API-127-25

ALAB
An Bord Achomhairc Um Cheadúnais Dobharshaothraithe

AQUACULTURE LICENCES APPEALS BOARD
RECEIVED
27/11/2025

Notice of Appeal Under Section 40(1) of Fisheries (Amendment) Act 1997 (No.23)

APPEAL FORM

Please note that in accordance with Section 40(2) of the 1997 Act this form will only be accepted if delivered by **REGISTERED POST or by hand** to the ALAB offices at the following address: **Aquaculture Licences Appeals Board, Kilminchy Court, Dublin Road, Portlaoise, Co. Laois, R32 DTW5**

Name of Appellant (Block Letters)	DECLAN CURTIN
Address of Appellant	
Eircode	
Phone No.	Email address (enter below)
Mobile No.	

Please note if there is **any change** to the details given above, the onus is on the appellant to ensure that ALAB is notified accordingly.

FEES

Fees must be received by the closing date for receipt of appeals	Amount	Tick
An appeal by an applicant for a licence against a decision by the Minister in respect of that application	€380	
An appeal by the holder of a licence against the revocation or amendment of that licence by the Minister	€380	
An appeal by any other individual or organisation	✗ €150	✓
Request for an Oral Hearing* (fee payable in addition to appeal fee) *In the event that the Board decides not to hold an Oral Hearing the fee will not be refunded	✗ €75	✓

Fees can be paid by way of Cheque or Electronic Funds Transfer

Cheques are payable to the Aquaculture Licences Appeals Board in accordance with the Aquaculture Licensing Appeals (Fees) Regulations, 2021 (S.I. No. 771 of 2021)

Electronic Funds Transfer Details	IBAN: IE89AIBK93104704051067	BIC: AIBKIE2D

Please note the following:

1. Failure to submit the appropriate fee with your appeal will result in your appeal being deemed invalid.
2. Payment of the correct fees **must be received on or before** the closing date for receipt of appeals, otherwise the appeal will not be accepted.
3. The appropriate fee (or a request for an oral hearing) must be submitted against each determination being appealed.

RL 0211 7783 9IE

ALAB
An Bord Achomhairc Um Cheadunais Dobharshaothraithe
Aquaculture Licences Appeals Board

The Legislation governing the appeals is set out at Appendix 1 below.

SUBJECT MATTER OF THE APPEAL	
SEE ENCLOSED LETTER DATED 26TH JUNE 2025	
Site Reference Number: - (as allocated by the Department of Agriculture, Food, and the Marine)	T05-472A

APPELLANT'S PARTICULAR INTEREST

Briefly outline your particular interest in the outcome of the appeal:

AS A MEMBER OF THE PUBLIC, A RESIDENT OF KINSALE AND RECREATIONAL USER OF THE

GROUNDS OF APPEAL

State **in full** the grounds of appeal and the reasons, considerations, and arguments on which they are based) (if necessary, on additional page(s)):

SEE ENCLOSED LETTER DATED 26TH JUNE 2025

CONFIRMATION NOTICE ON EIA PORTAL (if required)

In accordance with Section 41(1) f of the Fisheries (Amendment) Act 1997, where an Environmental Impact Assessment (EIA) is required for the project in question, please provide a copy of the confirmation notice, or other evidence (such as the Portal ID Number) that the proposed aquaculture the subject of this appeal is included on the portal established under Section 172A of the Planning and Development Act 2000. (See Explanatory Note at Appendix 2 below for further information).

Please tick the relevant box below:

EIA Portal Confirmation Notice is enclosed with this Notice of Appeal	
Other evidence of Project's inclusion on EIA Portal is enclosed or set out below (such as the Portal ID Number)	
An EIA was not completed in the Application stage/the Project does not appear on the EIA Portal	✓

Details of other evidence	N/A		
Signed by the Appellant		Date	26/6/25

Please note that this form will only be accepted by REGISTERED POST or handed in to the ALAB offices

Payment of fees must be received on or before the closing date for receipt of appeals, otherwise the appeal will be deemed invalid.

This Notice of Appeal should be completed under each heading, including all the documents, particulars, or information as specified in the notice and duly signed by the appellant, and may include such additional documents, particulars, or information relating to the appeal as the appellant considers necessary or appropriate."

Appendix 1.

Extract from the Fisheries (Amendment) Act 1997 (No.23)

40. (1) A person aggrieved by a decision of the Minister on an application for an aquaculture licence or by the revocation or amendment of an aquaculture licence may, before the expiration of a period of one month beginning on the date of publication in accordance with this Act of that decision, or the notification to the person of the revocation or amendment, appeal to the Board against the decision, revocation or amendment, by serving on the Board a notice of appeal.

(2) A notice of appeal shall be served—

(a) by sending it by **registered post** to the Board,

(b) by **leaving it at the office of the Board**, during normal office hours, with a person who is apparently an employee of the Board, or

(c) by such other means as may be prescribed.

(3) The Board shall not consider an appeal notice of which is received by it later than the expiration of the period referred to in subsection (1)

41. (1) For an appeal under section 40 to be valid, the notice of appeal shall—

(a) be in writing,

(b) state the name and address of the appellant,

(c) state the subject matter of the appeal,

(d) state the appellant's particular interest in the outcome of the appeal,

(e) state in full the grounds of the appeal and the reasons, considerations and arguments on which they are based, and

(f) where an environmental impact assessment is required under Regulation 3 of the Aquaculture Appeals (Environmental Impact Assessment) Regulations 2012 (SI No 468 of 2012), include evidence of compliance with paragraph (3A) of the said Regulation 3, and

(g) **be accompanied by such fee**, if any, as may be payable in respect of such an appeal in accordance with regulations under *section 63*, and

shall be accompanied by such documents, particulars or other information relating to the appeal as the appellant considers necessary or appropriate.

**Please contact the ALAB offices in advance to confirm office opening hours.

Appendix 2.

Explanatory Note: EIA Portal Confirmation Notice/Portal ID number

The EIA Portal is provided by the Department of Housing, Local Government and Heritage as an electronic notification to the public of requests for development consent that are accompanied by an Environmental Impact Assessment Report (EIA Applications). The purpose of the portal is to provide information necessary for facilitating early and effective opportunities to participate in environmental decision-making procedures.

The portal contains information on EIA applications made since 16 May 2017, including the competent authority(ies) to which they are submitted, the name of the applicant, a description of the project, as well as the location on a GIS map, as well as the Portal ID number. The portal is searchable by these metrics and can be accessed at:
https://housinggovie.maps.arcgis.com/apps/webappviewer/index.html?id=d7d5a3d48f[illegible]
7e5f84b711

Section 41(1)(f) of the Fisheries (Amendment) Act 1997 requires that "*where an environmental impact assessment is required*" the notice of appeal shall show compliance with Regulation 3A of the Aquaculture Appeals (Environmental Impact Assessment) Regulations 2012 (S.I. 468/2012), as amended by the Aquaculture Appeals (Environmental Impact Assessment) (Amendment) Regulations 2019 (S.I. 279/2019) (The EIA Regulations)

Regulation 3A of the EIA Regulations requires that, in cases where an EIA is required because (i) the proposed aquaculture is of a class specified in Regulation 5(1)(a)(b)(c) or (d) of the Aquaculture (Licence Application) Regulations 1998 as amended – listed below, or (ii) the Minister has determined that an EIA was required as part of their consideration of an application for intensive fish farming, an appellant (that is, the party submitting the appeal to ALAB, including a third party appellant as the case may be) must provide evidence that the proposed aquaculture project that is the subject of the appeal is included on the EIA portal.

If you are a third-party appellant (that is, not the original applicant) and you are unsure if an EIA was carried out, or if you cannot find the relevant Portal ID number on the EIA portal at the link provided, please contact the Department of Housing, Local Government and Heritage for assistance before submitting your appeal form.

The Classes of aquaculture that are required to undergo an EIA specified in Regulation 5(1)(a)(b)(c) and (d) of the Aquaculture (Licence Application) Regulations 1998 S.I. 236 of 1998 as amended are:

a) Marine based intensive fish farm (other than for trial or research purposes where the output would not exceed 50 tonnes);
b) All fish breeding installations consisting of cage rearing in lakes;
c) All fish breeding installations upstream of drinking water intakes;
d) Other fresh-water fish breeding installations which would exceed 1 million smolts and with less than 1 cubic metre per second per 1 million smolts low flow diluting waters.

In addition, under Regulation 5(1) (e) of the 1998 Regulations, the Minister may, as part of his or her consideration of an application for intensive fish farming, make a determination under Regulation 4A that an EIA is required.

26th June 2025

Re Aquaculture Licence Decision T05-472A – Kinsale Harbour, Cork – Woodstown Bay Shellfish Ltd.

Dear Sir,

In accordance with the provisions of the Fisheries (Amendment) Act 1997 I wish to formally appeal the decision of the Minister for Agriculture, Food and the Marine to grant the licence in relation to the above application.

I have attached a completed ALAB Appeal Form together with a cheque in respect of the requisite Fee.

In accordance with Section 49 of the Act I also formally request that the Board hold an Oral Hearing in respect of this matter. The fee in relation to this additional request is also included in the attached cheque.

The chief grounds for this appeal are as follows –

Errors and omissions on the Application Form

I have reviewed the available parts of the Application and believe that there are several errors and omissions which the Board should review and consider. These include -

The Applicant -

The Application lists the Applicant as Woodstown Bay Shellfish. The Applicant is in fact a Limited Company. I understand that the information to be supplied by a Limited Company is different to an Unlimited Company. It is unclear from the available information if the correct documentation was lodged with the Application.

Applicant's Name(s)
1. Woodstown Bay Shellfish
Address The harbour, Dunmore east, Co. Waterford

Source of Seed –

In terms of the source of mussel seed , I consider that the "Wild Irish Sea" is a very broad response and merited a request for Further Information. Equally, given the proposal to dredge for seed, this too merited a request for Further Information. Most importantly, the form asks for information on how the seed will be introduced into the culture area. The Applicant is completely silent on this.

(a) Wild Irish Sea (b) fishing / Dredging

Reason for site selection –

The Applicant cites a previous successful trial as the reason for the site selection. As the outcome of that trial is important information regarding the suitability or otherwise of the site, the results of the trial should have been furnished with the application or requested as Further Information.

(xiv) Please outline the reasons for site selection

Previous Succesful trial Licence on Site

Designated Shellfish Waters Area –

The Applicant states that the proposed site is within a Designated Shellfish Waters Area. Information available from the EPA indicates that this is not the case – see map at Appendix 1. To the extent that the proposed site is not in a Designated area this is a matter that should be well known to the Applicant as an experienced aquaculture producer. If the site is in fact not within a Designated area, and it is reasonable to expect the Applicant to know this, is this error / misstatement sufficient to invalidate the entire application?

(xv) Is the site located in Designated Shellfish Waters Area? Refer to Guidance Note 11a

Yes ✓ No

If yes give details

If no outline the reasons why you believe the site suitable for the proposed type of notwithstanding its location outside Designated Shellfish Waters Area

Sources of Pollution –

The Applicant states that there are no known sources of pollution in the vicinity of the proposed site. This is manifestly incorrect on a number of levels. So much so, this matter will be addressed separately later in this appeal.

NO

Harvesting –

The Applicant has indicated dredging as the method of harvesting. Given the potentially damaging impact of harvesting, more detail should have been provided with the Application or requested under Further Information.

xiv. Methods used to harvest the shellfish and details of any [illegible] shellfish

Dredging

Main Predators –

The Applicant has identified Starfish and Crabs as the main predators. The indicated control methods are dredging / site maintenance. This is very vague and more information should have been provided or requested under Further Information. Further analysis would be required on the impact of such control on the wider environment and existing crab and shrimp fishing.

xvii) What are the main predators of the species?

Crabs + Starfish

xviii) How will you control the predators?

Dredging / Site maintenance

Employment –

The Application Form requires the Applicant to project employment creation over a four-year period. There is a further requirement to indicate both full-time and part-time jobs. Whilst the Applicant has indicated employment growth of 6 over four years, they have not complied with the requirement to show this growth on an annual basis, nor distinguish between full and part-time jobs.

Furthermore, the Application Form is at best ambiguous as to where the indicated employment growth will be. This information is essential when considering the local economic impact of the proposal. It could be inferred from the Application Form that the employment creation will be at the Applicants Dunmore East premises.

Currently employ 30 full time staff at oyster growing site in Waterford

Grant of this Licence would allow us to grow staff by 6 people over 4 years

FULLTIME JOBS

Year 1 Year 2 Year 3 Year 4

PART TIME JOBS

Year 1 Year 2 Year 3 Year 4

Company has available purification facilities on Dunmore east premises

Mapping -

The Application Form specific maps to be provided with any Application. Such maps are required to show proposed access routes to the proposed site. The maps provided with the Application do not show any such routes. The absence of this information makes it impossible to assess the traffic and road safety implications of the Application.

1. An appropriate Ordnance Survey Map (recommendation is a map to the Scale of 1:10,000/1:10,560, i.e. equivalent to a six inch map). Note: The proposed access route to the site from the public road network shall be shown on the map.

Suitability of the Site?

The Ministers decision notice indicates at paragraph a) that scientific advice is that the waters are suitable. It is respectfully suggested that this advice is wrong or ill informed. The reasons for saying this are –

Location –

The proposed site is downstream of a major town. In particular, it is downstream of Wastewater Treatment Plants both public and private. It is also downstream of untreated effluent arising from agriculture and harbour activities. These issues are elaborated on below.

Kinsale Pollution Reduction Programme -

A copy of the Kinsale Pollution Reduction Programme is attached at Appendix 2. Crucially, this study only addresses the Designated Shellfish Area in Kinsale. As discussed earlier, the site proposed by the Applicant is not within this area. Section 1.2 outlines the legislative background to this report. Presumably, if the area proposed by the Applicant were to be designated a Shellfish Area a similar review would be required for the proposed area.

The report notes in section 2.0 that faecal contamination has been noted in shellfish in the Designated Shellfish Area. The report goes on examine the pressures in the subject area and outlines an Action Programme.

It is not unreasonable to conclude that the negative factors identified in the report will apply to some extent to the proposed site. It is also considered that the granting of a Licence in relation to the proposed site would be premature in the absence of a site-specific study equivalent to that contained in Appendix 2.

Historical Pollution incidents -

There have been a number of incidents of reported pollution in Kinsale Harbour and the Dock Beach which is adjacent to the proposed site.

Appendix 3 includes a Site Visit report by the EPA into an incident at the Kinsale on 22nd June 2019. The report notes a discharge of 354m3 of untreated wastewater into Kinsale Harbour over a four-hour period. But for a report from a member of the public, this incident could have been much worse.

This health concerns raised by this incident caused Cork County Council to issue a No Swim Advisory for the Dock Beach – see Appendix 3. The issue of the Advice demonstrates that the site proposed by the Applicant is exposed wastewater discharges from upstream of the proposed site.

There is no reason why there wouldn't be a repeat of a similar incident in the future with similar impacts of the proposed site location.

I have also included in Appendix 3 a Facebook post dated 2nd August 2023 suggesting a sewage incident at the Dock Beach. I have not been able to verify this report but have no reason to doubt the observations noted.

Further included at Appendix 3 is a report from the West Cork People which refers to issues with the Kinsale Plant.

Cork County Council and Irish Water should be asked to provide reports on all recorded pollution incidents which may have impacted the proposed site.

I understand that the Dock Beach is not a municipal beach and as such is not subject to the same degree of water quality monitoring as other beaches in the area. Given that the Application is for mussel farming for human consumption a period of water quality monitoring would be prudent before the grant of any Licence.

Kinsale Wastewater Infrastructure -

The site proposed by the Applicant is downstream of the town and harbour of Kinsale, with a population of some 5,000 people. There is extensive wastewater infrastructure upstream of the proposed site. As the proposed site is downstream of this infrastructure it is exposed to all discharges from this network. Such discharges include planned discharges of treated effluent, accidental discharges of untreated effluent and emergency stormwater overflows.

Attached at Appendix 4 is an extract from Cork County Council application for a Disposal Licence for the primary Kinsale Wastewater Treatment Plant. The maps included in the CCC application show the location of the discharge points from the Kinsale Plant and the privately operated Castlepark Plant. In the interests of clarity, I have attached a zoomed section of one of the maps from the CCC application. On this I have highlighted in pink the locations of existing culverts, outfalls and proposed emergency discharge. It is not clear from the information readily to hand what the current status of these features are. In considering the Licence Application Cork County Council and Irish Water should be asked to provide further information to assist the Board. This information should include up to date reports on the operation of the Kinsale Plant including current capacity and necessary future capacity to support ongoing development and population increase in Kinsale.

In addition to treated wastewater, it is to be expected that there will be misconnections between foul and surface water sewers. These misconnections are notoriously difficult to identify and resolve. Whilst no data is available in relation to this, there is a likelihood that a certain amount of untreated effluent is being released into the harbour through the stormwater system.

In my view the extent of wastewater treatment upstream of the proposed site makes it entirely unsuitable for production of shellfish for human consumption.

Pumping Stations & Overflows -

Because of the topography of Kinsale the wastewater infrastructure includes a number of pumping stations. The location of these are shown on plan attached the Irish Water letter dated 17th October 2016 included at Appendix 5.

As is usual in infrastructure such as this each pumping station has providing to stormwater overflows. Typically, these overflows have a flap valve to prevent tidal water flowing back to the station. In storm conditions the overflows may release untreated effluent into the harbour.

Also included at Appendix 5 is a Pump Station Survey 2022. Section 5.0 of the Survey notes clear evidence of tidal infiltration at all pumping stations. This infiltration can increase the hydraulic load on the overall system. It is reasonable to conclude that any tidal infiltration at the pumping stations would be reversed as the tide falls. A study would be required to identify if the noted infiltration causes untreated effluent to be released on the falling tide.

Cork County Council and Irish Water should be asked to provide information in relation to nature, quantity and frequency of discharges from the Pumping Station Overflows.

The site proposed by the Applicant is downstream of all the noted Overflows. In my view this renders the proposed site as unsuitable for production of shellfish for human consumption.

Untreated Wastewater discharge into Kinsale Harbour by vessels -

Included at Appendix 6 is a press report (dated 9th Auguust 2018) of the monthly meeting of Cork County Councils Bandon- - Kinsale Municipal District. This report flags the extent of untreated sewage that enters Kinsale Harbour from both yachts and smaller commercial vessels. Whilst not noted in the article, the situation is probably exacerbated by the number of yachts in the Harbor that are permanently lived on.

Interestingly, the Executive Engineer is recorded as saying that it was a "no brainer" that the Council should consider connecting the Pier Head to the pumping station at Denis Quay. This comment implies a level of concern with the facilities at the Pier Head. This merits further investigation.

The site proposed by the Applicant is downstream of the majority of untreated discharges from vessels. Cork County Council and the Harbour Authorities should be asked to advise on the extent of such discharges and likely impact on the site proposed by the Applicant.

Exposure to Storms -

While Kinsale is regarded as an intrinsically safe harbour, the outer harbour is wide open to gales and storms from the South or South-East. In Appendix 6 I have include an extract from the Sailing Directions of the Irish Cruising Club. These directions note that entry to Kinsale in these conditions would be "hazardous".

Also included in Appendix 6 are two pictures of the Summer Cove area during a winter storm. The location of Summer Cove is indicated on a map included in Appendix 6. It should be noted that Summer Cove is closer to the inner harbour than the site area proposed by the Applicant.

The photographs clearly show the severity of wave conditions in the harbour under particular circumstances. The spray from the photographed waves is higher than a two-storey house and in the foreground of the second picture debris thrown up by the waves litters the car park and road.

It is not clear from the Application that due consideration has been given to the exposure of the site to gales and storms. Further investigations are required to assess the impacts of storm damage to the proposed site. Such investigation should include the commercial viability of such an exposed site and the implications of any uncontrolled distribution of mussels disturbed by storm activity.

Historical Maritime Charts -

Included at Appendix 8 is an extract from the Admiralty Chart of Kinsale dated 1865 (Chart 2053). The extract focusses on the site proposed by the Applicant.

The notation on the Chart is "This Bank consists of shell sand with a small mixture of mud and is dredged for manure".

While this is an unusual notation on any Chart it isn't that surprising given that Kinsale didn't have any effective sanitation at the time. Looking at the profile of the bay south of the Blockhouse Point, it is to be expected that there would be an eddy current into this bay on the ebb tide. This eddy current could carry and deposit suspended matter in the shallow part of the bay.

Further hydrological investigation would be required to clarify the extent to which the proposed site is likely to receive and retain pollutants carried from upstream.

Experience from Morecambe Bay –

Included in Appendix 9 is a Facebook post dated 17th June 2025 by Jack O'Sullivan. While I have not verified the credentials of Mr O'Sullivan, his post does raise a number of significant evidence based issues that merit further investigation. In view of the exposure of the site to gales and storms, as discussed above, Mr O'Sullivans comments about the propensity of similar mussel beds being relocated is of particular concern.

The issues raised by Mr O'Sullivan should be investigated further.

Potential Hazards to Navigation -

A number of people present at the Public Meeting held in Kinsale on 8th June 2025 raised specific concerns that the proposal could create hazards to navigation. These include –

A Harbour Pilot noted that the proposed site is directly adjacent to the shipping channel into Kinsale. The Pilot also noted that the Bar in the channel already provides limited draft for larger vessels entering and leaving Kinsale. His concern was that dredging of the proposed site could adversely affect the limited depths currently available. He was also concerned about the safety of carrying out dredging operations in close proximity to vessel movements in the channel.

The concerns raised by the Pilot should be investigated further.

The meeting was also address by a commercial fisherman and a yacht owner. Both individuals had experienced engine difficulties caused by mussel growth in their engine cooling water intakes. It should be noted that loss of cooling water can result in an immediate and unexpected stoppage of an engine. Obviously, any such stoppage creates an immediate risk to both the vessel and crew.

The safety concerns in relation to potential for infestation of vessel cooling water systems should be investigated further.

Economic Impact

The Ministers decision notice indicates at paragraph c) that the proposed development should have a positive effect on the local economy. I couldn't find anything in the Application that would support this contention.

As discussed previously, there is limited information in the Application regarding the nature and location of the additional employment envisaged by the Applicant. At the very best the Applicant indicates that the proposal will create 6 jobs over a four-year period. Where these jobs will be created is unclear, but it may be inferred that they will be in Dunmore East.

Kinsale has a thriving economy, much of which relies on tourism and recreation. Both industries are responsible for significant employment in the town and surrounding areas.

Even if the 6 jobs referred to by the Applicant were to be created in Kinsale, which is doubted, this is relatively insignificant when compared to the jobs associated with tourism and recreation.

There is very real concern in Kinsale that the Application poses a threat to the economy of the town.

