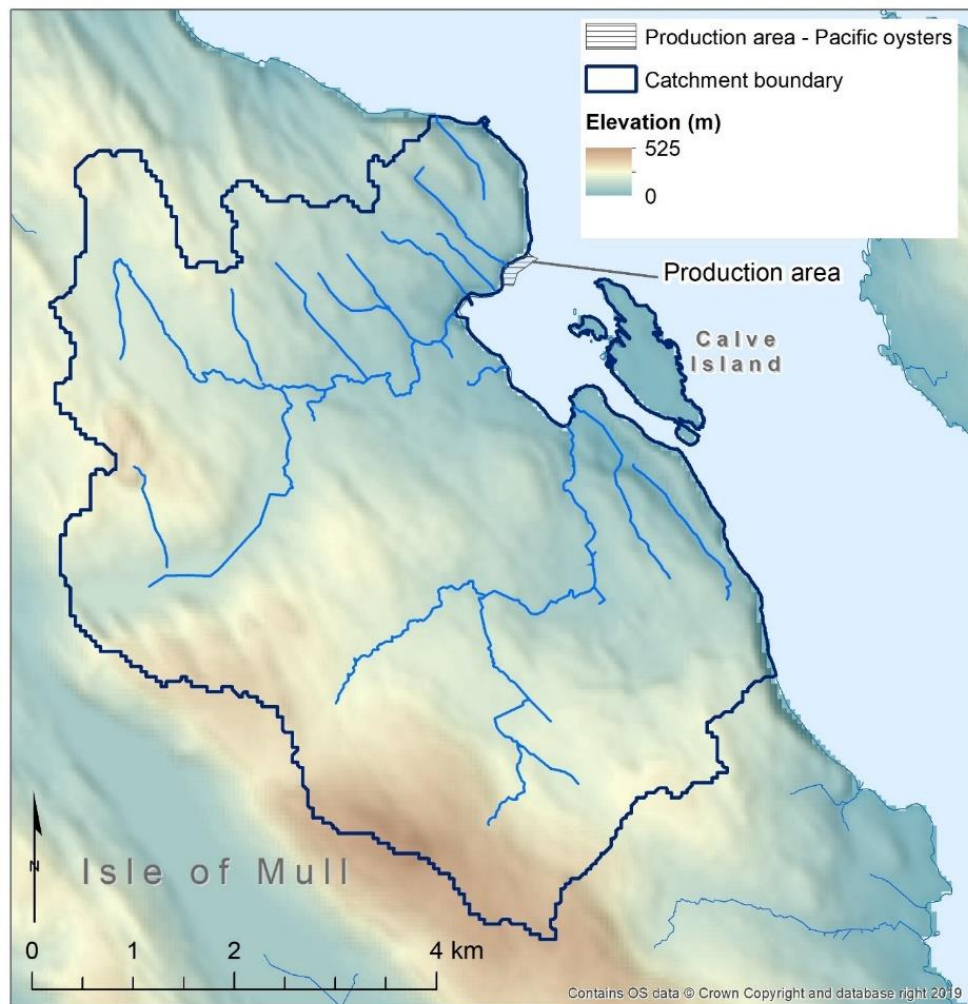
Growing Area Assessment



Additional Data Gathering



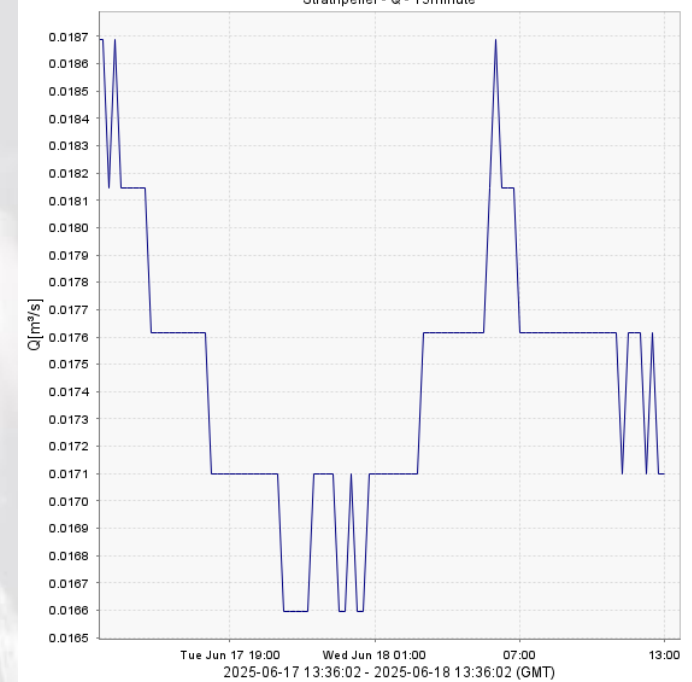
Watercourses



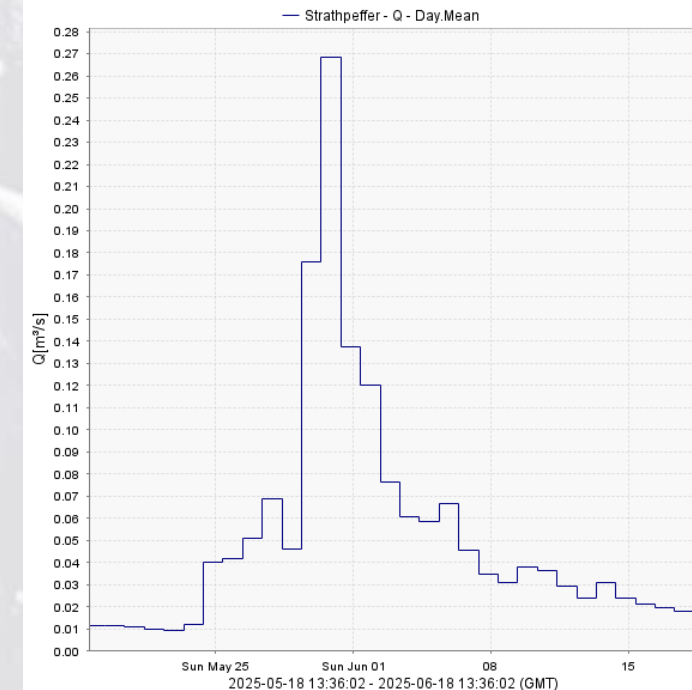
Watercourses are an important transport pathway for contaminants such as faecal material and chemicals.

Variations occur in flow and loading due to:

- Rainfall runoff
- Groundwater level
- Snowmelt
- Land use
- Land gradient
- Discharge/abstraction activity
- Season
- Presence of contaminant sources