Another concern raised locally is that if a Licence is granted as requested by the Applicant and it transpires that the site is subsequently subject to damage and disruption from activities upstream then the Applicant may be able to seek financial recompense from either Cork County Council or Irish Water. If the Applicant were to be successful in any such claim this would have a detrimental impact on financial resources that could otherwise be deployed in the area.

Accordingly, before the grant of any Licence the economic impact of the proposal should be fully investigated. If there is any risk of an adverse economic impact the Licence should not be granted.

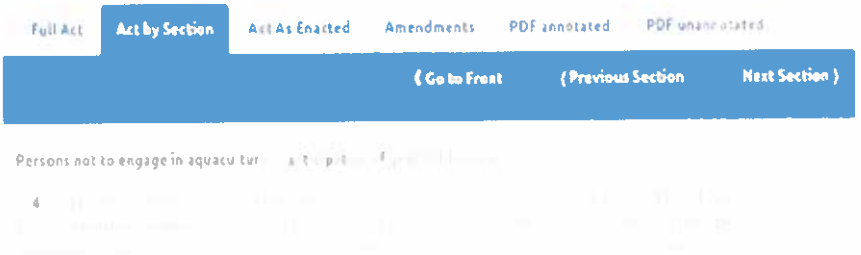
Do Woodstown Bay Shellfish Ltd already operate a mussel farm in the proposed location?

Appendix 10 include a screen grab from the Woodstown Bay Shellfish website taken on 25th June 2025. This indicates that Woodstown claim to have a mussel farm in Kinsale. Although not entirely clear from the website, it is presumed that they are referring to the site which is the subject of this Application.

If the reference is to the subject site, it raises a significant issue –

- Under the Fisheries & Foreshore (Amendment) Act 1998 an Application shall not be determined if the Applicant commences aquaculture prior to the grant of the relevant Licence.

Fisheries and Foreshore (Amendment) Act 1998



The Board should investigate if Woodstown have actually commenced aquaculture prior to the great of the requisite Licence. If so, it would appear that the Board can not proceed to grant the Licence requested.

Access to recreational activities

The Ministers decision notice indicates at paragraph b) that the project can accommodate access for recreational and other activities.

There is considerable local concern that the potential for negative impact on recreational and other activities hasn't been properly considered by either the Applicant, or the Minister.

The Dock Beach is a primary recreational facility for Kinsale. It's a clean safe beach within walking distance of the town. It is used extensively for swimming, kayaking, sailing, fishing and other water sports.

There are concerns that the proposed dredging activities will disrupt or prevent the recreational access that is currently enjoyed over the subject site.

There is also concern that sediment produced by the mussel beds and dredging will materially affect the water quality, temporarily or permanently, which will render the waters unsuitable or undesirable for water-based activities.

As discussed previously, the Applicant has not provided any information in relation to their proposed access to the site. In the absence of this information, it is not possible to assess how access to the site by the Applicant will impact recreational activities.

If the Licence were to be granted there is also a concern that the Dock Beach will be littered with spent mussel shells.

Included in Appendix 11 is a map showing the extent of some of the water sport activities in the vicinity of the subject site.

It is suggested that a Licence not be granted until such time as the full impact of the proposal on recreational activity is assessed.

Government / National Policy

On 9th June 2025 Taoiseach Micheal Martin made remarks at the European Ocean Pact Event – UN Oceans Conference An extract from these remarks is set out below (source Gov.ie 25th June 2025).

I agree that the special communities along our shores should be preserved and strengthened. However, it is far from clear how the granting of the requested Licence can support this objective.

> Europe's relationship with our seas and oceans can be seen across all our coastal communities. These communities directly rely on healthy oceans and seas for their livelihoods, food, and cultural heritage. By restoring our marine ecosystems and supporting sustainable fishing, we will not only protect our marine environment but also preserve and strengthen all the special communities along our shores that call the coast their home.

Appendix 12 contains an extract from the Review of the Aquaculture Licensing Process. Section 2.3 outlines the relevant Government and EU policy.

The Review states that there would be ".. a limited number of new licences...". Furthermore, the review notes that increased output will be dictated by "...site suitability for the cultivation of particular species".

Also included at Appendix 12 are two photographs from the Lower Road area of Scilly. The first photograph shows the traditional fishing for salmon using hand hauled nets. This once thriving from of fishing disappeared in living memory. This form of fishing stopped when salmon numbers collapsed during the 1970's. This collapse was attributed by many to unrestricted drift-netting at sea. No doubt, the drift netting was at the time judged to have a positive effect on the economy and to be sustainable. The second picture shows one of the iron posts once used to anchor one end of the salmon nets, now used as a mooring post for the occasional recreational boat. The Application site is behind the Blockhouse Point in the background. The pictures are a sark reminder of the potential for "economic progress" to have a serious negative consequences for local people.

It is suggested that the Board determine if the granting the requested Licence complies with Government and EU Policy.

Errors in the submitted Risk Assessment

Appendix 13 contains an extract from the submitted Risk Assessment dealing with the risks to otters. This part of Risk Assessment is clearly a "cut & paste" from another application for oyster farming on trestles. It is no relevance to the Application in hand.

This undermines the reliability of the Risk Assessment.

In view of this error, the Board should consider if the Risk Assessment is fatally flawed.

Impact on Heritage

The Ministers decision notice indicates at paragraph e) that there are no anticipated impacts on man-made heritage of value in the area.

It is not clear from the Application that the necessary surveys have been carried out to support this conclusion.

The proposed site is located close to the historic James Fort and Charles Fort. The site is close to the site of the wreck of the La Trompeuse which struck Farmer's Rock on 15th July 1796.

Nautical artefacts on display outside the Kinsale Museum includes an anchor which is attributed to Spanish Armada of 1601. The information board at the museum says that this anchor was raised from within the harbour in the 1890's.

Prior to the grant of any Licence, it is suggested that a full archaeological survey of the proposed site be carried out.

If granted, could the Licence impact on future infrastructure improvement works in Kinsale?

Based on experiences elsewhere there is a concern that the grant of a License in the proposed location might subsequently become an impediment to carrying out future important infrastructural works in Kinsale.

By way of example Appendix 14 includes the ABP Inspector's Report reference ABP-315940-23 an Appeal against drainage upgrade works in Dunmore East Harbour. The Report includes reference to submissions made by Woodstown Shellfish Ltd. Interestingly, Woodstown in their observations refer to perceived deficiencies in EIA Screening Reports and AA Screening Reports. It is suggested that the Kinsale Application might reasonably be subjected to the scrutiny they have suggested in the Dunmore East ABP Appeal – see section 6.5.2 of the Inspector's Report.

Also included in Appendix 14 is a summary of the judgement in the case of Irish Water v Woodstown Shellfish Ltd – [2017] IEHC 223. This case deals with difficulties associated with the laying of a wastewater pipe in Youghal Harbour.

It is suggested that the Board give due consideration to any potential future difficulties that the grant of a Licence may create for future infrastructural projects in Kinsale Harbour.

Issues with the licencing process generally

A number of concerns have been raised about the licensing process generally and this application in particular. These include –

The current licensing system is perceived to lack transparency. The system does not operate along the line of other Statutory Consents such as the on the Planning & Development Act. These concerns are more fully considered in the Review of the Aquaculture Licensing Process referred to elsewhere.

Interested members of the public are only given an opportunity to Appeal a decision of the Minister to grant a Licence. In making that appeal it would appear that the terms of the proposed Licence are not publicly available.

The Application for the License in question was lodged in December 2018. The Ministers decision was only published recently. It should be noted that section 13 of Act sets an objective to decide Applications within 4 months and the provisions that apply where this is not possible. It is not clear why there were extraordinary delays in deciding this Application or indeed if the requisite notices were issued by the Minister. Notwithstanding this, it is abundantly clear that it is unsafe to rely on environmental reports and screening that are over six years old.

It has been challenging for the public to easily engage with the appeal process. For example, Appendix 15 includes a screen grab from Gov.ie. The Application in question is to be found under Kinsale Harbour May 2012. This is considered to be misleading as the base Application was made in 2018. It has also been relatively difficult to identify the deadline for lodging appeals. There is no good reason why this information isn't provided on the Gov.ie website.

The ALAB Appeal Form notes that a request for an Oral Hearing attracts an additional fee of €75. Surprisingly, it is stated that this fee is not refundable in the event that the Board decides not to hold an Oral Hearing. This approach could be construed as a deterrent to requesting an Oral Hearing in circumstances where an Oral Hearing is otherwise fully justified. The approach could be seen as undermining the justice of the appeal system.

In view of the above concerns the Board should consider if a decision to grant the requested Licence is safe and if granted is it likely to be challenged in the Courts subsequently.

Other issues arising from the Ministers decision

In the preamble to the Ministers decision it is stated that the decision to grant the Licence is in the "...public interest...". Given that the Applicant is a commercial concern it is difficult to understand the public interest can used to justify granting the Licence. There is very strong public opposition in Kinsale to the granting of the granting of this Licence. There is a reasonable basis to say that the population of Kinsale can judge for themselves what is in their interest, or otherwise.

Paragraph d) of the Ministers reasons says that all issues raised in the consultation phase have been considered. While this may well be the case, no evidence has been provided to verify this.

Paragraph f) of the Ministers reasons says that no significant effects arise regarding wild fisheries. The River Bandon is an important destination for Atlantic salmon and sea trout. There is no evidence that the Application gives due consideration to these species. It is requested that this shortcoming be properly addressed.

Conclusion

I believe that the Aquaculture Licencing Application reference T05-472A by Woodstown Bay Shellfish contains significant errors and omissions. I further believe that the reasoning set out in the decision by the Minister to grant said licence is wrong or misguided in a number of key areas. In simple terms, the proposal is the wrong thing in the wrong place.

The risks associated with granting the requested Licence outweigh any limited benefits by some margin.

In view of the matters raised in this appeal I request that Licence applied for not be granted.

In the alternative, if the Board believe that a Licence should be granted, I request that it not be issued without substantial further investigation to verify that each of the reasons set out in the Minister's decision are demonstrated to be correct, beyond reasonable doubt.

Yours faithfully,

Declan Curtin MRICS, MSCSI

Chartered Planning & Development Surveyor

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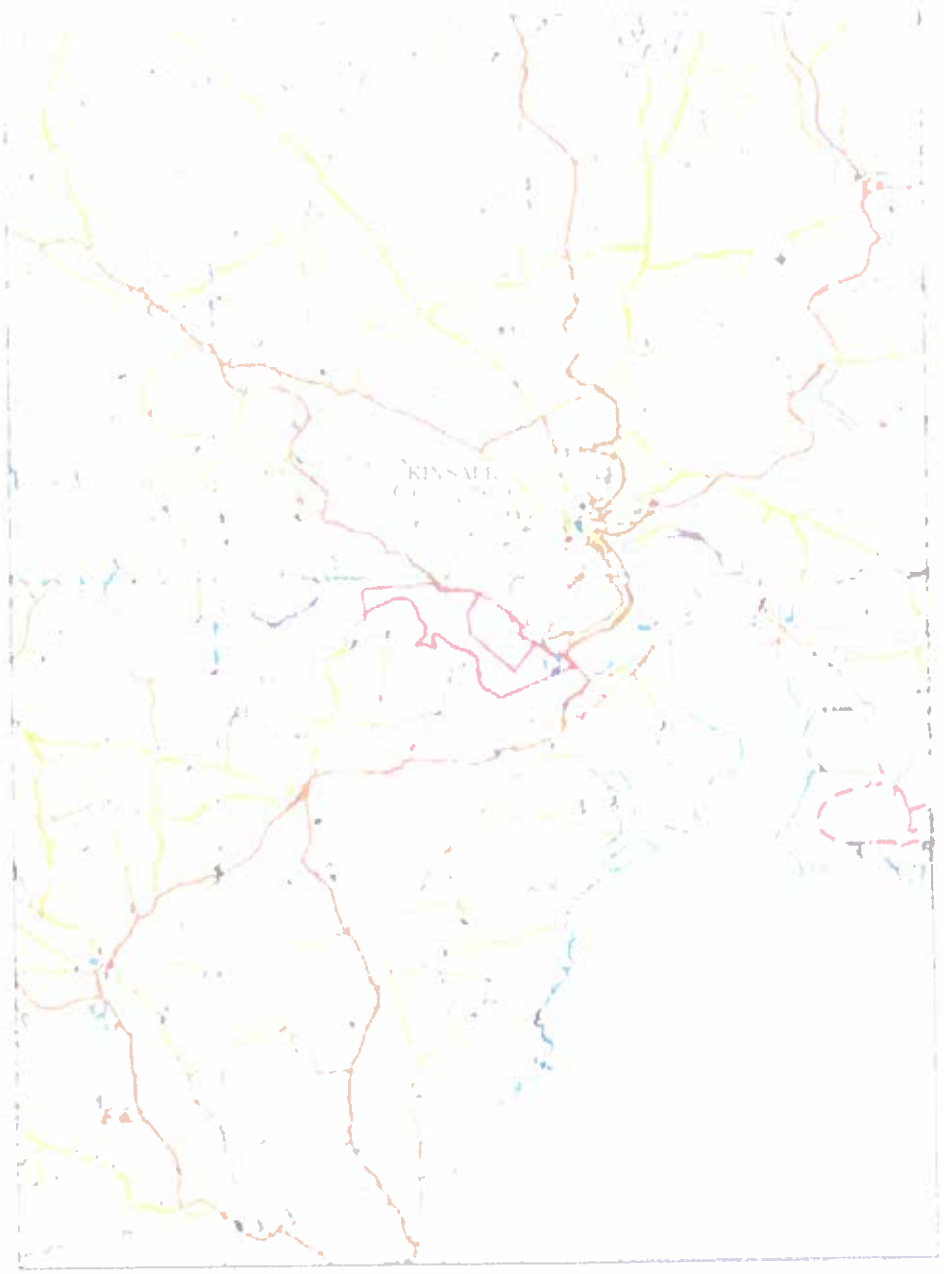
Appendix 1

Designated Shellfish Area – Kinsale – EPA Map 41

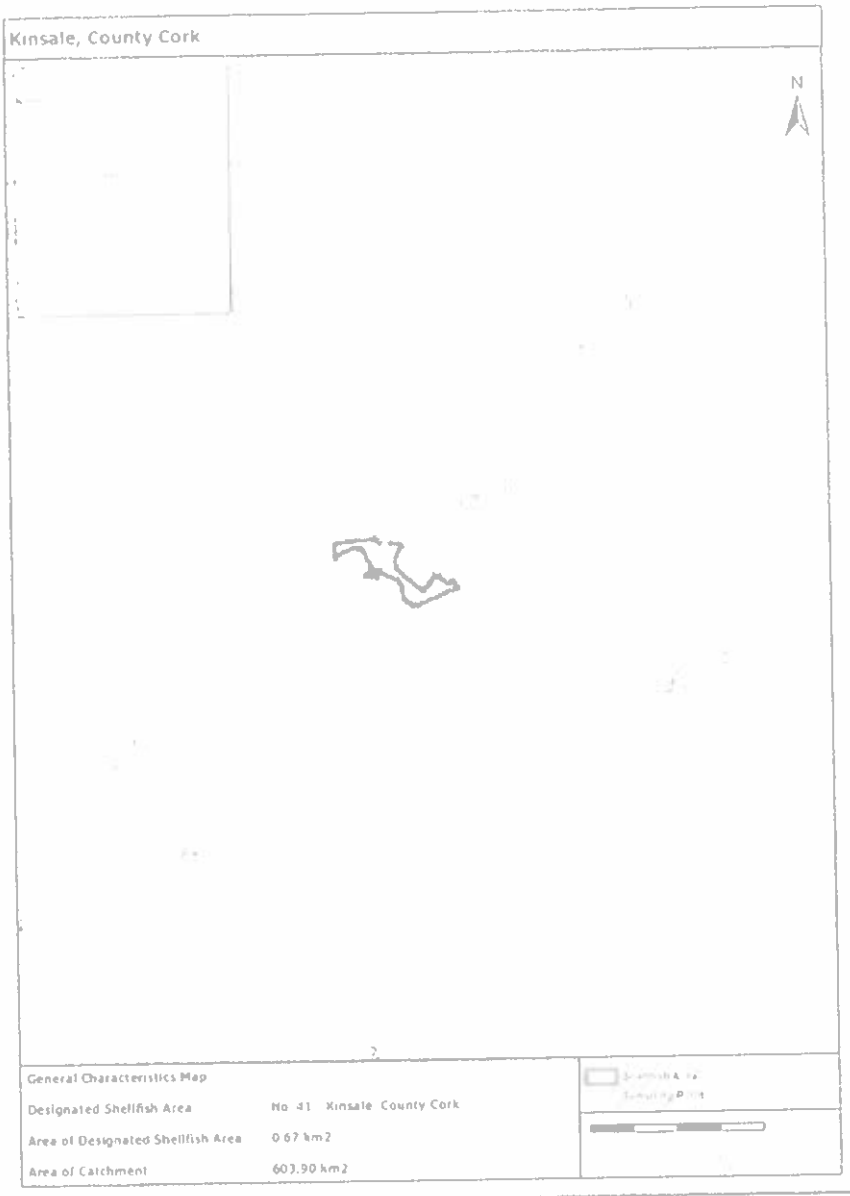


Map 41: Kinsale

Appendix 2

Revised / Updated

Kinsale Pollution Reduction Programme



Name	Kinsale Shellfish Area
Map number	41
Year of designation	2009
Area	0.67 km^2
River Basin District	South Western RBD
County	Cork
Location of sampling point	51 deg 42.000 min North (Lat) 8 deg 32.700 min West (Long)
Catchment area	603.90 km^2

1.0 INTRODUCTION

1.1 Programme Objective

Compliance with the standards and objectives established by the Quality of Shellfish Waters Regulations 2006 (S.I. No. 268 of 2006) (as amended) for the designated shellfish growing waters at Kinsale and with Article 5 of Directive 2006/113/EC of the European parliament and of the Council on the quality required for shellfish waters.

1.2 Pollution Reduction Programme

This pollution reduction programme for the shellfish growing waters at Kinsale has been established by the Minister for the Environment, Community and Local Government in order to protect and improve water quality in the designated shellfish growing areas in Kinsale and in particular, to ensure compliance with the standards and objectives for these waters established by the 2006 Quality of Shellfish Waters Regulations (S.I. No. 268 of 2006) and with Article 5 of Directive 2006/113/EC of the European parliament and of the Council on the quality required for shellfish waters.

1.3 Supporting Characterisation Report and Toolkit of Measures

The Pollution Reduction Programme stems from the work undertaken in the characterisation report for Kinsale. The characterisation is designed to achieve the following:

- establish the catchment that influences the water quality of the designated area;
- identify the different types of pressures or impacts prevalent in the catchment;
- establish an initial assessment of the water quality within the catchment and within the designated shellfish area using all water quality data available;
- from the above three elements identify the pressures that are active in the catchment and subsequently impacting the water quality in the designated shellfish area;
- having identified the pressures impacting on the water quality the characterisation report prioritises them in relation to their impact.

The characterisation report thus provides a prioritised list of pressures/impacts/effects on water quality. The pollution reduction programme or action plan takes this prioritised list and addresses each issue with actions to help ensure that compliance with the relevant water quality standards is achieved or ensured.

The measures/actions included in this PRP to address the identified pressures on shellfish water quality in this catchment are based on a National Toolkit of Measures. The National Toolkit has been derived from earlier work carried out on the River Basin Management Plans under the Water Framework Directive (WFD), reflecting the common objective to improve water quality in the two Directives. In addition, designated shellfish waters are part of the WFD Register of Protected Areas, providing a further link between the Pollution Reduction Programmes and River Basin

Management Planning.

Within each individual PRP specific measures from the National Toolkit are applied where required, to address the key and secondary pressures identified in each of the designated shellfish waters.

1.4 Strategic Environmental Assessment and Habitats Directive Assessment

The Strategic Environmental Assessment (SEA) and Habitats Directive Assessment (HDA) processes were carried out in tandem with the PRP compilation process. These assessments both informed the development of alternatives considered for the PRP and included detailed high-level assessments highlighting the potential positive and negative impacts (including cumulative impacts) associated with application of the measures contained in the National Toolkit. In addition, a more focussed assessment was also carried out which considered the individual and cumulative impacts associated with implementation of the measures brought forward into this individual PRP.

As a result of the SEA and HDA assessments mitigation measures were identified in order to reduce potential negative impacts associated with implementation of the PRP. The relevant mitigation measures are included in Annex 2 of the PRP. The mitigation measures arising from the SEA are noted in black, while the mitigation measures arising from the HDA noted in blue.

1.5 Monitoring of Water Quality

The Marine Institute is carrying out a monitoring programme to monitor the condition of waters in the shellfish growing area and to verify compliance, or otherwise with the water quality standards outlined in Schedules 2 and 4 of the Quality of Shellfish Waters Regulations (S.I. No. 268 of 2006) and summarised in Table 1 of the Characterisation Report (Chapter 1 of the Characterisation Report refers). The Marine Institute will submit a report on water quality in respect of the designated area to the Minister each year, and will immediately bring to the attention of the Department of the Environment Community and Local Government any non-compliance with a water quality standard to enable investigation to be undertaken

1.6 Review/monitoring of Pollution Reduction Programme

This pollution reduction programme will be kept under review by the Minister and will be updated and amended as needed from time to time, having regard to water quality conditions within the shellfish growing area including changes in water quality in response to the implementation of measures and other factors arising in the catchment that may affect water quality in the designated area

The pollution reduction programme will be reviewed at intervals not exceeding three years and, where necessary, at lesser intervals if the monitoring data indicates a deterioration in water quality status or a risk that the objectives or standards laid down in the Regulations will not be achieved

When the Pollution Reduction Programme is being reviewed the most current baseline data will be consulted.

Prior to the incorporation of the PRP into the second cycle of the River Basin Management Plans a review of the Strategic Environmental Objectives for Water will be carried out as against those drawn up for assessment of the first cycle River Basin Management Plans to ensure that the Shellfish PRP help to meet the wider Water

Framework Directive water quality objectives.

1.7 Monitoring of Environmental Impacts

Article 10 of the SEA Directive requires that monitoring be carried out in order to identify at an early stage any unforeseen adverse effects due to implementation of the PRP, with the view to taking remedial action where adverse effects are identified through monitoring. An Environmental Monitoring Programme has been developed which focuses on aspects of the environment that are likely to be impacted by the PRPs. The Environmental Monitoring Programme is included in Table 5 of the National Toolkit of Measures. The Department of the Environment, Community and Local Government will be the authority responsible for collecting and collating data under the Environmental Monitoring Programme. The data will be collected at the same time the pollution reduction programme is reviewed.

1.8 Monitoring Implementation of Pollution Reduction Programme

This PRP is effectively a sub-basin plan of the River Basin Management Plan for the catchment and will be implemented during the first implementation cycle under the Water Framework Directive (i.e up to 2015).

Implementation of the pollution reduction programme will be monitored by Water Quality Section of the Department of the Environment, Community and Local Government.