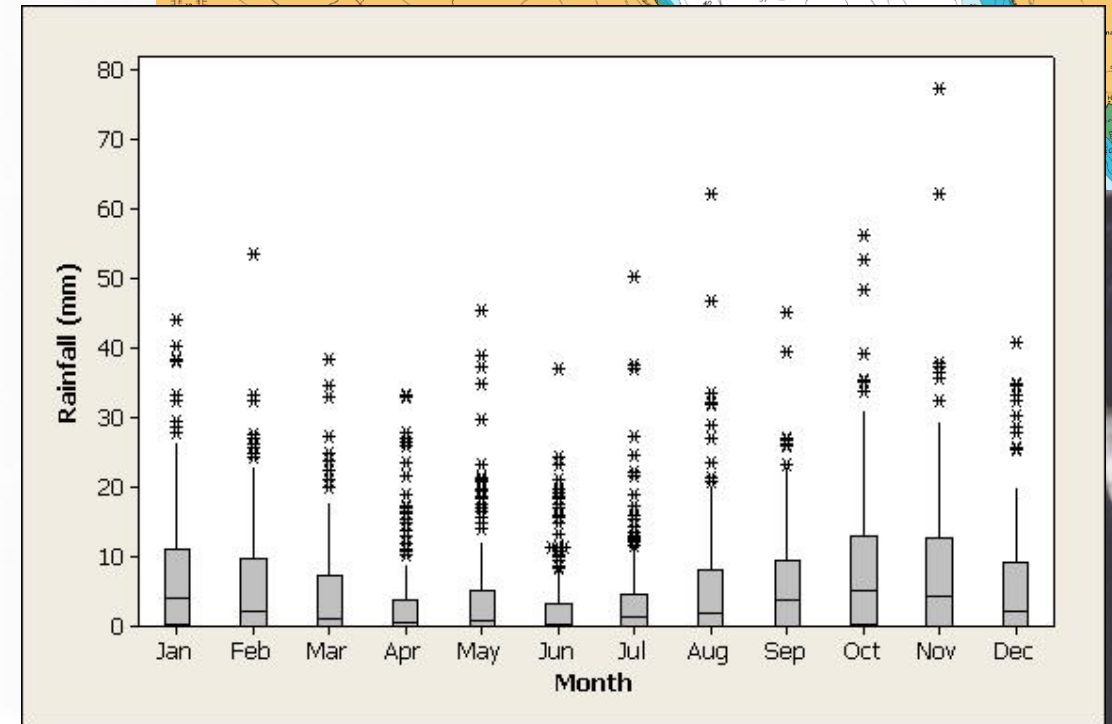
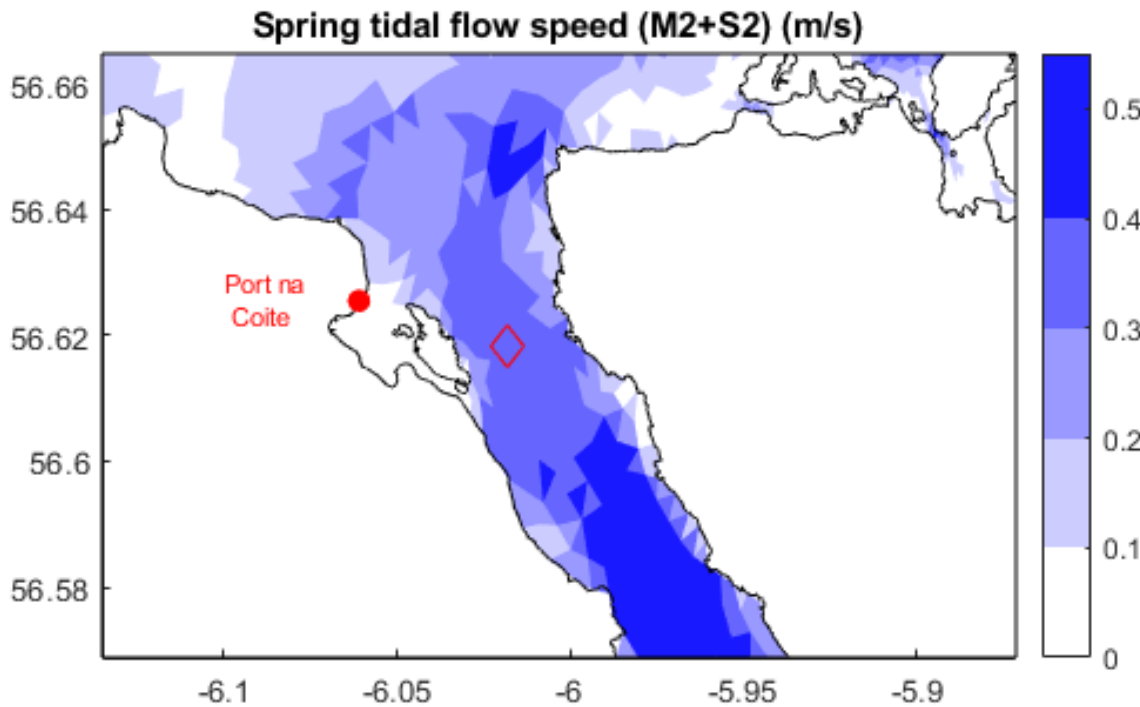