The contact person is:

Mr. Aidan Brennan
Assistant Principal
Water Quality Section
Department of the Environment, Community and Local Government,
Newtown Road
Wexford.

Phone No: 053 9117466(+00 353 53 9117466)
Fax No: 053 9144639 (+00 353 53 9144639)
Email: aidan.brennan@environ.ie

2.0 STATUS/IMPACTS

Overall status	The results of monitoring (2009) undertaken for the purposes of the Shellfish Waters Directive (2006/113/EC) and Schedules 2 and 4 of the Quality of Shellfish Waters Regulations (S.I. No. 268 of 2006) indicated faecal contamination within / in the vicinity of this shellfish area. The most up to date results of monitoring (2012) indicate that this area is not in compliance with the Guide Value of 300 faecal coliforms / 100ml. The results of Shellfish Water monitoring do not indicate any water quality issues within / in the vicinity of this shellfish area. However due to the previous

	water quality issues with dissolved oxygen, biochemical oxygen demand, dissolved inorganic nitrogen and chromium within / in the vicinity of this shellfish area, it is considered prudent to continue with the actions outlined in this Pollution Reduction Programme. Monitoring of shellfish flesh for food hygiene purposes (2012) indicates faecal contamination in this shellfish area. The bivalve mollusc production areas at Kinsale are classified as 'Class B' for the purposes of EC Regulation 854/2004. Chapter 3 of the Characterisation Report refers.
Other issues	None
3.0 PRESSURES/RISKS	
3.1 Key Pressures	Analysis of the Characterisation Report for this designated shellfish water suggests that the key pressures are urban wastewater systems, on-site waste water treatment systems and agriculture Chapter 5 (summary at 5.3) of the Characterisation Report refers.
Urban wastewater systems	Kinsale See Annex 1
On-site waste water treatment systems	There are 6,443 on-site waste water treatment systems in this catchment and their density is higher than the national average. The characterisation report indicates that a substantially smaller number are located within the coastal region of the catchment, which may have a direct impact on the shellfish area. The hydrological condition of the majority of the catchment is unsuitable posing a risk to surface and groundwaters. The risk to surface waters from pathogens and phosphorus is high throughout the catchment as is the likelihood of inadequate percolation. In response to measures identified in the Pollution Reduction Programme to address OSWWTS pressures in the vicinity of the designated shellfish area Cork County Council have • prepared a map outlining the catchment area in the vicinity of the designated shellfish area, (lands in close proximity to, & draining to, the designated shellfish area). • carried out a desktop study of lands in the immediate vicinity of the designated shellfish area assessing the following information sources : data from the relevant Characterisation Report, EPA, Envision

	Information System & local knowledge, • identified a measures/enforcement programme to be implemented under the Water Pollution Act and Section 70 of the Water Services Act. The European Court of Justice has ruled against Ireland in relation to on-site wastewater treatment systems (ref. Case C-188/08). The Court found that by failing to adopt the necessary legislation to comply with Articles 4 and 8 of Council Directive 75/442/EEC as regards domestic waste waters disposed of in the countryside through septic tanks and other individual waste water treatment systems, Ireland has failed to fulfil its obligations under that directive. To address the ruling, the Water Services (Amendment) Act 2012 was signed by the President on 02/02/2012. This Act introduces a new system of registration and inspection for septic tanks and other on-site waste water treatment systems. The Act also sets out the responsibilities of households served by those systems (including requirements to carry out remedial actions where necessary).
Agriculture	Estimates of livestock density and fertiliser usage are higher than the national averages. In response to measures identified in the Pollution Reduction Programme to address Agricultural pressures in the vicinity of the designated shellfish area Cork County Council have • prepared a map outlining the catchment area in the vicinity of the designated shellfish area, (lands in close proximity to, & draining to, the designated shellfish area). • carried out a desktop study of lands in the immediate vicinity of the designated shellfish area assessing the following information sources : Data from Characterisation Report, EPA, Envision Information System & local knowledge, • identified a measures /enforcement programme to be implemented under the Water Pollution Act and Section70 of the Water Services Act
3.0 Potential Secondary Pressures	Port activities
Port Activities	Kinsale port is situated approximately half a kilometre downstream.
4.0 PROTECTED AREAS	
Designated Shellfish Areas	Kinsale designated Shellfish Waters

5.0 ACTION PROGRAMME – MEASURES	
5.1 Key Pressures	
Urban Wastewater Systems	**Overview:** A system for the licensing or certification by the EPA of waste water discharges from areas served by local authority sewer networks was established in accordance with the requirements of the Waste Water Discharge (Authorisation) Regulations, 2007 (S.I. No. 684 of 2007). In accordance with these Regulations the EPA is not allowed to grant an authorization for a waste water discharge, which, in the opinion of the EPA, would: • cause a deterioration in the chemical status or ecological status (or ecological potential as the case may be) in the receiving body of surface water, • exclude or compromise the achievement of the objectives established for protected species and natural habitats in the case of European sites where the maintenance or improvement of the status of water is an important factor in their protection or which is inconsistent with the achievement of environmental quality standards established under national Regulations in relation to designated bathing waters, designated shellfish waters, areas designated for the protection of freshwater fish and areas designated for the abstraction of water intended for human consumption. The requirements of the European Communities (Quality of Shellfish Waters) Regulations, 2006 (as amended) have been fully integrated into the EPA licensing process In addition this process takes into account the effect of viruses on the quality of shellfish waters. The licence will require detailed actions including infrastructural works, if required, by the licensee within specified time-frames if the discharge does not comply with the above Regulations. Each licence granted will be subject to enforcement by the EPA. Full details of each application and licence decision can be viewed online at www.epa.ie. The following is the position with the key waste water treatment plant for Kinsale: Kinsale- A licence application was made by Cork County Council in September 2008 pursuant to the requirements of the Waste Water Discharge (Authorisation) Regulations, 2007 (as amended). This application is currently under assessment. In the case above, compliance with any EPA Wastewater Discharge Authorisation will require detailed actions, including infrastructural works, if required, by the licensee within specified time-frames if the discharge does not comply with the above Regulations. Each licence granted will be subject to enforcement by the EPA. The financial investments to ensure compliance with any EPA licence conditions requiring additional urban waste water

	collection or treatment can be made under the Water Services Investment Programme.
On-site waste water treatment systems	Cork County Council were to identify systems directly adjacent to estuarine and coastal waters and water courses as well as systems serving large populations. Cork County Council were to undertake investigation of the likely extent of microbial contamination of Designated Shellfish Waters from adjoining dwellings and Section 4 licensed activities. Section 70 of the Water Services Act 2007 places a duty of care on owners of septic tanks and provides local authorities with enforcement powers including prosecution to address any problems identified. The Report on Possible Risks from On-Site-Wastewater Treatment Systems on Designated Shellfish Water Areas, received from Cork County Council for the Kinsale Designated Shellfish Water Area has been reviewed and it is considered that it would be prudent to • carry out on-site waste water treatment systems investigations in the areas in the vicinity of the shellfish water areas to complete the risk assessment and outline the full extent of the impact • The need for on-site inspections based on the national implementation plan to be drawn up by the EPA should be factored into the overall risked based approach for inspections under the Water Services (Amendment) Act 2012. • All new planning applications for dwellings to be served by on-site waste water treatment systems in the Local Authority Area should be required to demonstrate compliance with the EPA Code of Good Practice for Waste Water Treatment & Disposal Systems Serving Single Houses. This will minimise any potential risk of discharge of pathogens to the shellfish water from any new dwelling in the area. • follow up with the measures/enforcement programme as detailed to ensure compliance with the Pollution Reduction Programme requirements:
Agriculture	The Report on Possible Risks from Agriculture on Designated Shellfish Water Areas, received from Cork County Council for the Kinsale Designated Shellfish Water Area has been reviewed and Cork County Council has generally complied with the Pollution Reduction Programme requirements. However, it is considered that it is necessary to • Carry out investigations of agricultural activities in the areas in the vicinity of the shellfish water areas to complete the risk assessment and outline the full extent of the impact. • Follow up with the measures/enforcement programme as detailed to ensure compliance with the Pollution Reduction Programme requirements.

5.2 Potential Secondary Pressures	
Port Activities	Under the Prevention of Pollution at Sea Acts no ship is allowed to discharge within 3 miles of Kinsale Harbour. The disposal of ship generated waste (including sewage and bilge water) is covered by the European Communities (Port Reception Facilities for Ship Generated Waste and Cargo Residues) Regulations 2003 (S.I 117/2003) (as amended). The disposal of ship generated waste is facilitated by the making of an application to the Competent Authority, disposal is arranged by the ships agent and conformity checking is carried out by the competent authority.
Future Development	Under Article 4 of the European Communities (Quality of Shellfish Waters) Regulations 2006 (S.I. No. 286 of 2006) (as amended), every public authority that has functions the performance of which may affect shellfish waters shall perform those functions in a manner that will promote compliance with the objectives of this pollution reduction programme and with the objectives of the Shellfish Waters Directive. The functions of particular importance – in light of the objectives of Directive 2006/113/EC and of this PRP – include waste water treatment (licensing and operations), implementation of the GAP Regulations, waste management (licensing and operations), effluent discharge licences, planning and development and building control. Continued monitoring will be carried out during the lifetime of the PRP. Should this monitoring identify pressures that are impacting on shellfish water quality in the designated area, the PRP will be appropriately amended.

Compliance with the Parameters set out in the Directive[1]

The Directive prescribes the minimum ((Mandatory (I)) quality criteria which must be met by shellfish waters and guideline values (G) which Member States must endeavour to observe. Not all of the Parameters have both Guide and Mandatory values.

		Compliance with Mandatory Values (Y/N)	Compliance with Guide Values (Y/N)
Parameter 1	PH (I)	Y	
Parameter 2	Temperature (G)		Y
Parameter 3	Coloration (after filtration) (I)	Y	
Parameter 4	Suspended Solids (I)	Y	
Parameter 5	Salinity (I & G)	Y	Y
Parameter 6	Dissolved Oxygen (I & G)	Y	Y
Parameter 7	Petroleum Hydrocarbons (I)	Y	
Parameter 8	Organohalogens (I & G)	Y	Y
Parameter 9	Trace Metals (I & G)	Y	Y
Parameter 10	Faecal Coliforms (G)		N[2]

Compliance for Parameters 1 to 7 - taken from 2011 monitoring results
Compliance for Parameters 8 & 9 - taken from 2010 monitoring results
Faecal Coliform compliance 2012 monitoring results
Non-compliance with Parameter 10 is being regulated by the actions in this PRP

Annex 1 – Discharge Authorisations

Water Services Authority	Agglomeration Name	Registration Number	Population Equivalent	Status
Cork County Council	Kinsale	D0132-01	2,001 - 10,000	Under Assessment

Annex 2 - Mitigation Recommendations from the SEA process

The Strategic Environmental Assessment carried out for the Shellfish PRPs has highlighted potential positive and negative environmental impacts (including cumulative impacts) associated with implementation of the range of measures outlined in the National Toolkit of Measures, all of which are aimed at controlling pressures which impact on shellfish water quality.

In most cases, the PRPs identify the need for further investigation to supplement existing information on the types and extent of the pressures which are currently affecting shellfish water quality. Following this, the next step in the protection of shellfish waters will be the introduction of measures from the National Toolkit to address the identified pressures. It should be noted that this PRP is a dynamic document and will be updated regularly in order to outline if, and where, measures are required following the completion of the investigations.

The table below outlines the mitigation measures required to reduce potential impacts from measures in the National Toolkit associated with the key and potential secondary pressures currently identified for this catchment. When considering implementation of specific measures from the National Toolkit, it is required that the relevant mitigation measures below be considered to reduce any potential negative impacts (mitigation measures arising from the Habitats Directive Article 6 Assessment are noted in blue).

Should further key and secondary pressures be identified in this catchment in future, then the full list of mitigation measures, which is included in Table 4 of the National Toolkit, should be consulted to determine if any of those apply. In addition, the authority/organisation/individual responsible for implementing each of the mitigation measures below is listed in Table 4 of the National Toolkit.

	NATIONAL TOOLKIT MEASURE	ASSOCIATED MITIGATION MEASURE
WFD4	**POINT SOURCE & DIFFUSE SOURCE DISCHARGES** Actions: Water Pollution Acts and regulations: • License discharges to surface waters and sewers from small scale industrial and commercial sources. Review licenses at intervals of not less than 3 years. Keep registers of discharge licenses and make them available to the public. • Serve notices or directions on persons requiring measures to be taken in order to prevent or control pollution of waters, where necessary. • Notify Local Authorities of accidental discharges and spillages of polluting materials which enter, or are likely to enter, waters. Other actions: Urban Wastewater Treatment Plants: • Measures for improved management: keep register of plant capacity and update annually; install facilities to monitor influent loads and effluent discharges in accordance with Environmental Protection Agency guidelines and best practice; put auditable procedures in place to monitor compliance of licensed discharges; implement training procedures for staff involved with licensing of discharges; monitor receiving water quality upstream and downstream of the point of discharge. • Optimise treatment plant performance by the implementation of a performance management system. • Revise existing Water Pollution Act industrial licence conditions and reduce allowable pollution loading. • Review existing Industrial Pollution Prevention Control licence conditions and reduce allowable pollution load. • Investigate contributions to the collection system from unlicensed discharges. • Investigate contributions to the collection system of specific substances known to impact ecological status resulting from licensed and unlicensed discharges and issue or revise licenses to reduce or remove such specific substances in the discharge.	Detailed assessment of higher risk works will be required to include environmental considerations (based on EIA guidance). It is recommended that lower risk work should be compelled to consider environmental issues as part of the registration process.

	• Upgrade plant to increase capacity where necessary. • Upgrade plant to provide nutrient removal treatment where necessary. Actions: Wastewater Discharge Authorisation Regulations: • License large Local Authority WWTPs and certify smaller WWTPs as specified in the Regulations (taking account of WFD objectives). Review licenses at intervals not less than 3 years. Enforce compliance with WWTP licensing conditions. Maintain a register of WWTP licences and certificates and make available on request. Inform other relevant public authorities when an application or review is received. Actions: Water Services Act: • Prepare and implement Water Services Strategic Plans. • Duty of care on owners of premises to ensure that treatment systems for wastewater are kept in good condition. Actions: Planning and Development Act (unsewered systems) • Permit on-site waste water treatment systems subject to site suitability assessment. Other actions: Unsewered Systems: • Amend Building Regulations to give effect to new codes of practice for single houses and large systems.	
WFD5	**PHYSICAL MODIFICATIONS** Actions required: physical modifications: • Develop new morphology regulations creating a registration and authorisation system. Actions: Planning and Development Act: • Consider the morphological implications of developments as part of the planning process.	It is recommended that further environmental assessment is undertaken once measures are defined

WW1	**WASTE WATER TREATMENT PLANTS** Measures intended to reduce loading to the treatment plant: • Limit or cease the direct importation of polluting matter (e.g. liquid wastes, landfill leachate, sludges). • Investigate the extent of use and impact of under-sink food waste disintegrators and take appropriate actions. • Investigate fats/oils/grease influent concentrations and take actions to reduce FOG entering the collection system.	This measure should be accompanied by an education and awareness campaign for householders and commercial premises aimed at reducing pollution at source. This campaign should include information on the use and disposal of household chemicals, oils, detergents, paints, solvents, etc as well as information on phosphorus-related pollution. Consideration should also be given to targeting specific audiences on issues such as discharges to water and the importance of wetland sites to water quality. This measure will require project level Habitats Directive Assessment if alternative facilities for treatment of waste are constructed e.g. incinerator
WW2	**WASTE WATER TREATMENT PLANTS** Impose development controls where there is, or is likely to be in the future, insufficient capacity at treatment plants.	This measure will need to link to the development planning process, e.g. by including a requirement to address wastewater capacity as part of the scope in any accompanying SEA for development plans. This measure will need to consider whole catchment loading.
WW6 to WW9	**WASTE WATER TREATMENT PLANTS** WW6: Where necessary to achieve water quality objectives install secondary treatment at smaller plants where this level of treatment would not otherwise be required under the urban wastewater treatment regulations. WW7: Apply a higher standard of treatment (stricter emission controls) where necessary. WW8: Upgrade the plant to remove specific substances known to impact on water quality status WW9: Install ultra-violet or similar type treatment.	WWG to WW9: Negative impacts on climate associated with GHG emissions related to additional energy requirements for these measures should be offset by use of renewable energy sources or similar WW6 to WW8: If additional landtake is required for these measures, environmental studies will be undertaken to assess the impact on the environment.

		area
WW10	**WASTE WATER TREATMENT PLANTS** Relocate the point of discharge.	A Habitats Directive Assessment will be required to demonstrate that the relocation will not negatively impact on protected areas
UP3	**ON-SITE WASTE WATER TREATMENT SYSTEMS** For new developments: • At planning assessment stage, apply the GIS risk mapping / decision support system and codes of practice • Notice to planning authority required immediately prior to the installation of on-site effluent treatment systems including percolation areas and polishing filters.	The pre-planning process should assess whether Habitats Directive Assessment would be required for new development within or adjacent to a protected area
UP5 to UP7	**ON-SITE WASTE WATER TREATMENT SYSTEMS** UP5: Enforce requirements for percolation. UP6: Enforce requirements for de-sludging. UP7: Consider connection to municipal systems.	UP5 & UP6: An education programme should be carried out in tandem with new requirements for tank maintenance, including guidance on disposal of sludges. UP6: Intelligent transport programmes should be put in place to minimise the amount of emissions associated with movement of sludges from on-site treatment systems. UP7: Upgraded treatment works should be required to introduce BAT, including the use of renewable energy sources, in order to reduce GHG emissions and others resulting from increased demand for treatment. UP6 & UP7: New wastewater treatment infrastructure, including sludge disposal infrastructure, will be subject to environmental assessment at the project level to reduce indirect impacts to biodiversity, landscape, cultural heritage and climate. UP7 A Habitats Directive Assessment will be required for new structures

**Note: It should be noted that in this case the term Habitats Directive Assessment refers to the assessment process as specified in Article 6 of the Habitats Directive. This starts with screening to determine whether a likely significant impact from the plan/programme is expected to occur to a Natura 2000/Ramsar site as a result of activities in/adjacent to/in the catchment of a Natura 2000/Ramsar site. If, in accordance with Habitats Directive Assessment guidance (guidance produced by the EU and DoEHLG in Ireland), it can be shown that there is no potential for impact at the screening stage, no further assessment may be required. However when the plan/programme being screened lies within or adjacent to a Natura 2000/Ramsar site then such a determination must be made in consultation with NPWS. If the plan/programme is within the catchment (surface and groundwater) of a Natura 2000/Ramsar site, such consultation with NPWS is only necessary for those water dependent Natura 2000 sites which are listed in the WFD Register of Protected Areas.*

Appendix 3

Site Visit Report

The site visit process is a sample on a particular day of an installation's compliance with some of its licence conditions Where non-compliance against a particular condition has not been reported, this should not be construed to mean that there is full compliance with that condition of the licence.

Instructions and actions arising from the visit shall be addressed, or where applicable noted, by the licensee in order to ensure compliance, to improve the environmental performance of the installation and to provide clarification on certain issues.

The licensee shall take the actions specified to close out the non-compliances and observations raised in this Site Visit Report.

Licensee

Name of Installation	Kinsale
Licensee	Irish Water
Licence Register No.	D0132-01
CRO Number	
Site Address	Cork
Site Visit Reference No.	SV18084

Report Detail

Issue Date	27/06/2019
Prepared By	David O'Connor

Site Visit Detail

Date Of Inspection	21/06/2019	**Announced**	No
Time In	14 00	**Time Out**	15:00
Agency Personnel On Site	David O'Connor		
Licensee Personnel and Role	Marie Feehan (IW) Michael Kelleher (EPS) Joe Brown (EPS)		
Photo Taken	Yes	**Samples Taken** No	**Video Taken** No
Odour Assessment	No		

Scope

A site visit was carried out at the Denis Quay pump station (PS) In Kinsale Co. Cork in response to an incident that occurred on 22/06/2019, resulting in an emergency overflow from the PS into Kinsale harbour.

Media

- Surface water.
- Waste water.

Site Areas Inspected

- Denis Quay pump station.
- Discharge point (ref. SW006).

Documents Inspected

- N/A

1. Site Specific Issues

	Answer	Condition Number	Non Compliance	Observation
Site visit findings	Checked			

Comment / Corrective Action

It was noted during the site visit that all three foul pumps at the pump station failed to activate, which resulted in the emergency overflow. Irish Water stated that the failure was due to a "communication issue" with the SCADA system. The alarm system at the pump station did not activate as the alarm was also impacted by the SCADA failure.

A total of 354 m3 of screened untreated wastewater was discharged to the Kinsale harbour during the period between 10 00 and 14 00. Irish Water first became aware of the discharge at approximately 13.45 on foot of a public complaint. The SCADA was reset at 14 00 which restored the pumps, ceasing the emergency overflow.

Corrective Action Required

Irish Water is required to prioritise a ful investigation of this incident to establish what caused the SCADA and alarm failures which led to the emergency overflow Irish Water is required to update this incident notification (ref. INC1016666) with the findings of their investigation, to include the preventative measures that Irish Water propose to implement at the Denis Quay pump station to prevent a reoccurrence of this incident.

Summary

rish Water are require to fully investigate the cause of the SCADA failure that led to the emergency overflow from the Denis Quay pump station. Irish Water are required to implement preventative measures at the pump station to prevent a reoccurrence of this incident. A report outlining the findings of the investigation is to be submitted under the open incident notification (ref. INCI016666) within one month of issue of this site visit report.

FOLLOW-UP ACTIONS

You are required to complete the instructions and actions, as outlined in this report, within the specified timeframe. Where required, you shall respond to actions specified in Compliance Investigations within the required timeframe.The licensee shall maintain documentary evidence, for review by the EPA, that the prescribed corrective actions were completed within the required timeframe.

(i) Compliance Investigations

You are not required to respond directly to items contained in this EPA site visit report; where an issue requires a direct response, the EPA will generate a Compliance Investigation through the EDEN system. You will receive notification when a Compliance Investigation instruction or action is generated.

(ii) Publication of reports and licensee response.

Please note that this Site Visit Report will be made available for public viewing via the EPA's Licence Enforcement Access Portal within one day of the issue date and will be published on the Licence Details Page of the EPA's website, www.epa.ie, that relates to your licence 60 calendar days after the issue date.

You may if you choose submit, within 45 calendar days of the issue date of this Site Visit Report, a Licensee Public Response that will be published alongside the Site Visit Report. This Response, should you wish to avail of it, provides you with an opportunity to inform the public about how you are implementing the actions set out in the report, activities underway, timescales and target completion dates. Please be aware that the content of your Licensee Public Response must be factual and should not breach the EPAs stated online publication standards.

If you wish to submit a Licensee Public Response to an EPA Site Visit Report, you should do this by clicking on the 'Make a Response' link on the Site Visits page in EDEN. A .pdf document containing your response can be attached and submitted from here.

(iii) Response to Site visit report

Where you do wish to respond directly to a site visit report, you should do this by generating a 'Licensee Return' of the type 'Site Updates/Notifications' and the sub-type 'Response to EPA Report' in EDEN.

Please note that you are required to comply with the conditions of your licence at all times, and where noncompliance occurs you must restore compliance within the shortest possible time. These actions will be verified during subsequent EPA visits.

Please quote the above Inspection Reference Number in any future correspondence in relation to this Report.

The Dock Beach

Cork County Council

20/6/19

ADVICE NOT TO SWIM

Bathers are advised not to swim at this bathing water due to a suspected incident in the waste water network

To reduce the risk of illness, beach users should take the following precautions:

- **Avoid swallowing or splashing water**
- **Wash your hands before handling food**
- **Avoid swimming with an open cut or wound**
- **Avoid swimming if you are pregnant or have a weakened immune system.**

Higher levels of bacteria are usually short-lived and most bathers are unlikely to experience any illness.

LIKELY CAUSE: ***Suspected Waste Water Infrastructure in the area***

EXPECTED DURATION: ***7 days (update Wednesday 26/6/2019)***

ACTIONS TAKEN/PROPOSED: ***Bathing Water to be sampled 24/6/19. Results available 26/6/19***

Environment Directorate Inniscarra Co Cork 021 4532700 / [illegible]

Market Place, Kinsale, Co Cork, Ireland

KINSALE ADVERTISER

YOUR WEEKLY GUIDE TO WHAT'S ON IN KINSALE

T +353 (0)21 4774333 E info@kinsaleadvertiser.com

Update on Bathing Ban at Dock Beach

Kinsale Notice Board

I th nk there was sewage overflow at Dock beach during the night. Water smells of sewage and there is a scummy yellow foam on the beach

Tess Dean
I would report it to the garda because as Mary Macsweeney said it is a massive health hazard and someone might not realise until they are in the water

John Young
I spoke to the consultants who designed the Sewage treatment plant as I noticed there was no UV tunnel designed to kill bacteria I was told the Council could not afford it!!!.

Clare Mc Carthy
I actually went in it was horrendous I didn t realise it was sewage until I saw the bubbles. This is disgraceful & a health hazzard

...an WCP Staff November 2022

For years Kinsa e residents have been complaining about really bad odours and noise coming from the town's wa te water treatment p ant and the EPA have now backed up their complaints in a new report criticising the contin ou and ongo g breache at the plant

The EPA has quest oned the capac ty f the plant to cope with the intake especially during the summer months when the sun, heat and ack of w nd an exasperate malodorous conditions and the e is an increased level of vis t r to the town The EPA s concerned about the inability to reduce ongoing breaches in Chemical Oxygen Demand (COD) carbonaceous Biological Oxygen Demand (cBOD), Suspended Solids (SS) and orthophosphate

The EPA reported that "Odo r s a ongo ng ssue, particularly during the summer months, ..and odour mitigat n measures taken to date have not resolved the odour issue...On investigation, the cause of the odour was found to be an open manhole at the top of the sludge holding tank."

The Green party and a lot of loca residents are concerned about the negat ve impact of the existing waste water treatment plant and ts capacity to address existing loads' particularly when new developments in Abbey Fort where hundreds of new houses are being bu lt below the exist ng GAA pitch, and new planning applications for a furthe 80 plus houses on the GAA pitch cou d result n a huge amount of add tional load on the existing struggling nfrastructure

Green Party Bandon Kinsale Representative said: "It seems really unfair on local residents that they have to put up with what seems to be poor management of the site, with manholes being left open on sludge tanks, pumps and back-ups not working due to power outages, and what seems to be a lack of control of biological materials and chem cals. This needs to be addressed with great urgency especially before new houses on stream for occupation On researching the topic, and reading the reports it seems that the Kinsale wastewater treatment plant also does not have an u-trav olet dis nfection p ocess before treated water is released nto the river This is a major concer for the Green party as local f sherman depend on shellfish harvested directly downstream from the waste water egress point and we have a lot of sw mmers and water sports which would be directly affected The ultraviolet disinfection process kills harmful bacteria wh ch could infect shellfish, potentially leading to illness if eaten. After contacting the EPA it turns out that rish water have not r sk assessed the potential damage of released treated effluent into the harbour of Kinsale. We therefore ask that Irish water as a matter of urgency to carry out a r sk assessment and instal ultraviolet disinfection at Kinsale waste water treatment plant "

Appendix 4

Cork County Council
Kinsale Agglomeration
Urban Wastewater Disposal Licence Application
Attachments

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B.2		765685 – W – 0002 Location of Proposed WWTP
B.3		765685 – W -0003 Location of Primary Discharge Points
B.4		765685 – W - 0004 Location of Secondary Discharge Points
B.5		765685 – W – 0005 Location of Storm Overflow
B.6	Certified EIS and Ministerial Approval	
B.8	Copy of Site Notice	765685 – W – 0006 Location of Site Notice
B.10	Copy of DEHLG Water Services Investment Programme – Cork County	
B.12	Kinsale Foreshore Licence	
C.1	Volume 4 of Tender Documents for Kinsale WWTP	
D.1	Tables D.1 (i), (ii) and (iii)	
E.2	Proposed Monitoring and Analysis	
E.4	Kinsale Survey Data	
G.1	Copy of DEHLG Water Services Investment Programme – Cork County	

Attachment B.1

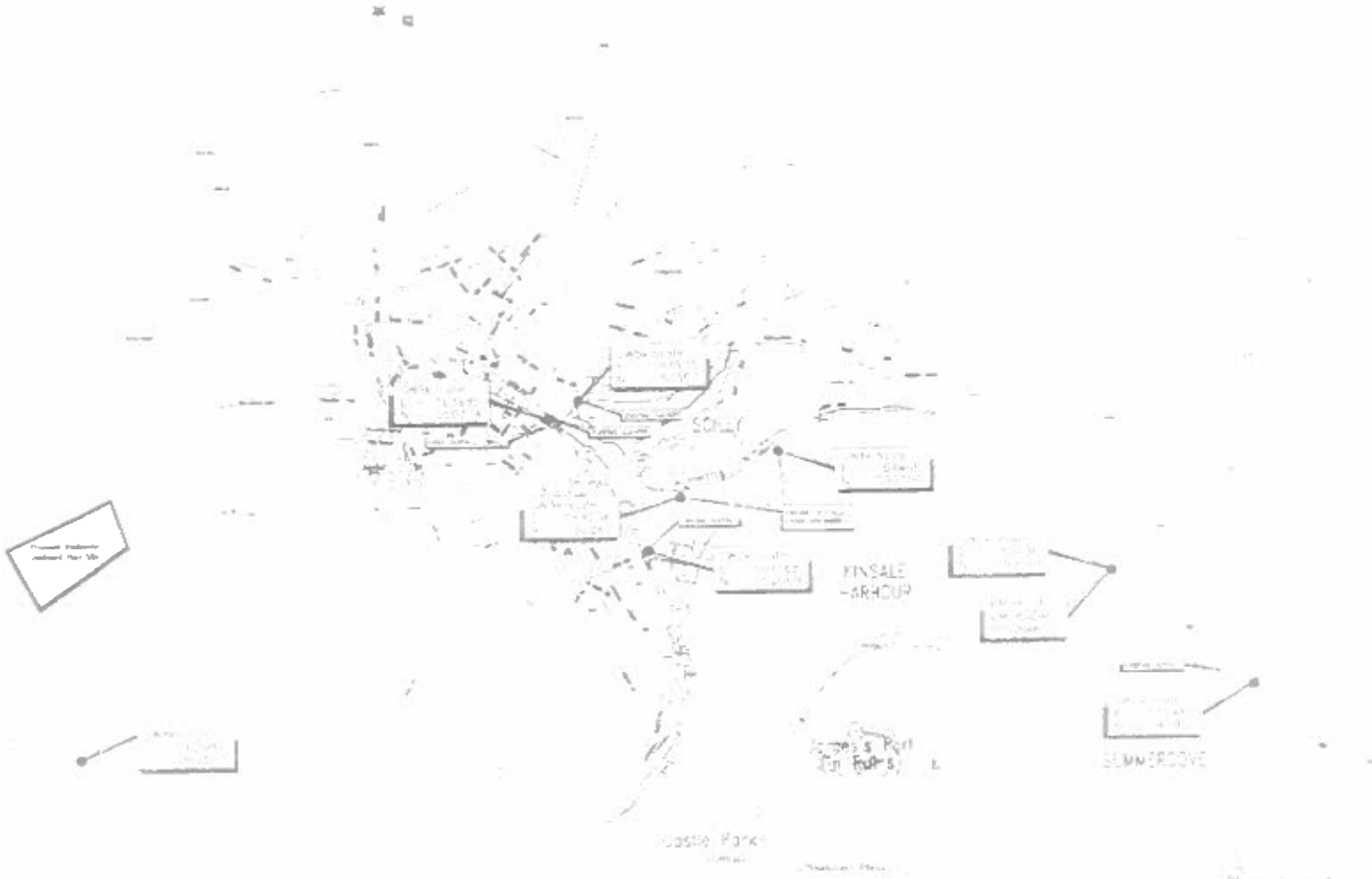
Attachment B.2


N
Harbour Heights
LOCATION OF PROPOSED WASTE WATER TREATMENT PLANT
E = 162957
N = 050111
PROPOSED PRIMARY DISCHARGE
SW1 Insole (PROPOSED)
E = 162615
N = 049527

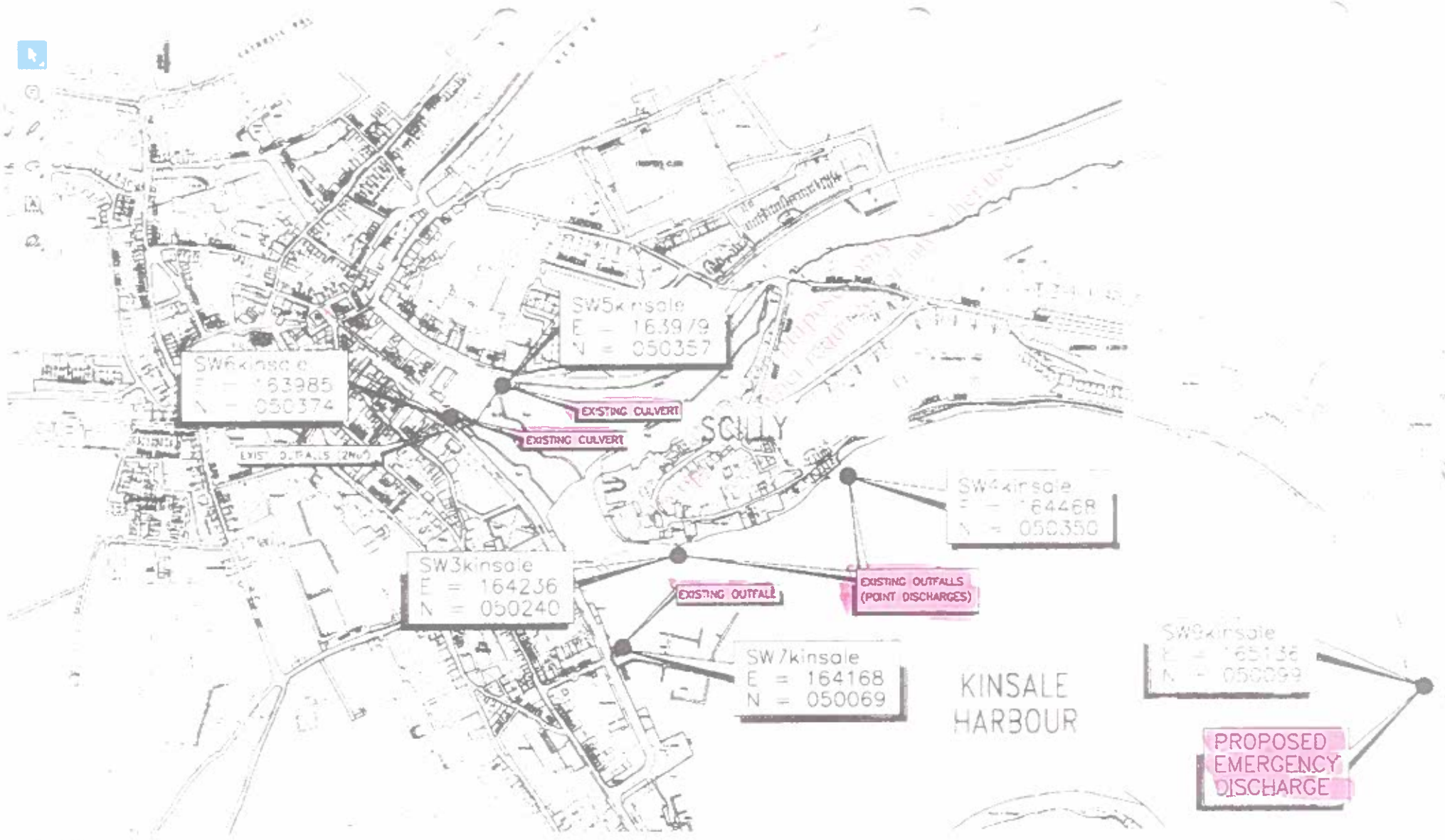
Attachment B.3


SEILL
KINSALE HARBOUR
James's Fort
(in Ruins)
SUMMERCOVE

Attachment B.4


KINSALE
HARBOUR
SEMINROOVE

Attachment B.5


SW5kinsale
E = 16397?
N = 050357
SW6kinsale
E = 163985
N = 050374
EXISTING CULVERT
EXISTING CULVERT
SCILLY
SW4kinsale
E = 16446?
N = 050350
SW3kinsale
E = 164236
N = 050240
EXISTING OUTFALL
EXISTING OUTFALLS
(POINT DISCHARGES)
SW7kinsale
E = 164168
N = 050069
KINSALE
HARBOUR
SW8kinsale
E = 165136
N = 050099
PROPOSED
EMERGENCY
DISCHARGE

Appendix 5

Administration Team
Environmental Licensing Programme
Office of Environmental Sustainability
Environmental Protection Agency
PO Box 3000
Johnstown Castle Estate
Wexford

Date 17th October 2016

RE: **Kinsale Waste Water Discharge Authorisation D0132-01: Technical Amendments**

Further to Irish Water's request for a technical amendment to the Kinsale Waste Water Discharge Licence via EDNE on the 14th October 2016, please find enclosed a CDROM with an electronic copy of the digital drawings.

I trust the above is satisfactory,

Yours Sincerely,

Sheelagh Flanagan
Environmental Licensing Specialist

Kinsale
Emergency Overflows

UISCE ÉIREANN : IRISH WATER

- Emergency Overflow

Associated Pumping Station

SW002 Summer Cove
SW003 Scilly
SW006 Denis Quay
SW007 Denis Quay
SW008 WWTP
SW010 Denis' Quay
SW011 World's End

- Waste Water Treatment plant
- IW Agglomeration

Coordinate System: TM65 Irish Grid
Projection: Transverse Mercator

Scale:	1:11,325 @ A3
Revision No.:	0
Attachment No.	C.1.2
Drawn By	E.Laurinaviciute
Checked By:	M'OReilly
Approved By	M'OReilly
Drawn Date	12/10/2016
Checked Date	12/10/2016
Approved D	12/10/2016

water technology limited

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Kinsale Town

Pump Station Survey 2022

September to December 2022

General Report:

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1.0 Introduction:

Information was required by Irish Water in relation to the Sewage Pump Stations in Kinsale.
Water Technology Ltd. carried out a study initially at Worlds End Pump Station, and subsequently extended it to include the following Pumps Stations.

- Summercove Pump Station
- Scilly Pump Station
- Denis Quay Pump Station
- Worlds End Pump Station
- Viking Wharf Pump Station

Note that the pump stations , except for Viking Wharf, are managed by EPS on behalf of Irish Water. Viking Wharf is managed by Cork County Council.

1.1 The scope of works included the following.

- Monitoring sump level where possible
- Monitor flows at the inlet to pump stations where possible
- Monitor ORP in the sumps
- Monitor Conductivity and Salinity in the sumps
- note tidal infiltration events
- log rainfall
- note possible anaerobic conditions from ORP readings
- carry out site inspection at high tide
- estimate retention times
- estimate flow balancing

During the survey the following works were added to the survey program.

- Install a flow logger and ORP sensor at the inlet to the Treatment Plant.

Note that, on a different scope of works, we monitored the conductivity and salinity at the inlet of the WWTP in September. We have included some of this data as it is relevant and some of it overlaps with the survey period.

While initially the scope of the survey was 1 month, the survey was extended into December to ensure we had enough data set from all sensors. October and November were wet months. We did finally get a dry period during the cold weather period in December, (mainly between the 6th and 11th December)

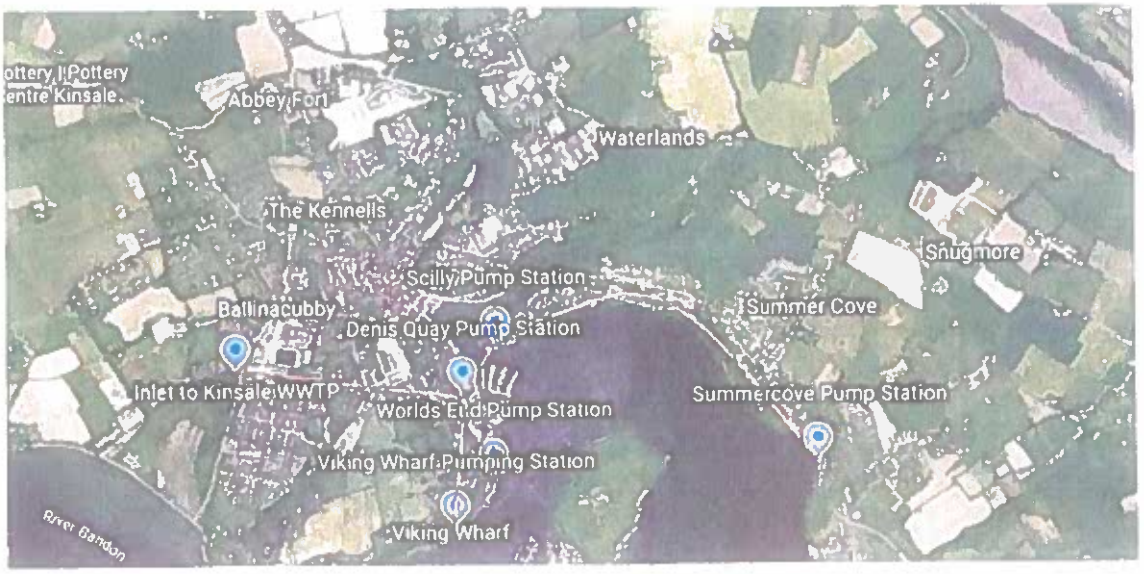
1.2 Pump Station Network:

Summercove PS pumps across to Scilly PS, which in turn, pumps across to Denis Quay Pump PS.

Worlds End PS, and Viking Wharf PS also pump to Denis Quay.

Denis Quay, PS is the main pump station and pumps across to the WWTP.

Fig 1- Pump Station Network at Kinsale



1.3 Summary of Equipment installed

Fig 2 – summary of equipment installed:

2.0 Methodology

2.1 Equipment set up at Summercove Pump Station

Fig 3 – Summercove Pump station

Coordinates : 51.69914, -8.5012795

Fig 4 – Summercove PS Google map

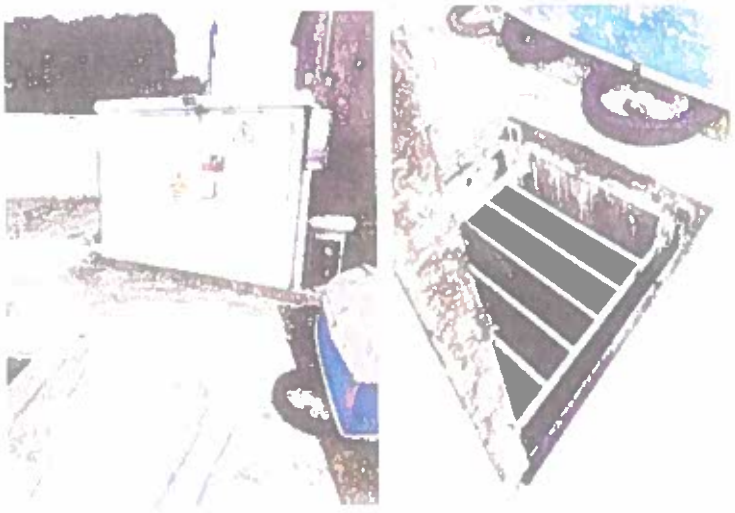
Summercove PS is in the car park across from the Bulman Pub. To install the sensors in the sump would have required leaving one cover open, which in turn would have required cordoning off a section of the car park area. After consultation on this, it was decided not to set up equipment in the sump at Summercove, but instead to monitor the inlet at Scilly PS, which should provide information relating to Summercove, since it pumped across to this point.

2.3 Equipment set up at Scilly Pump Station:

Coordinates : 51.7038821, -8.519402

Fig 5 – Scilly PS Google map

Fig 6 – Scilly Pump Station



In the sump we installed.

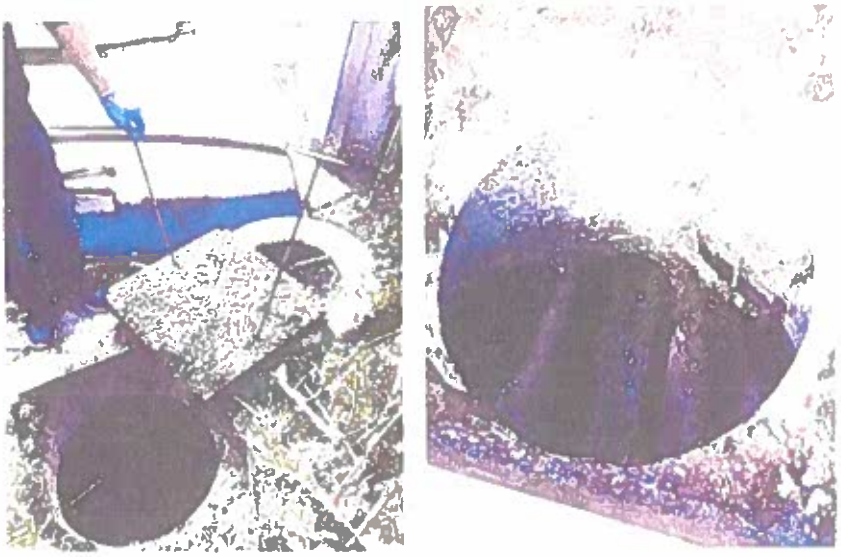
- Ponsel ORP sensor
- Ponsel Conductivity/Salinity sensor
- Isco 730 Bubbler level logger

- 2105 telemetry logger

At the inlet pipe coming into the sump we installed

- Ponsel ORP sensor
- Ponsel Conductivity Salinity sensor
- Isco 2150 AV flow logger
- 2105 telemetry logger

Fig 7 – Inlet Manhole before sump at Scilly PS



All equipment was set up within security fencing provided by Cork County Council.