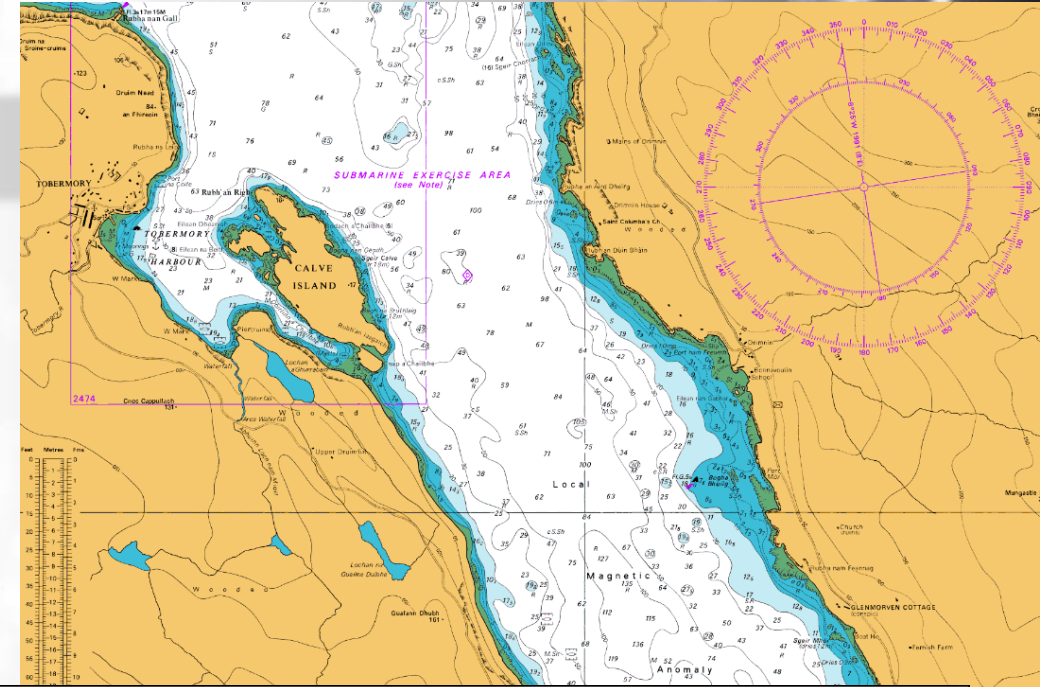
Timeseries Graph generated 2025-06-18 13:36:02 GMT