Fig 8- Equipment surrounded by security fencing at Scilly PS

2.4 : Equipment set up at Denis Quay Pump Station :

Coordinates : 51.7022023, -8.5199914

Fig 9- Denis Quay PS Google map

at the sump we installed :

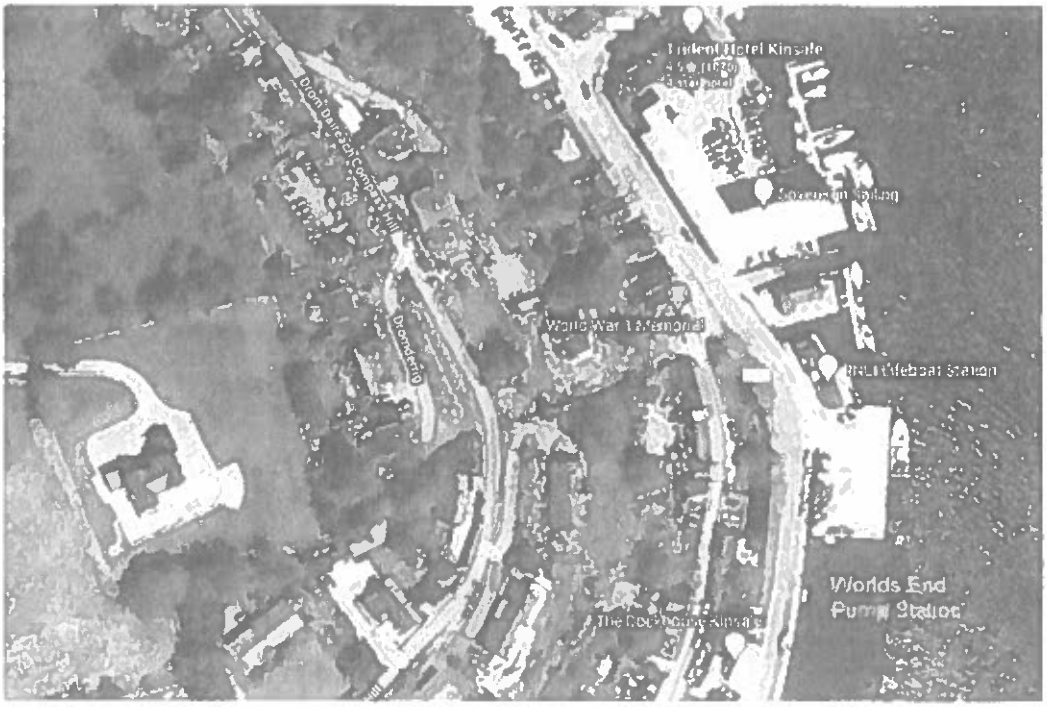
- Ponsel ORP sensor
- Ponsel Conductivity/Salinity sensor
- Isco 730 Bubbler level logger
- 2105 telemetry logger

Fig 10- Installing Equipment at Scilly PS

2.5 Equipment set up at Worlds End Pump Station

Coordinates : 51.7022023, -8.5199914

Fig 11- Worlds End PS Google map



at the sump we installed :

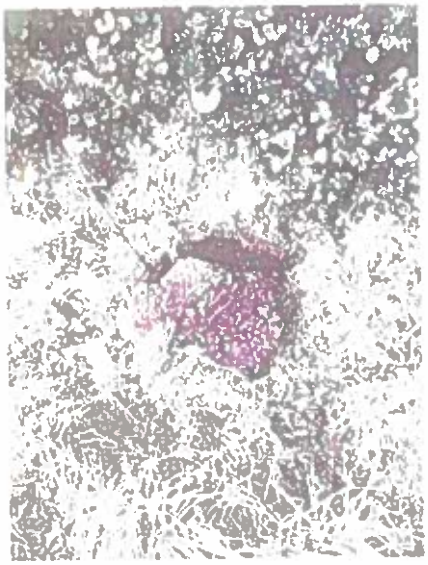
- Ponsel ORP sensor
- Ponsel Conductivity/Salinity sensor
- Isco 730 Bubbler level logger
- 2105 telemetry logger
- Isco 674 Tipping Bucket Rain Gauge with separate 2105 logger

Fig 12 - Worlds End Pump station

At the inlet pipe into the sump we installed

- Isco 2150 AV Flow Logger

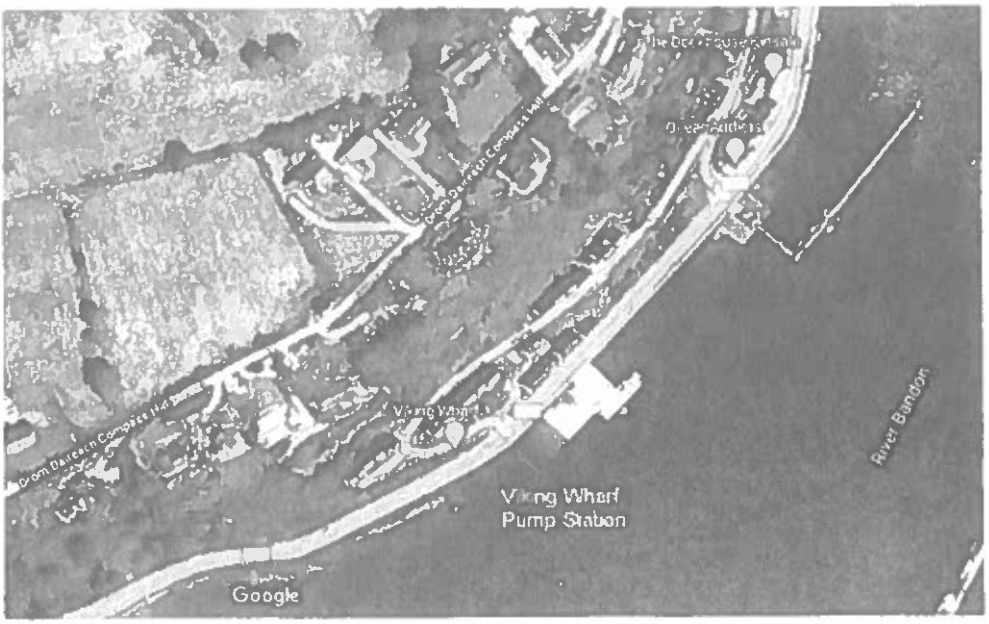
Fig 13 – Inlet to Worlds End Pump Station



2.6 Equipment set up at Viking Wharf Pump Station

Coordinates : 51.697563, -8.520312

Fig 14- Viking Wharf PS google map



at the Viking Wharf sump, we installed :

- Ponsel ORP sensor
- Ponsel Conductivity/Salinity sensor
- Isco 2110 ultrasonic level logger
- 2105 telemetry logger

Fig 15 Installing Equipment at Viking Wharf PS

at the inlet manhole before the sump we installed

- Isco 2150 AV Flow Logger

Fig 16 - Equipment set up in inlet manhole to Viking Wharf PS

2..7 Equipment set up at Inlet to WWTP

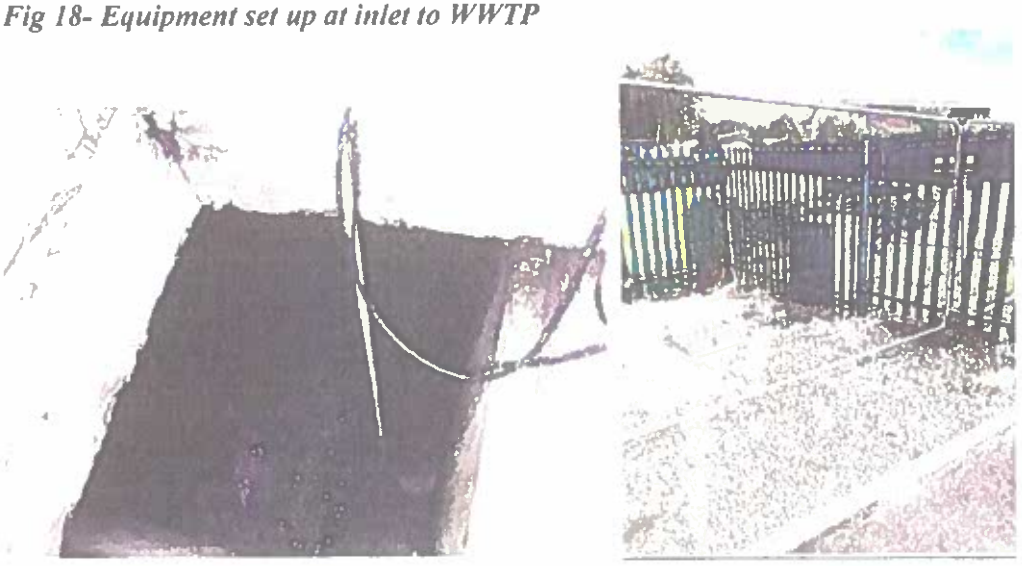
Coordinates : 51.702967, -8.532599

Fig 17 – Inlet to WWTP Google map

At the inlet to the WWTP the following equipment were installed in the 600 mm pipe inside the manhole at the entrance by confined space entry.

- Isco 2150 Area Velocity, (AV), Flow sensor
- Ponsel ORP sensor

Fig 18- Equipment set up at inlet to WWTP

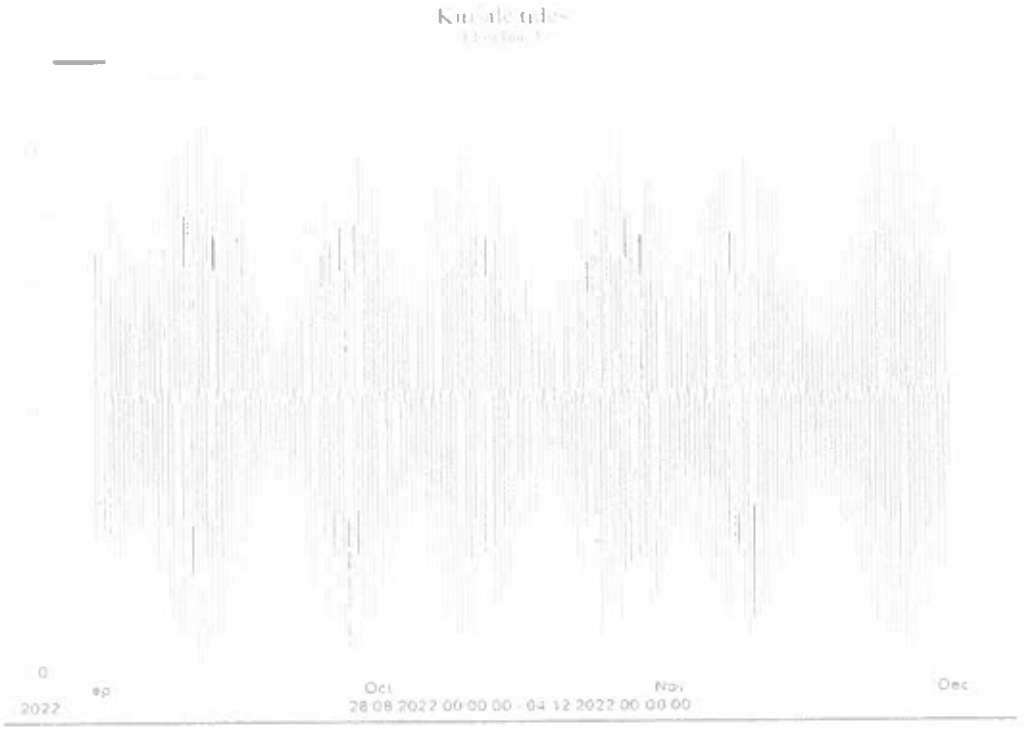


3.0 Results :

3.1 Tides

Tidal data for Cobh was available in monthly printable charts from the website . Kinsale tide is 12 mins approximately before Cobh and levels are on average 0.14 M lower. These adjustments were made, and the data was tabled in excel and imported back into Flowlink Software, which we use for graphing purposes

Fig 19 - Tidal Graph Sept to Dec 2022



3.2 Summercove Pump Station

As mentioned previously, no equipment was installed at Summer Cove to avoid cordoning off the car park. However, a draw down test was carried out on 26th October between 15:00 and 17:00 and a sump inspection was carried out at high tide at 7 am on the 28th October

3.2.a: Summercove PS Draw Down test

Fig 20 – Summercove drawdown and retention time calculations

sump measurements (estimate as measured on site)			
	metres		metres
length	4.4	width	2.2

Pump rate:

	height	Time	
	metres		
Pump on level	1.4	15:48	
pump off level	0.9	15:51	
difference	0.5	3	mins

Fill rate

	height	Time	
	metres		
Pump off level	0.9	15:51	
pump on level	1.4	16:21	
difference	0.5	30	mins

Calculations

working volume LxWxH		4.84	M3
Estimated inlet Flow		9.68	m3/hr
Estimated Pump Flow, (draw down + fill rate)		106.48	m3/hr
Flow Rate noted on Siemens mag meter		102.7	m3/hr
retention time during test		30	mins

3.2.b. Retention times at Summercove PS:

The flows logged at the inlet to Scilly pump station downstream clearly show the spikes of the flow pumped over from Summercove.
Fig 21 shows a dry weather day . (Sunday 25th October). which shows 2hrs 28 mins between pump events during the night, reducing to 20 minutes during peak times.

Fig 21 – Pumping flow spikes from Summercove logged at Scilly Inlet

3.2.c: Observations at Spring Tide at Summercove:

(4.16 Metres high tide) 28th October 7:44 AM

Fig 22 - Summercove at high tide

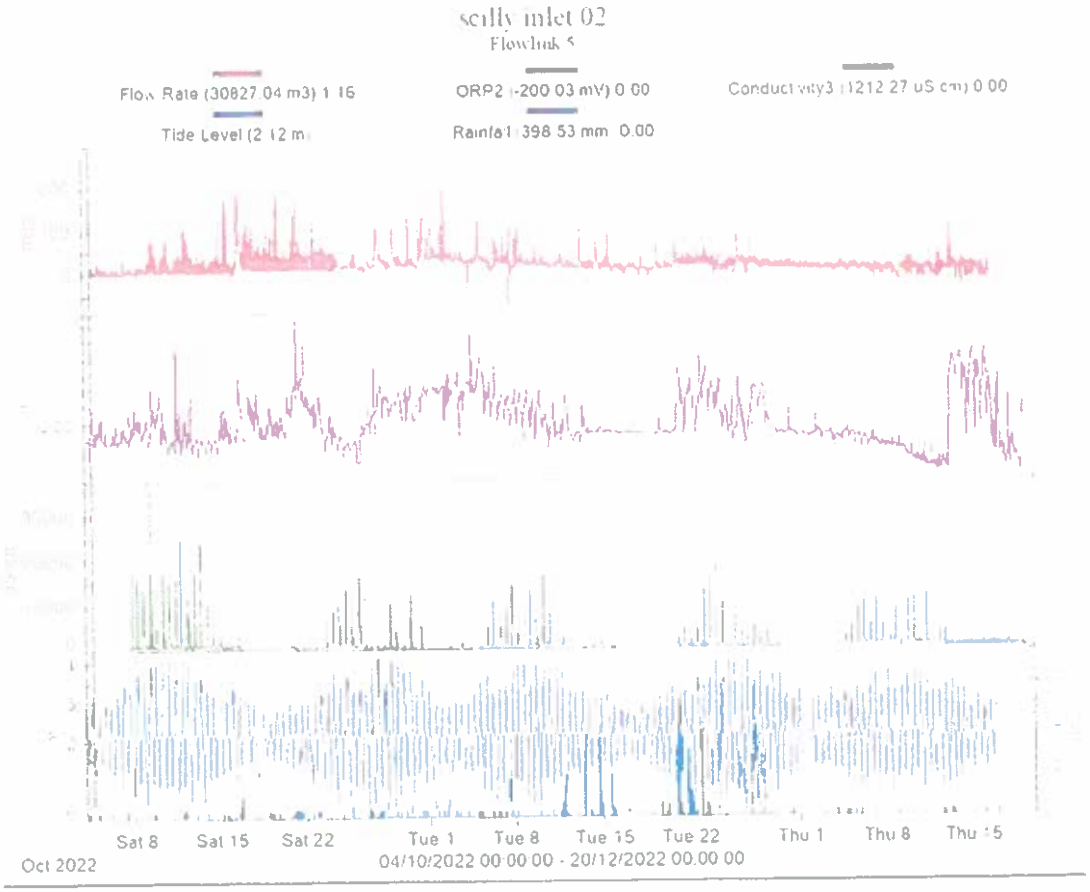
On Arrival sump was pumped low with no evidence of sea infiltration. We did a conductivity spot test with Odean handheld meter and both the water flowing in and the sump water was between 500-600 micro siemens. which is consistent with normal sewage. We understand that a non-return flapper valve, (NRV), was fitted at the peer wall at summer cove.

3.3 Scilly Pump Station:

Note: At Scilly pump station monitors are set up on the inlet manhole just before the sumps and in the sumps. Flow entering is the combined flow from the Scilly area and the flow pumped from Summercove.

3.3.a: Inlet manhole data set

Fig 23 - Scilly inlet data set with Flow- ORP- Conductivity-Tide level- Rainfall:



There is evidence of tidal infiltration at the inlet to Scilly PS as can be seen from the conductivity spikes coinciding with the higher tides. However, during our spot test at Summercove at a spring tide, there was no evidence of tidal infiltration. The source of

this infiltration prior to the sump has not been determined. In Fig 24 we look closer at a tidal event and we note that it does not record a notable spike in flows corresponding with the conductivity spikes. This seemed to be the general trend throughout the survey period.

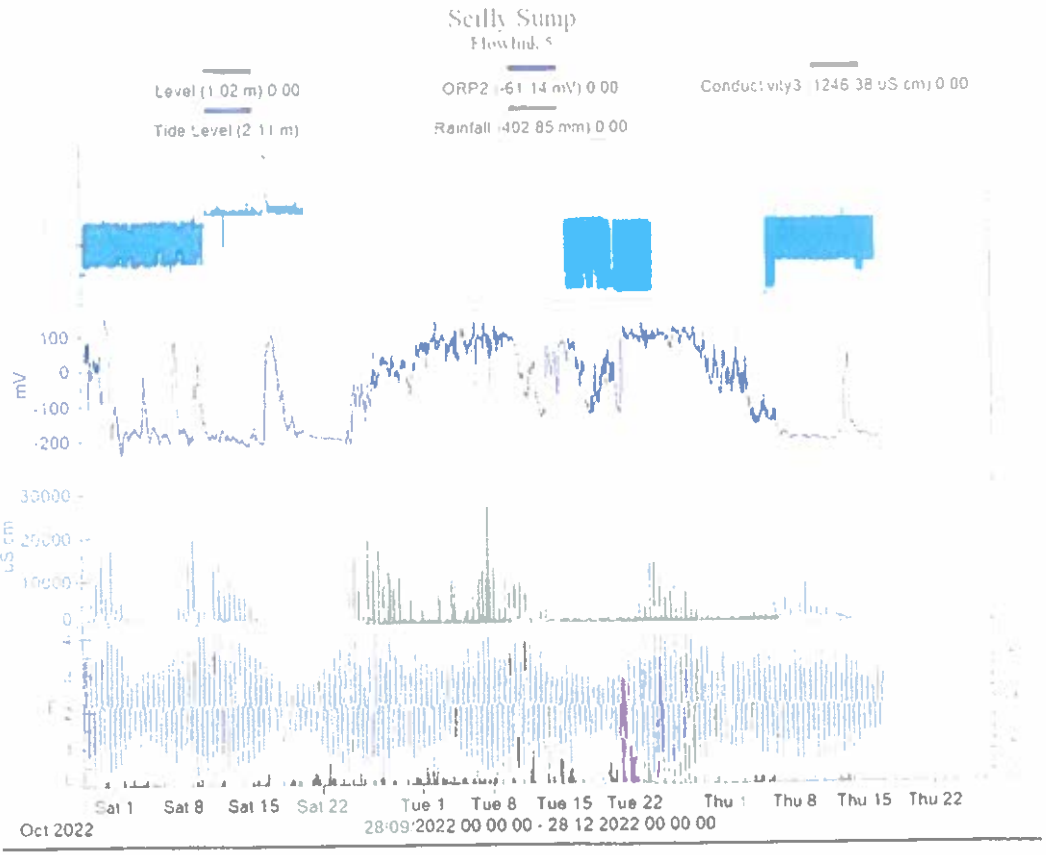
The conclusion therefore is that any infiltration prior to the Scilly PS sump is relatively small, although the source may be worth further investigation.

Fig 24 - Scilly Inlet at high tide showing conductivity spike but no flow increase

3.4 Scilly Pump Station – Sump

3.4.a Scilly PS sump data set

Fig 25- Scilly Sump data set with sump level, ORP, Conductivity, Tide level, Rainfall



Some issues occurred which resulted in loss of level sump data for periods of the survey. The main observation from the data is that there are high spikes in conductivity coinciding with each high tide, confirming there is sea infiltration into the Scilly Pump Station sump. Typically tide level in excess of 3.6 metres result in sea water infiltration.

3.4.b Scilly PS Sump Draw down test

Using the logged level data, we calculated the following flow rates and retention times for a dry weather day on the 1st October

The longest retention in the sump was between 3 to 6 am recording at 3 hrs 8 minutes between pumping, which reduced to 32 minutes between 9 to 10 am.

Fig 26- Scilly PS draw down and retention time calculations

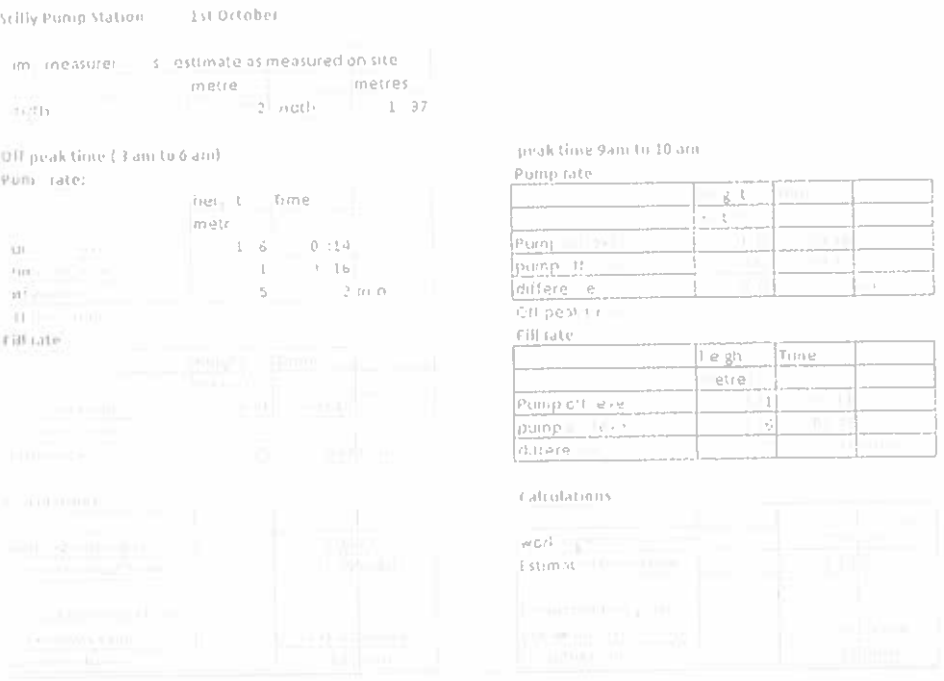
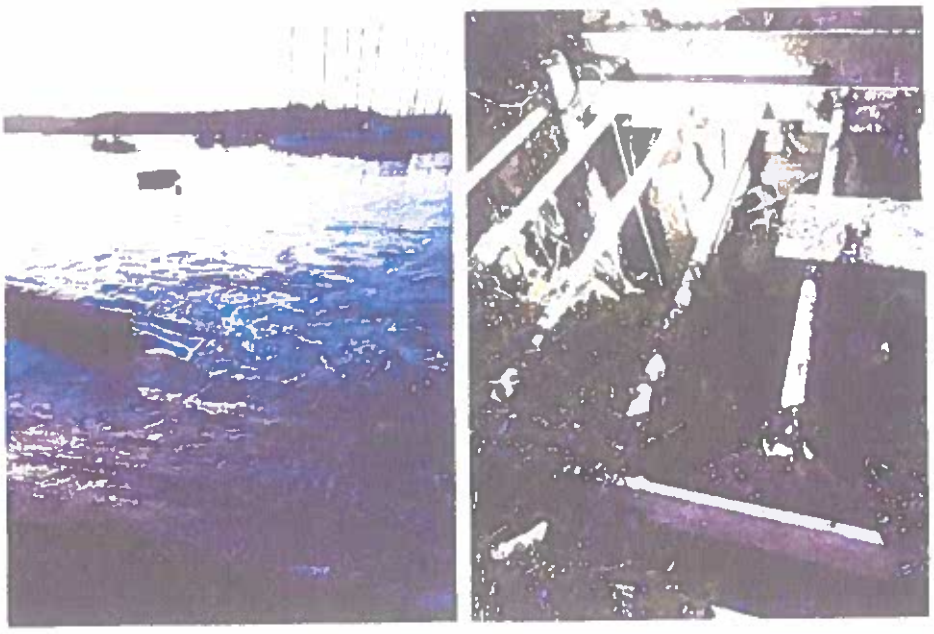


Fig 27- Scilly PS sump level refill variations on 1st October

3.4.c Observations at spring tide at Scilly Pump Stations

28th October Time 8:10 am - 30 mins after high tide.

Fig 28- Scilly Pump Station at high tide



Scilly Pump station is right on the pier and some waves were almost reaching the covers of the sump at high tide. We noted that there was water pouring back on the overflow pipe at the top of the sump which we assume is sea water coming back in. This would coincide with the spikes we are seeing for conductivity in our trend graph. The actual volumes appear to be relatively small. At a guestimate, around 2- 4 m3/hr. We observed this infiltration, 30 minutes after high tide so it may have been slightly higher prior to our arrival.
The spot test result in the sump for conductivity read 12.0 miliSiemens at this time.

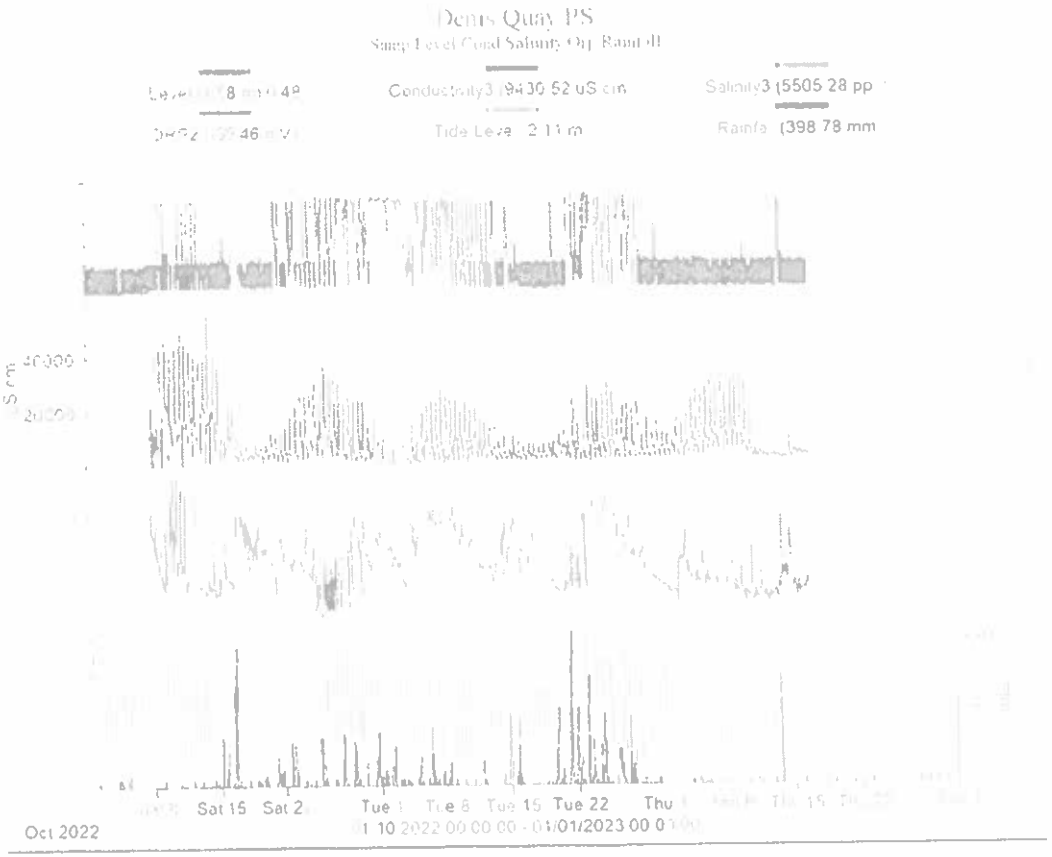
In conclusion while Scilly PS does not appear to be the major source of infiltration a non-return valve fitted on the storm overflow could help eliminate this source.

3.5 Denis Quay Pump Station

3.5.a Denis Quay Pump Station data set

Denis Quay Pump Station is the main pump station for the town . As well as taking the sewage from the town centre, other pump stations, such as Scilly PS and World End PS, feed into this pump station. The combined sewage is pumped to the WWTP from this point. There is also a storm water pumping station at this location to pump out storm overflow.

Fig 29 – Denis Quay PS Data set with sump level, Conductivity, ORP, Tide Level and Rainfall



The sump level spikes above 2 metres, (green trend), coincide with overflowing from the sewage tanks into the storm tank. While these are occurring predominantly after heavy rain as would be expected, the graph shows the overflows are also coinciding with the highest tides. This is also coinciding with very high spikes in the conductivity and salinity. This suggests that additional flow into the pump station relates not only to rainfall but also to sea water infiltration. Conductivity/salinity spikes are highest in October but there is still evidence of infiltration in November and December.

3.5.b Denis Quay PS – Draw down test

Longest retention times recorded at Denis Quay between pumping events on dry day, are 10 minutes approximately. Typically, the refill rate between pumping cycles is every 6 minutes approximately at peak dry weather flows. The pumps at Dinish appear to be speed controlled using PID technology.

Fig 30 - Denis Quay PS drawdown and retention time calculations

Denis Quay Pump Station 3rd October

sump measurements (estimate as measured on site)			
	metres		metres
length	4.67	width	2.546

Off peak time (3 am to 6 am)

Pump rate:

	height	Time	
	metres		
Pump on level	[illegible]	03:36	
pump off level	[illegible]	[illegible]:42	
difference	0.56	8	mins

Off peak time

Fill rate

	height	Time	
	metres		
Pump off level	0.34	0:42	
pump on level	90	[illegible]:52	
difference	0.56	10	mins

Calculations

working volume LxWxH		6.97	M3
Estimated inlet Flow		41.82	m 3/hr
Estimated Pump Flow, (draw down + fill rate)		83.68	m3/hr
retention time		10	mins

peak time 11am to 12 am (high Tide)

Pump rate:

	height	Time	
	metres		
Pump on level	0.90	11:40	
pump off level	0.34	11:44	
difference	0.56	4	mins

Off peak time

Fill rate

	height	Time	
	metres		
Pump off level	0.34	11:44	
pump on level	90	11:50	
difference	0.56	6	mins

Calculations

working volume L x W x H		6.97	M3
Estimated inlet Flow		69.63	m3/hr
Estimated Pump Flow, (draw down + fill rate)		174.23	m3/hr
retention time		5	mins

Fig 31- Denis Quay sump level refill 3rd October

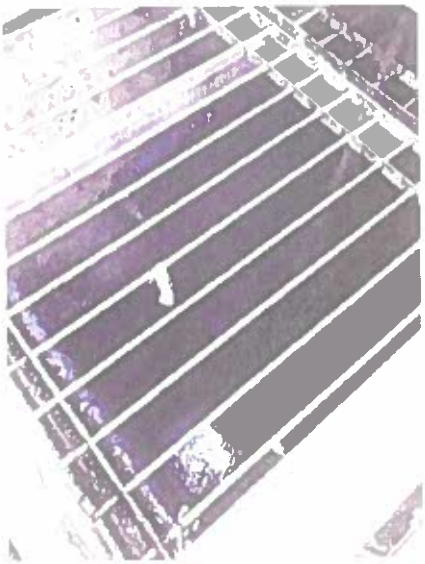
3.5.c Observations at spring tide at Denis Quay Pump Station

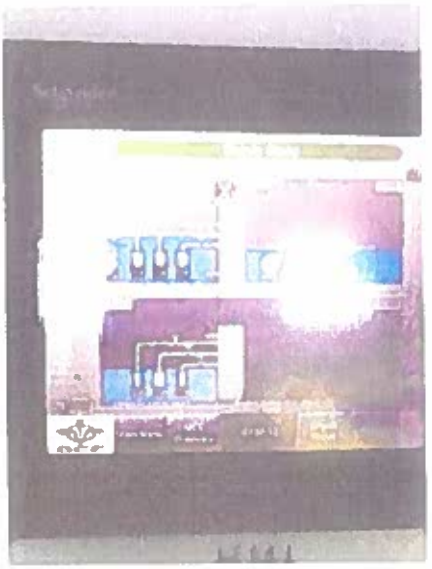
28th October Time 9:10 1.5 hours after high tide.

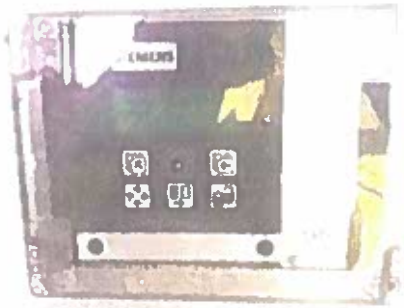
On arrival the sump level was at 2.9 metres and overflowing into the storm overflow.

Foul pumps were running continuously and pumping at 270 m3 hr. The storm water pump was pumping out at 970 m3 hr at the time.

Fig 32 - Denis Quay PS at high tide







FOUL RISING MAIN
01-FM01

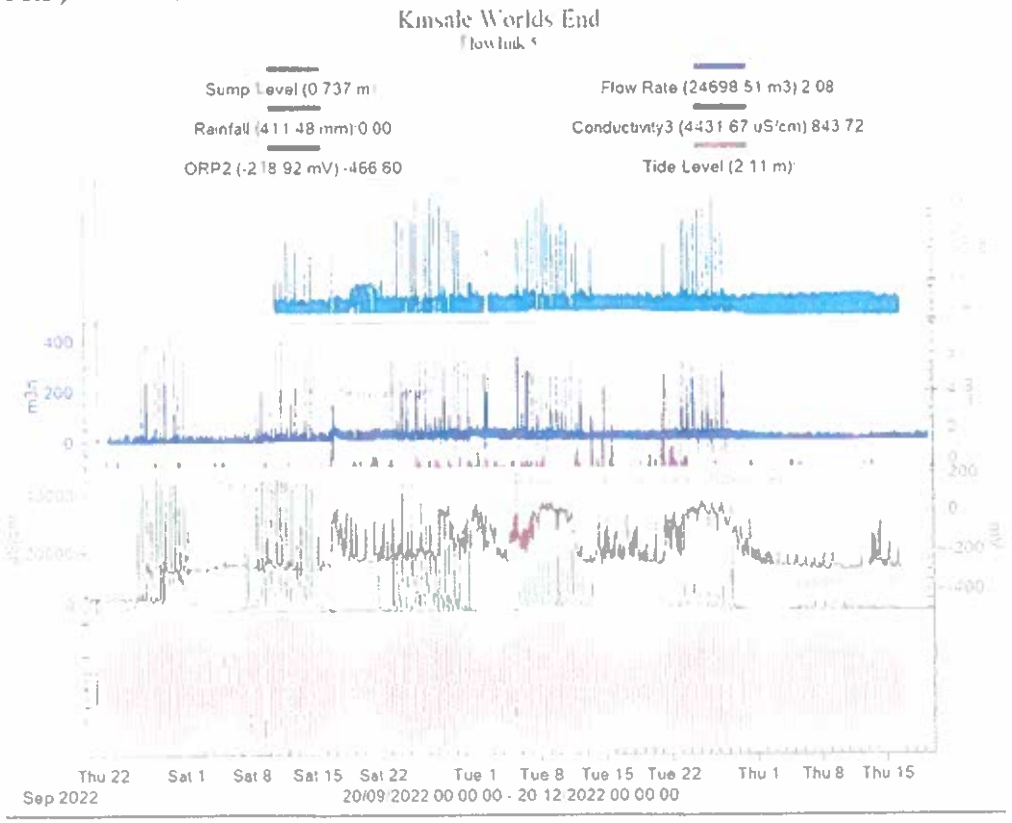
STORM RISING MAIN
01-FM02

3.6 Worlds End Pump Station

3.6.a Worlds End Pump Station data set

We installed ORP and conductivity sensors in Worlds End prior to the other sites at the end of August. On the 21st September we also monitored the manhole at the inlet to the sump.

Fig 33- Worlds End PS data set with Sump level, Inlet Flow, Rainfall, Conductivity, ORP, Tide level



During all high tides above 3.6 metres there is clear evidence of sea water infiltration. High level spikes are recorded both in the sump and in the inlet manhole prior to the sump. This is noticeable particularly in in October and November, but to a much lesser extent in December. The high level spikes were lasting approximately 3 hours . The flow entering the sump in between high tides has regular small spikes, as sewage is pumped from some other location to this point.

3.6.b Worlds End PS – Draw down test

Our level logger in the sump recorded very small level variations, (120 mm approx.), which suggest the pump is pumping out and refilling on a short duration. An example of this can be seen on the 13th October which is selected at a dry weather flow day. Both the pump out period and refill period recorded was every 2 minutes with no noticeable change throughout the day other than high tide. where the level increased and stayed high for several hours.

Fig 34 - Words End PS drawdown and retention time calculations

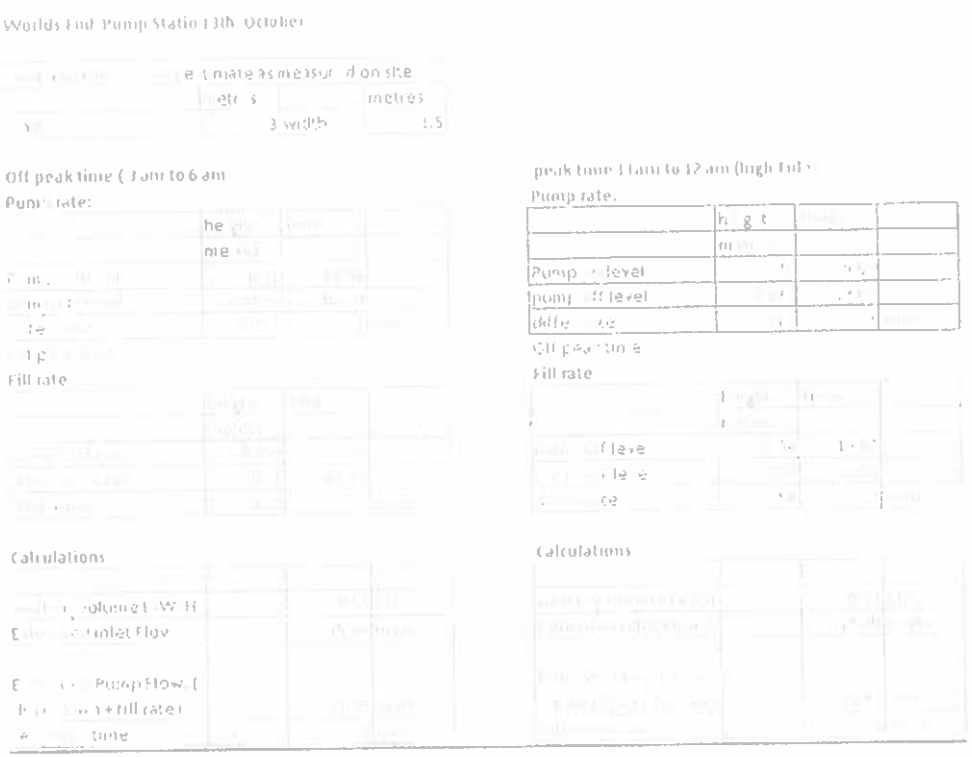
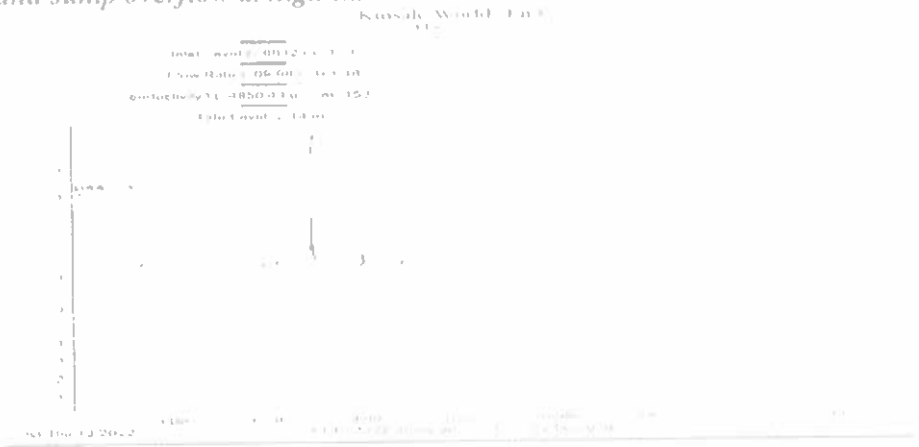


Fig 35- Kinsale Worlds End PS sump level with consistent 2 min pump cycle and sump overflow at high tide - Oct 13th

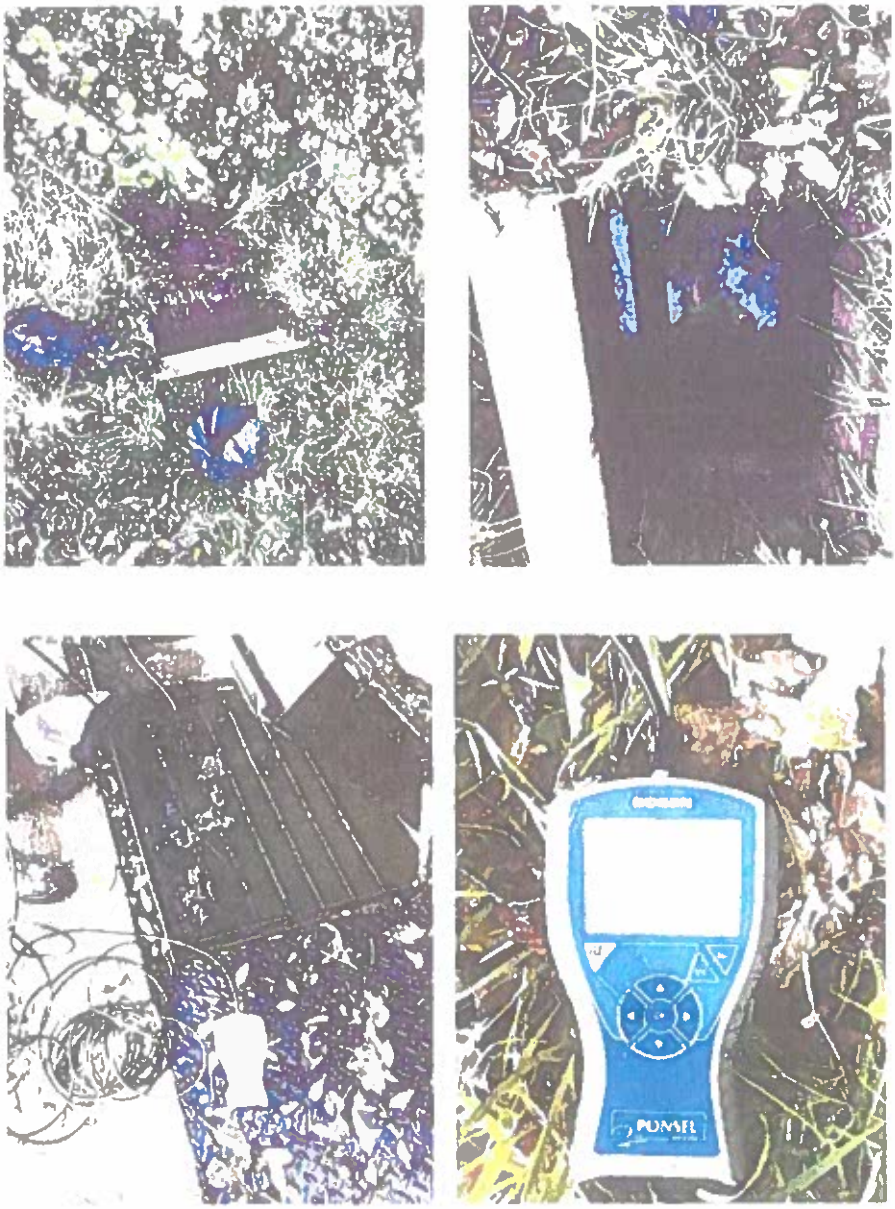


3.6.c Observations at spring tide at Worlds End Pump Station on Spring Tide

28th October time :8:30 – 50 mins after high tide

Both the storm overflow manhole and the sump were flooded, and both recorded high conductivity readings. 22.6 mili Siemens was recorded on spot test in inlet manhole and 23.53 mili siemens in the sump. This coincided with the logged data we recorded.