Timeseries Graph generated 2025-06-18 13:36:02 GMT

Environmental factors

- Topography
- Bathymetry
- Tides
- Meteorology
- Hydrodynamics
- Geology
- Soil type
- Chemical composition



Shoreline Survey

Purpose

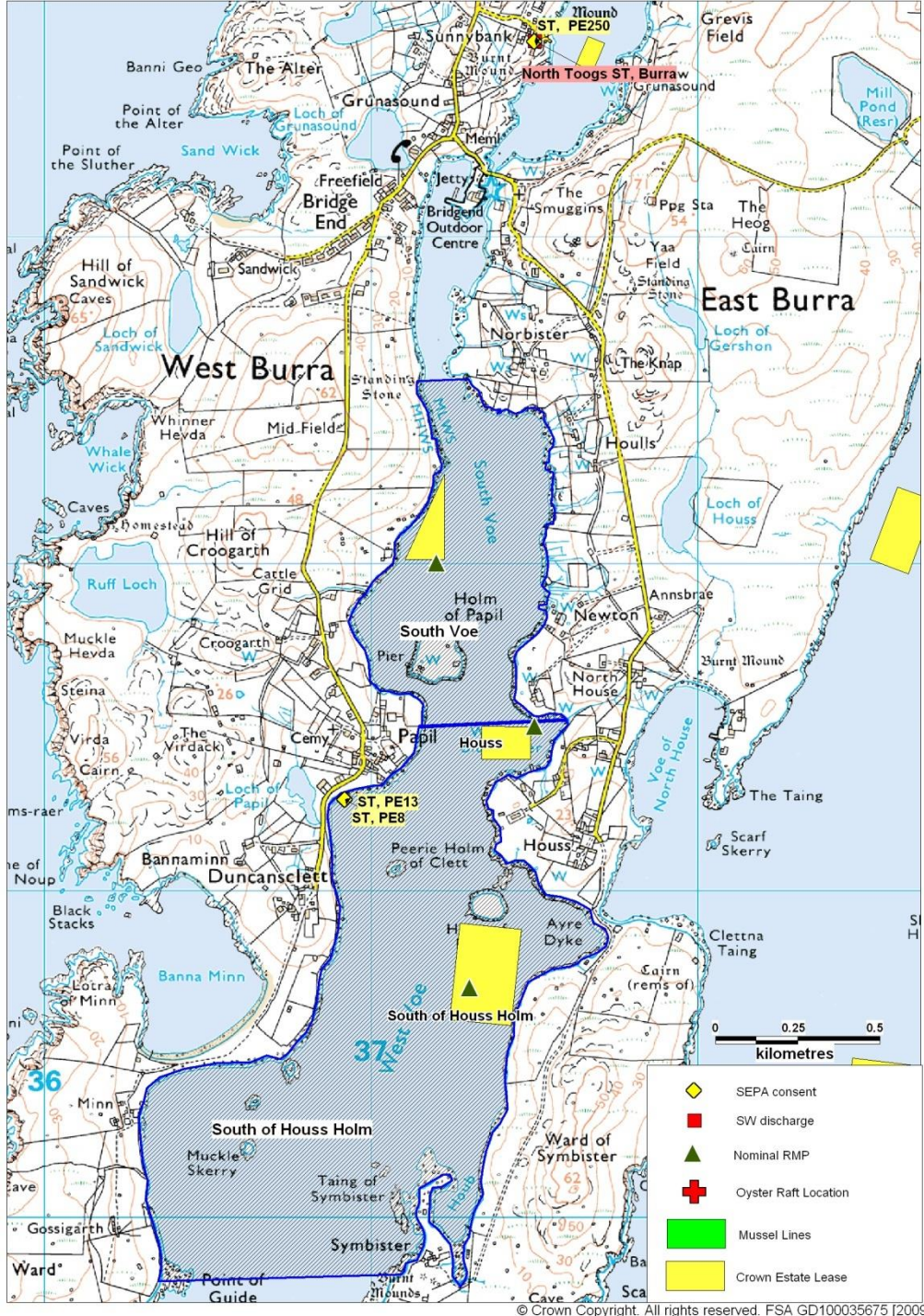
To see if it is where we think it is:

- Fishery location and extent
- Watercourses
- Faecal sources
- Land use

To see what else might be there:

- Animals at shoreline
- Waste dumping
- Seasonal populations



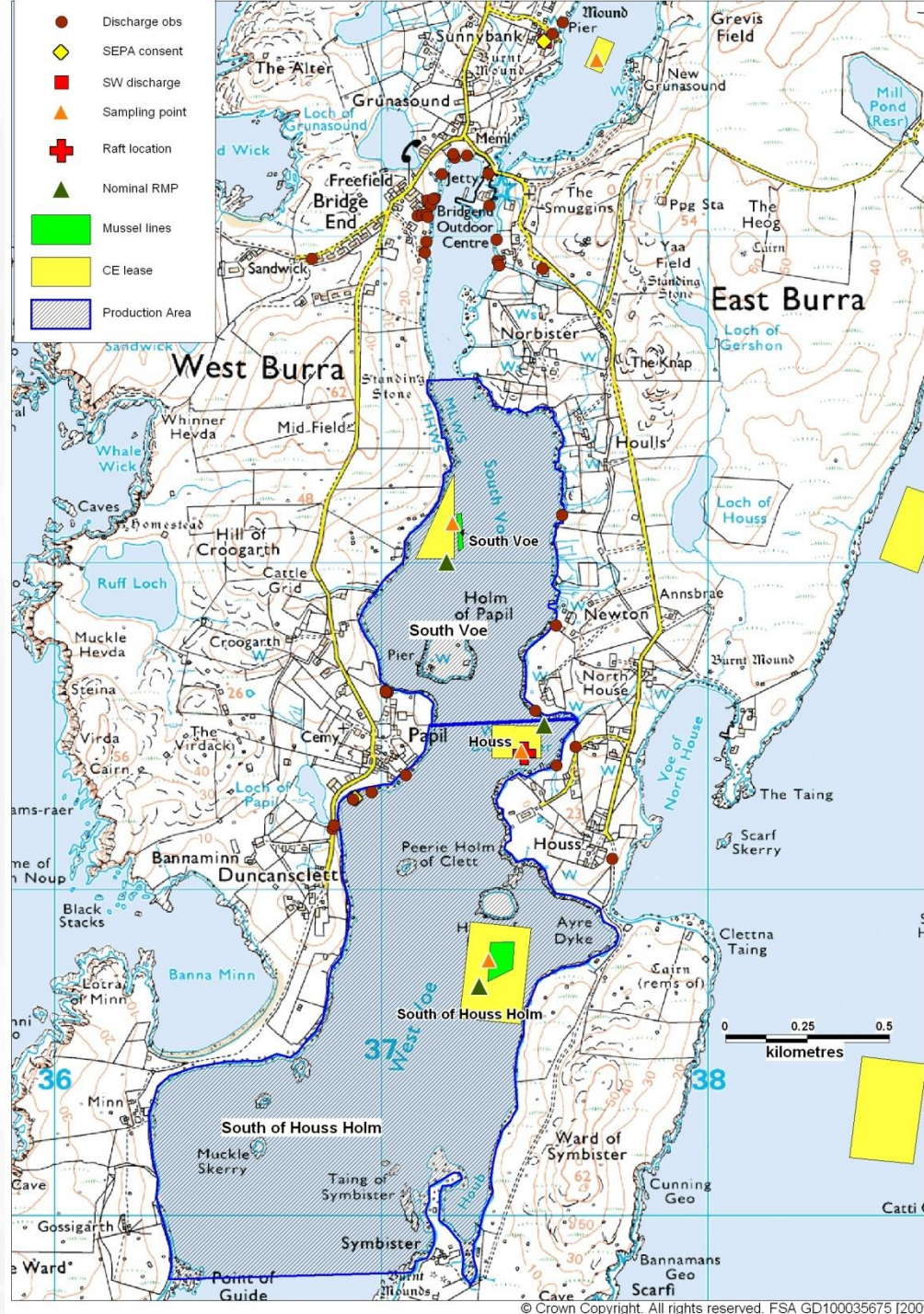


← Before shoreline survey

- Three consents for septic tank discharges
- Seabed lease areas for shellfish farms
- RMP locations not all on seabed leases

After shoreline survey →

- Precise locations of shellfish farms
- Actual sampling point locations recorded
- 38 septic tanks and discharge pipes found





Shoreline Survey Planning

Good shoreline survey planning ensures:

- Required resources are available
- Information gathering is consistent and complete
- Safety considerations accounted for
- Sampling logistics considered
- Efficient use of survey time



Any questions?



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Exercise: Plan a shoreline survey

- Using the template and materials given, plan a shoreline survey for a Pacific oyster growing area at Tobermory Bay.
- Draw the extent of shoreline to be surveyed on the map provided and note the locations and types of samples you would collect (if any).
- You have 20 minutes for this exercise