Fig 36 Worlds End PS during high tide



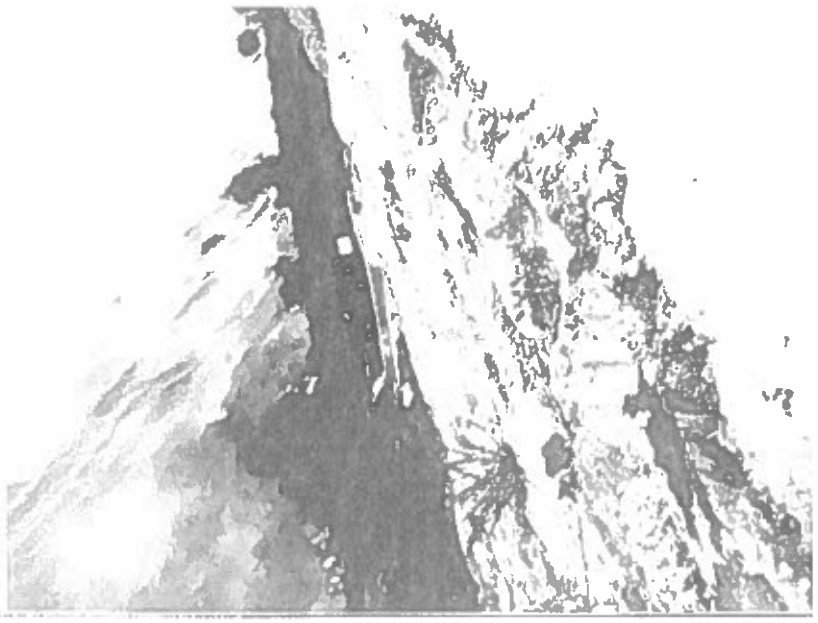
Within the control panel there is a mag meter which was reading 26 m3/hr approx.. The pumps were running continuously due to the tidal infiltration. The logged data show that the sump is flooded out for 3 hours. thus we estimate there is approximately 156 m3 of predominantly sea water pumping to Denis Quay Pump station twice daily when the tides exceeded 3.6 metres. Worlds End PS was a significant contributor to tidal infiltration in October predominantly.

Fig 37 – Worlds End Pump Station control panel

3.6.d Installation of new NRV at Worlds End :

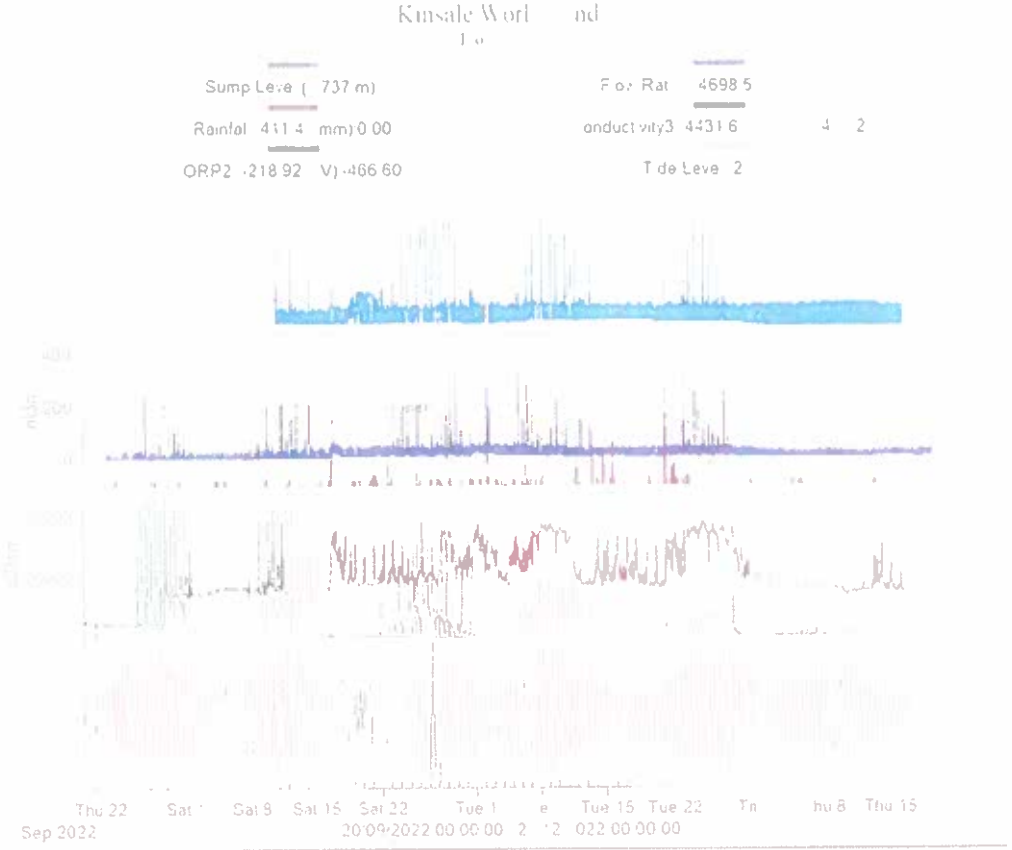
It was noted during a site inspection on the 11th November that Cork County Council fitted a new flapper non-return valve , (NRV), at the sea wall at Worlds End to prevent sea infiltration back from the storm overflow at this point. This was fitted some date at the end of October as seen in Fig 38.

Fig 38 – non return flapper valve (NRV) installed at Worlds End Storm overflow pipe



While there is still some high conductivity and salinity spikes in November, these have reduced in comparison to October as seen in Fig 39. In December up to the 15th December when the survey was completed, there is almost no infiltration recorded although it is noted that the high tides were lower than in October and November.

Fig 39 – Kinsale Worlds End PS data showing reduction in conductivity spikes in December – green trend



3.6.e High tide inspection at Worlds End after NRV installed

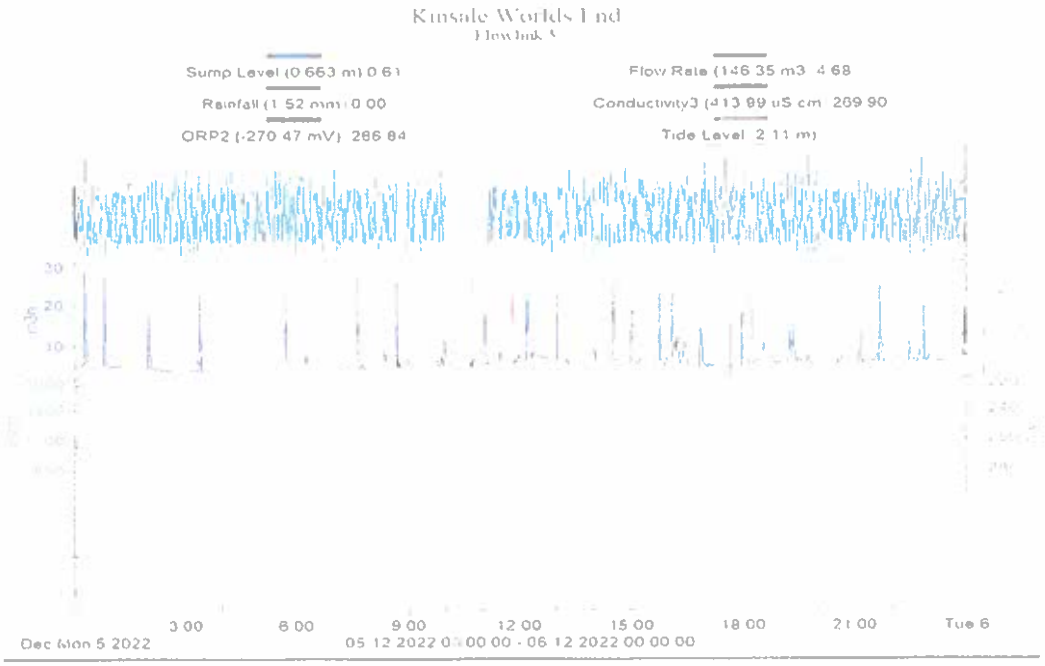
- Monday 5th December – 3:15 pm

On Monday 5th December the crew went to inspect the high tide at 3:15 pm. The tide recorded at 3.56 Metres. It was noted that sea water is still getting back from the storm overflow pipe at the peer wall, through the NRV. to the storm overflow box at high tides and a small quantity did spill over. as can be seen in photos below. The NRV is not sealing completely and sea water is getting back the storm overflow. however. the manhole is not completely flooded out as was witnessed in the previous on 28th October visit prior to the NRV being installed.
We noted that the flapper cover at the peer wall is a light material and was moving in and out a little with the motion of the waves and thus not sealing fully.

Fig 40- Kinsale Worlds Inlet manhole showing small amount of tidal infiltration on high tide

The recorded data at that time shows a small spike in conductivity in the sump but no increase in sump levels or flows as seen in Fig 41. Overall, the data is showing a reduction in infiltration, but it will be necessary to inspect again when there is a higher spring tide, (e.g. 4.2 metres)

Fig 41 - Kinsale Worlds End PS shows small conductivity spike but no flow increases on high tide – 5th Dec

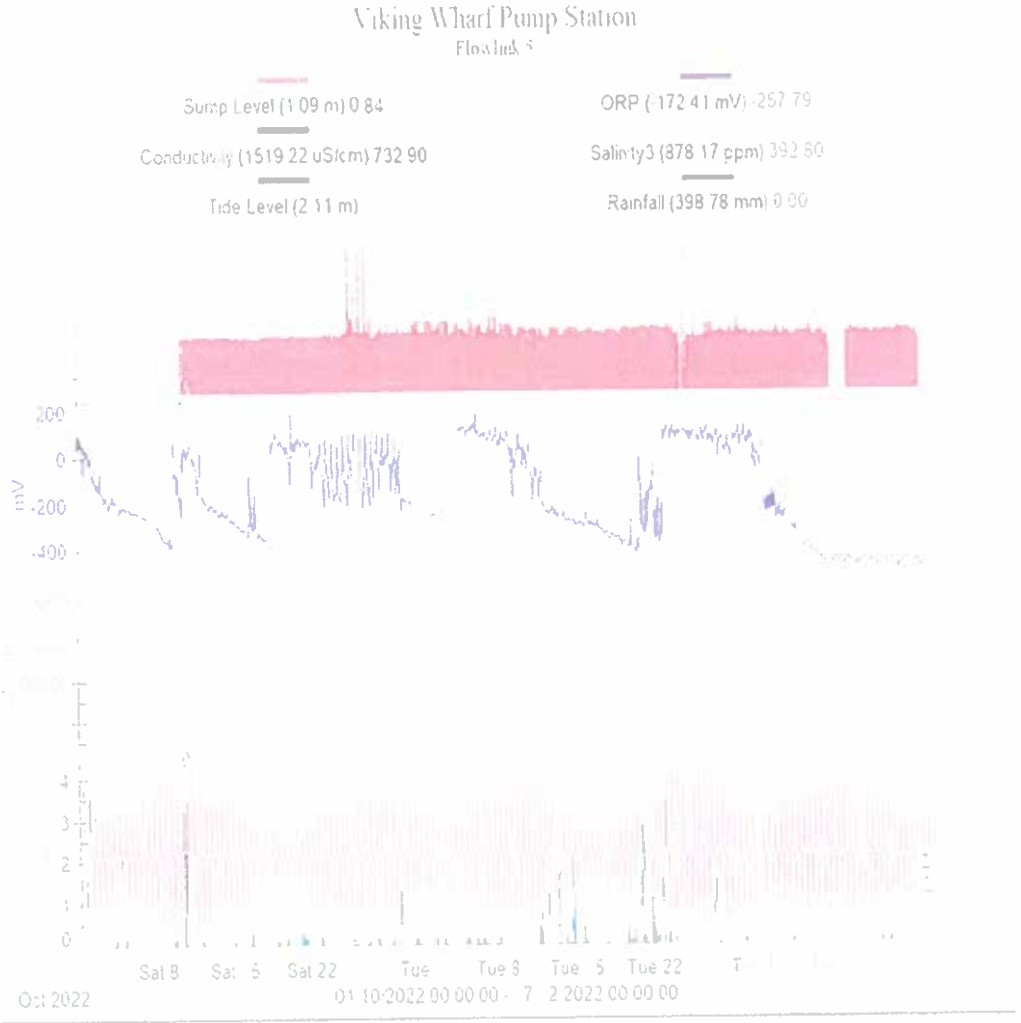


3.7 Viking Wharf Pump Station

3.7.a Viking Wharf PS data set

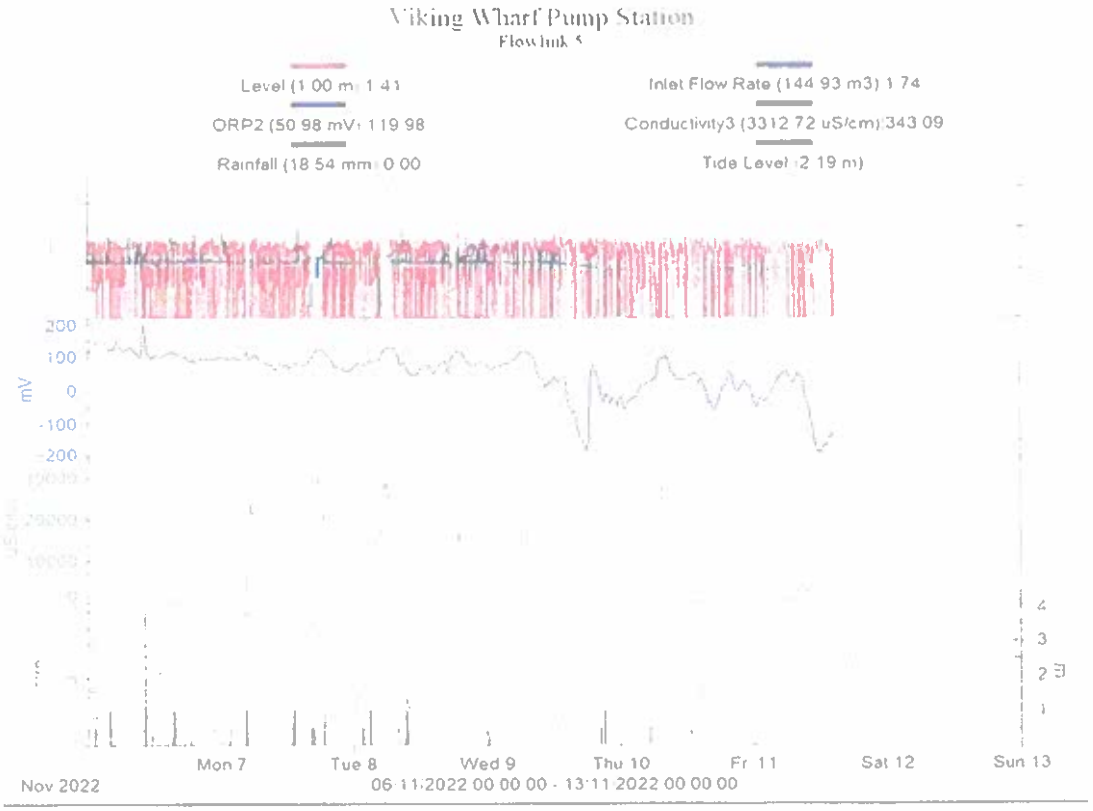
Viking Wharf is a smaller pump station managed by Cork County Council.

Fig 42- Viking Wharf PS data set with sump level, ORP, Conductivity, Salinity, Tide level and rainfall



High conductivity spikes are recorded at high tides, suggesting sea infiltration, however, there is only evidence of the sump flooding to high level over one to two days at the highest tides, (above 4 metres approx.) as seen in Fig 43.

Fig 43 – Viking Wharf PS showing conductivity spikes on high tides- green trend



3.7.b Viking Wharf draw down test

The sump level log is recording frequent pumping and refill cycles which seem to be relatively consistent throughout the day. Typically pump out is 2 minutes with longest refill and retention times recorded at 34 minutes during dry weather. Further to heavy rain in October refill times logged typically at 10 minutes throughout the day.

Fig 44 – Viking Wharf PS draw down and retention time calculations

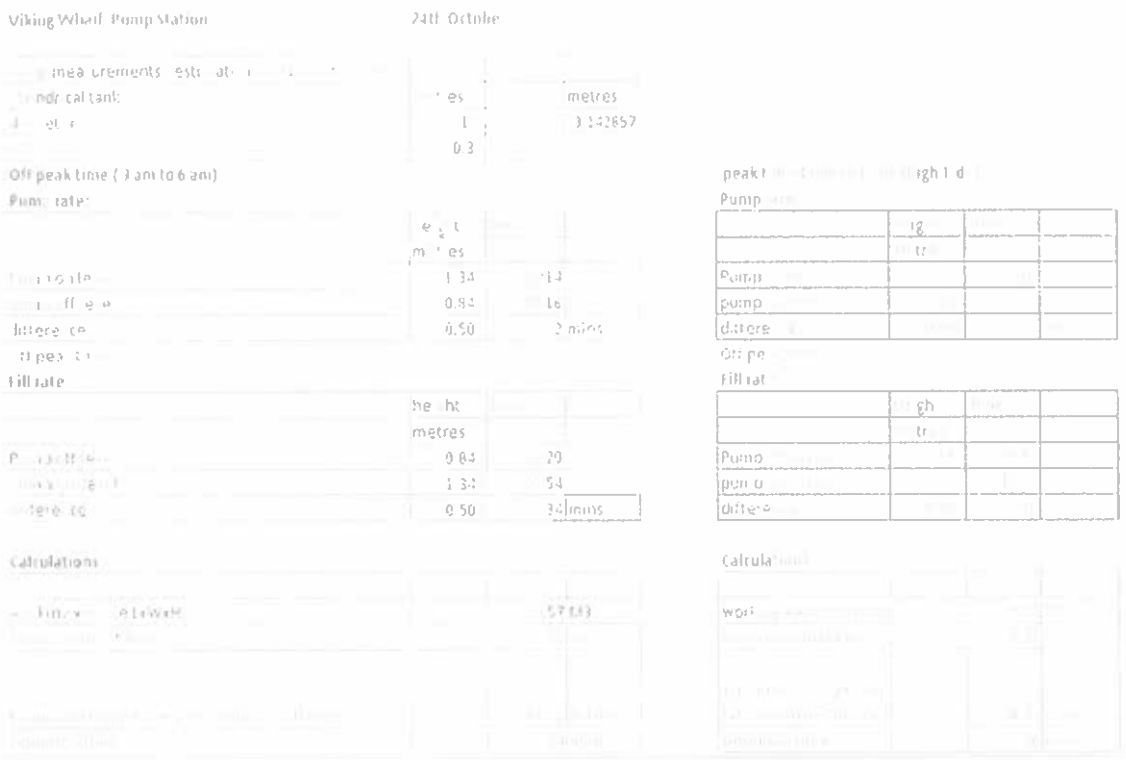


Fig 45 – Viking Wharf PS sump level variations on 24th October

3.7.c Observations at spring tide at Viking Wharf Pump Station

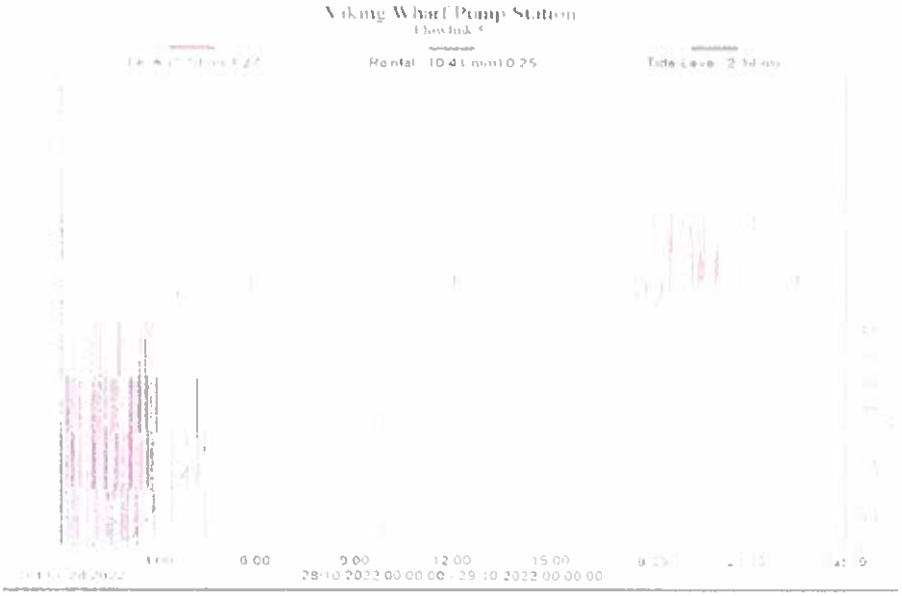
28th October time 08:45 - 1 hour after high tide

When we arrived at the pump station, one hour after high tide, levels were normal in the sump and at the inlet. A spot test recorded on the sump for conductivity measured 15.6 mili siemens, indicating there had been some infiltration.

Fig 46 - Viking Wharf one hour after high tide

Analyses of the logged data as seen in Fig 47. shows that the sump had flooded out on high tide between 7 am and 8:30 am. so we just missed that event. We conclude that there is sea infiltration also at this location which merits further investigation

Fig 47- Viking Wharf PS- logged sump level data shows sump flooded at high tide.



3.7 Inlet to WWTP

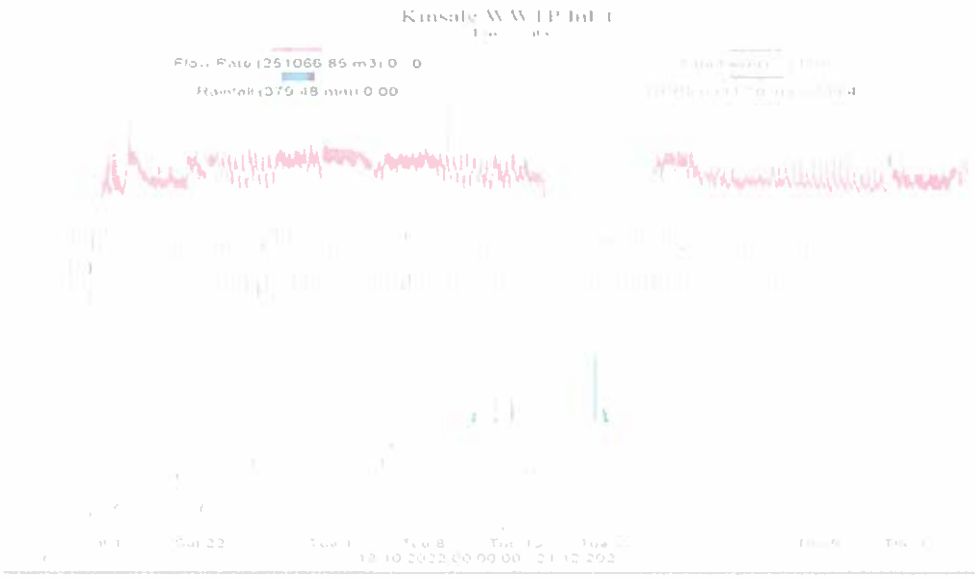
3.7.a Inlet to WWTP data set

Prior to installation of equipment at the pump stations we logged the conductivity at the inlet to the WWTP. There is clear evidence of the conductivity spikes coinciding with the high tide cycle as seen in Fig 48.

Fig 48- Conductivity and Salinity at the inlet to WWTP showing spikes at high tide- Sept 2022

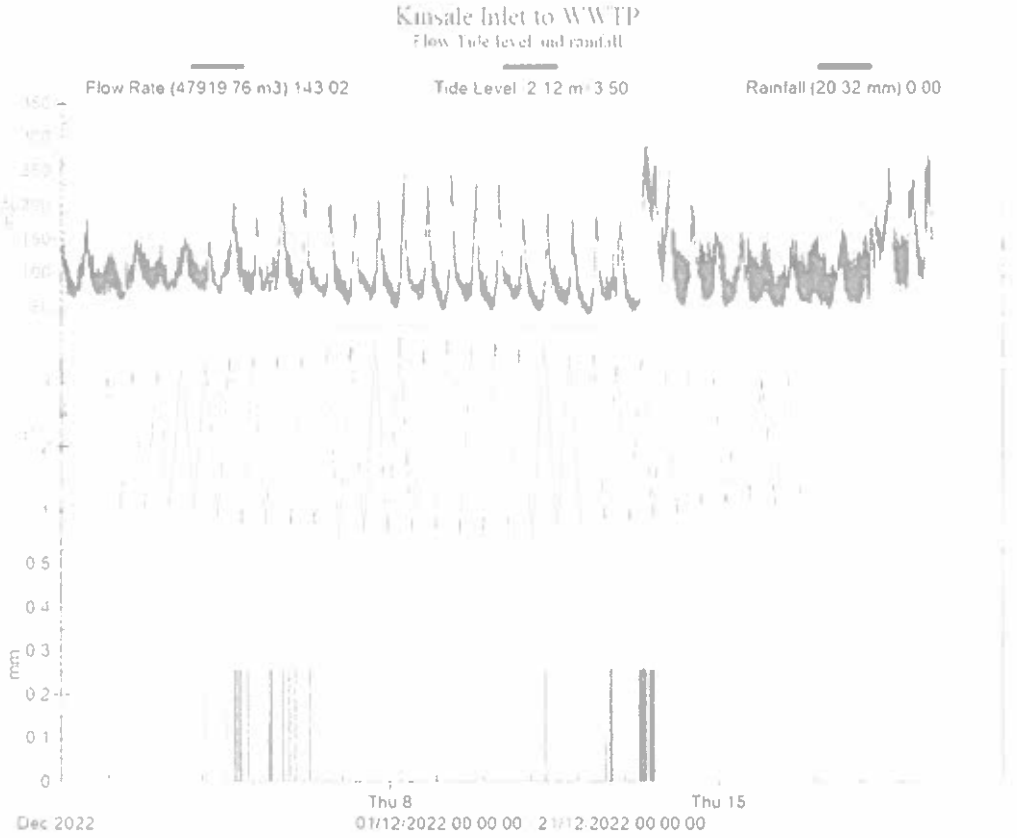
After the conductivity sensor was removed an ORP sensor was installed on the 8th October and a flow logger on the 14th October as seen in Fig 49.

Fig 49 - Kinsale WWTP Inlet data set for Flow , ORP, Tide level and rainfall



The flow at the inlet to the WWTP cycles with the high tides even in dry weather a seen in Fig 50

Fig 50- Kinsale WWTP Inlet showing flow spiking with each high tide



3.9 Estimate of Tidal Infiltration at inlet to WWTP

The graph following in Fig 51, is typical of a high tide flow spike. It is a dry weather day on the 6th December. This high tide is 3.8 metres. Calculating approximately the additional flow contributing to high tide, we estimate 260 m3 of tidal infiltration into the WWTP for this tidal event. With 2 high tides per day, this would correspond to 500 m3 tidal infiltration approx. per day at this time. A similar pattern can be seen with day to day analyses of the flow data, while the infiltration volumes will vary depending on height of tides.

Fig 51- Kinsale WWTP Inlet - one high tide spike with estimated 260 m3 of tidal infiltration

4.0 Summary of Pump Station Retention Times

The following table is a summary of retention times, with longest retention times between pumping typically occurring between 2 am and 6 am. The retention times at all pump stations is under the pre cursor 5 hours for sulphide formation.

Fig 52- estimated Retention times summary at Kinsale Pump Stations

Pump Station	normal	longest	
Summer Cove PS	20	148	mins
Scilly PS	32	188	mins
Denis Quay PS	6	10	mins
Worlds End PS	2	2	mins
Viking Wharf PS	10	34	mins

4.1 Assessment of Flow data

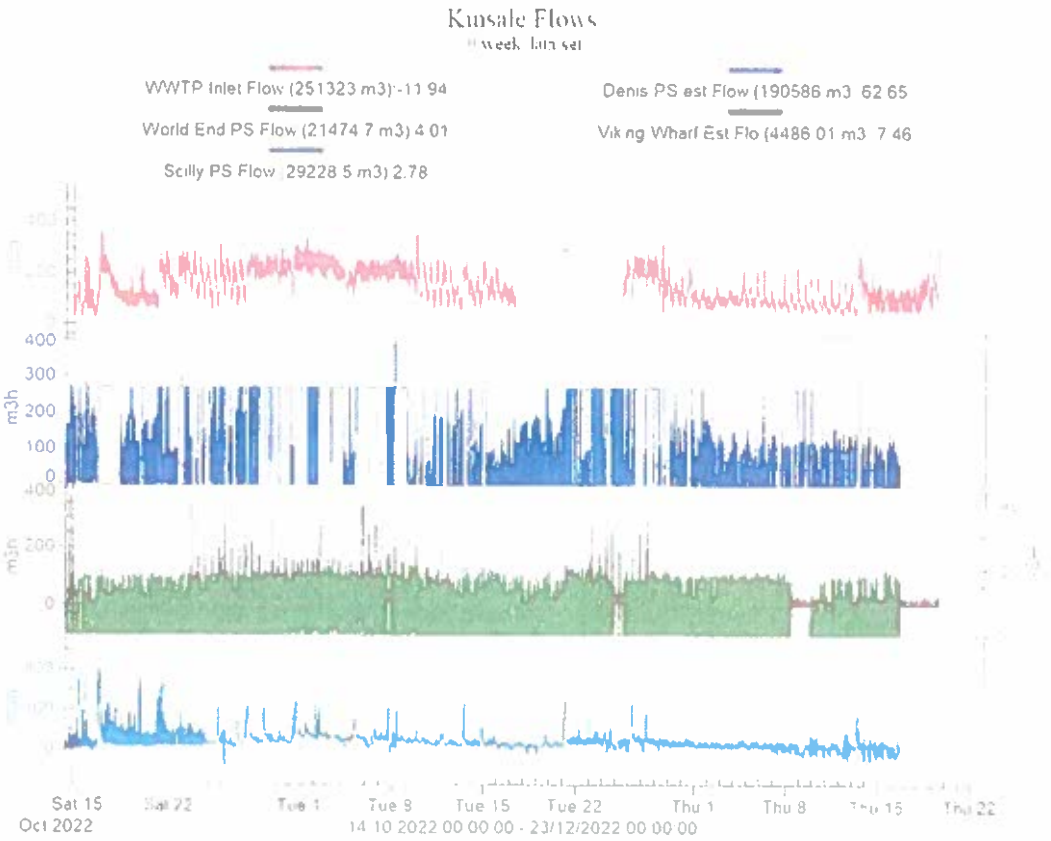
At Summer Cove, Denis Quay and Worlds End Pump Station Siemens magnetic flow meters are permanently installed and flow is displayed locally at the pump station. There are also flow meters installed in the treatment plant. As far as we can ascertain, the pump station flows are not logged centrally. We did not see any flow meters installed at Scilly Pump Station or Viking Wharf.

While it may have been possible to log the 3 x pump station which have flow meters installed, by bringing a signal to a local logger, these signals were already feeding into the local PLC's controlling the pumps and it was outside the scope of the survey to loop into these signals. Instead we either calculated the flows by draw down calculations using the level loggers we installed in the sumps, or where possible, we installed flow loggers at the inlet.

At Scilly PS we installed a flow logger at the inlet which measured the combined flow pumped from summer Cove and the gravitational flow from the Scilly Peer area. At Worlds End PS we also measured the inlet flow. The Worlds End Inlet flow measurement showed a consistent and frequent pumped flow cycle. We also measured the inlet flow at Viking Wharf; however, this data was not reliable as the flows were small and the area velocity flow sensor ragged out frequently. Instead we use the logged level to carry out drawdown estimates. At Denis Quay pump station, we also used the logged sump level to calculate a flow estimate. However, during high tide and any significant rain event, the sump level rose at Denis Quay, resulting in the pumps running constantly for a few hours. These pumps are speed controlled from the PLC and could vary with each pump cycle. We observed on one occasion that when the sump was at 2 metres and overflowing into the storm overflow tanks at Denis Quay , that the several foul pumps were running constantly at total flow on mag meter displayed at 270 m3/hr. During other high tides there are periods where the level is varying but not following the normal draw down trends. As this also interfered with our calculation, we assumed an average pumped flow of 100 m3/hr in our calculation for these periods. At the inlet to the WWTP we also installed an area velocity flow logger

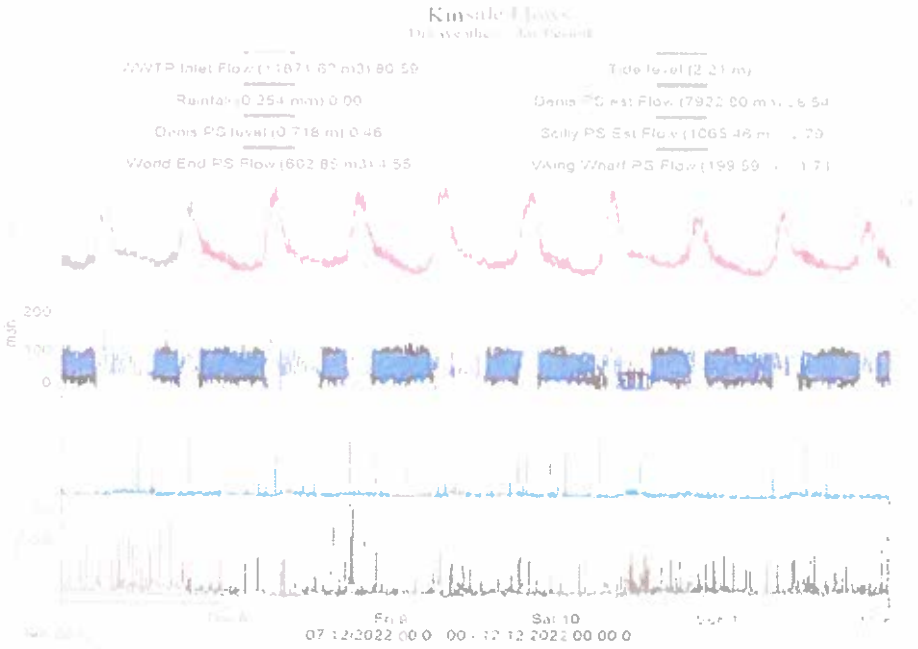
Using the combination of flows measured at the inlets and the draw down estimates at Denis Quay and Viking Wharf, we produced a 10 week data set as seen in Fig 53.

Fig 53- 10 week data set of recorded or estimated flows at all pump stations and at the WWTP Inlet



October and November were wet months. For the purpose of calculating an approximate flow breakdown, when compared to the flow measured at the inlet to the WWTP, we looked specifically at dates 7th to 11th December when there was no rain.

Fig 54 Flow data from all pump stations for 5 day dry period in December



The totals we estimated for these periods and the fractions compared to both Denis Quay and the inlet at WWTP calculated as follows in Fig 55.

Fig 55- Estimated flow breakdown for 5 day dry period in December

5 dry days 7-11th Dec		
Pump Station	M3	
Viking Wharf PS	200	
Worlds End PS	603	
Scilly PS	1065	
Denis PS	7923	
WWTP Inlet	11872	
	Fraction	Percentage
Viking Wharf/Denis	0.03	3%
Viking Wharf/ WWTP	0.02	2%
Worlds End/Denis	0.08	8%
Worlds End/ WWTP	0.05	5%
Scilly/Denis	0.13	11%
Scilly/WWTP	0.09	8%
Denis/WWTP	0.67	73%

There are periods during these 5 days during high tides when the sump level was high at Denis Quay PS and the pumps were running continuously.
Looking at a section of data in between high tides, when all pump stations are in the normal pump out cycle and there is no evidence of sea infiltration, we get the following graph and flow breakdown in Fig 56

Fig 56- Flow recorded between tide event – 6 hours Dec 13th

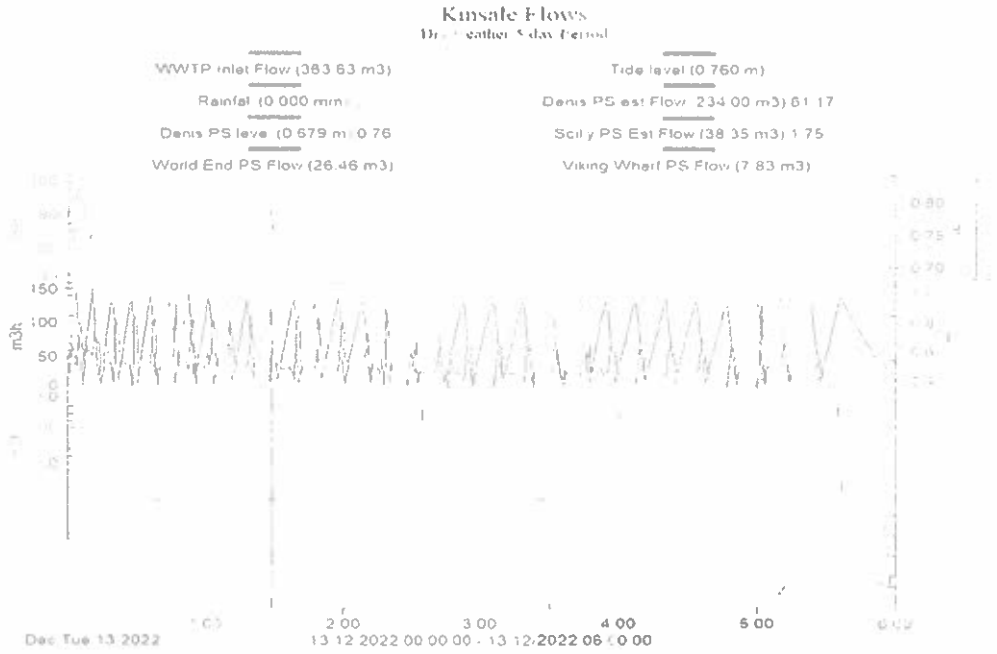


Fig 57- Estimated Flow Breakdown between tide event – 6 hours Dec 13th

13th Dec Midnight 6 hours between tide events		
Pump Station	M3	
Viking Wharf PS	8	
Worlds End PS	26	
Scilly PS	38	
Denis PS	234	
WWTP Inlet	364	
	Fraction	Percentage
Viking Wharf/Denis	0.03	3%
Viking Wharf/ WWTP	0.02	2%
Worlds End/Denis	0.11	11%
Worlds End/ WWTP	0.07	7%
Scilly/Denis	0.16	17%
Scilly/WWTP	0.10	9%
Denis/WWTP	0.64	55%

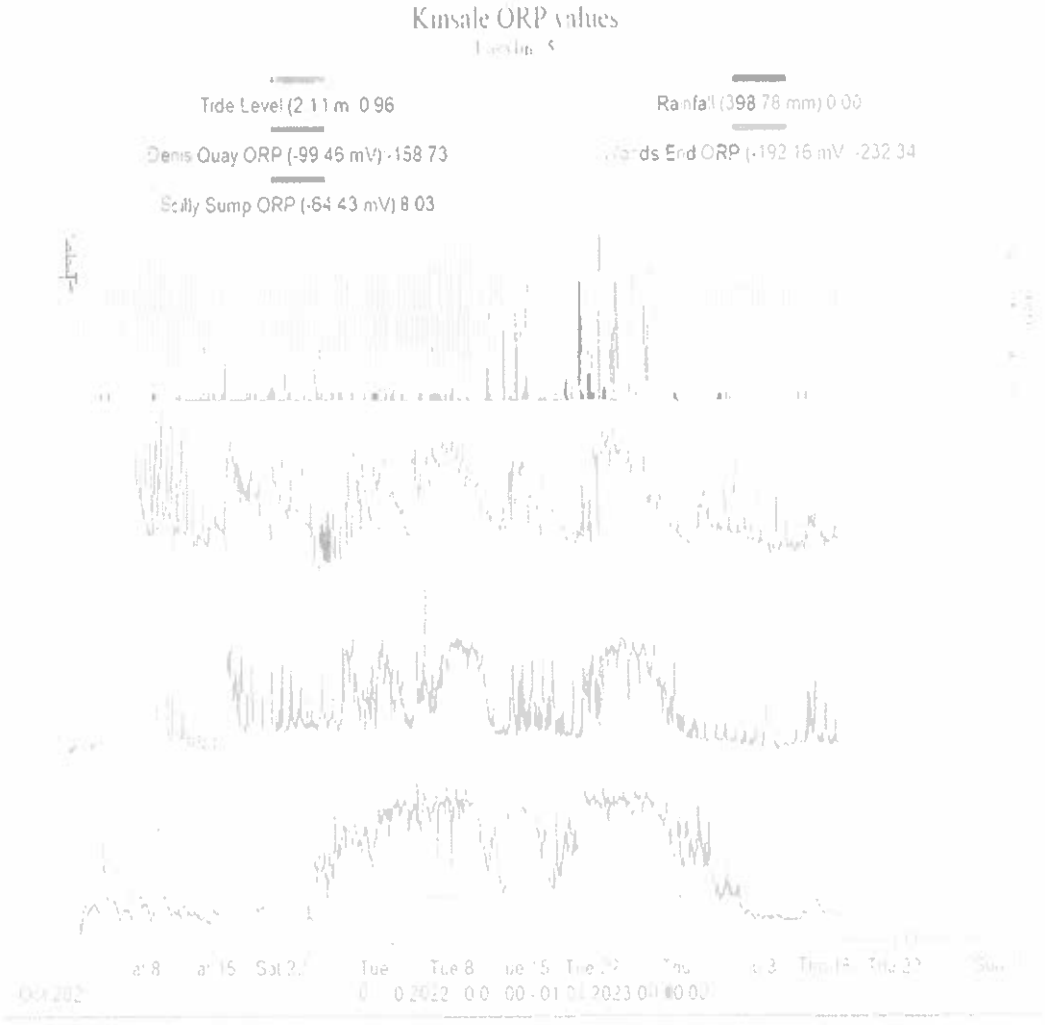
While these are estimates with room for error, particularly with the draw down estimated flow, the results suggest that Denis Quay Pump station contributes a much higher percentage of the overall flow to the treatment plant because of the high tide sea infiltration. The hydraulic load at the plant should therefore be significantly less if the tidal infiltration issue was fully addressed in the town.

4.2 Assessment of ORP recordings :

ORP measured in each pump station sump and at the inlet to Scilly, (coming from Summer Cove), and at the inlet of the WWTP.

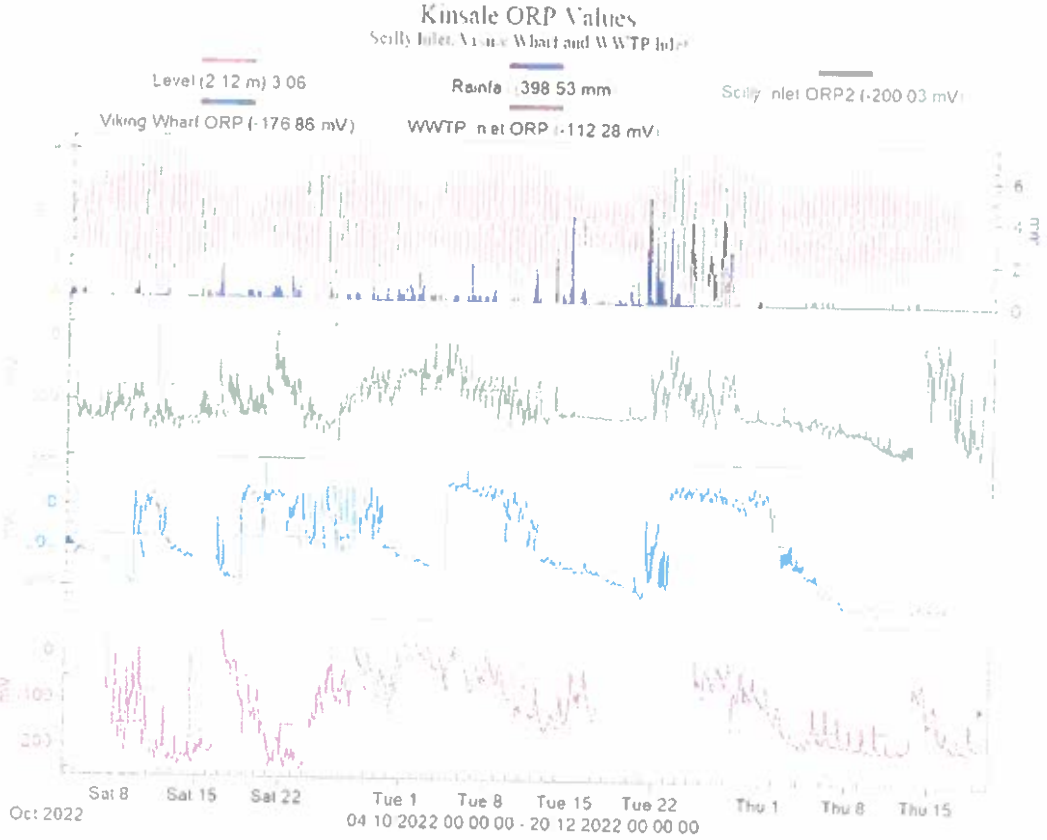
The data set for Denis Quay, Worlds End and Scilly Pump station is seen in the Fig 58

Fig 58- ORP data set for Denis Quay sump , Scilly sump, and Worlds End sump



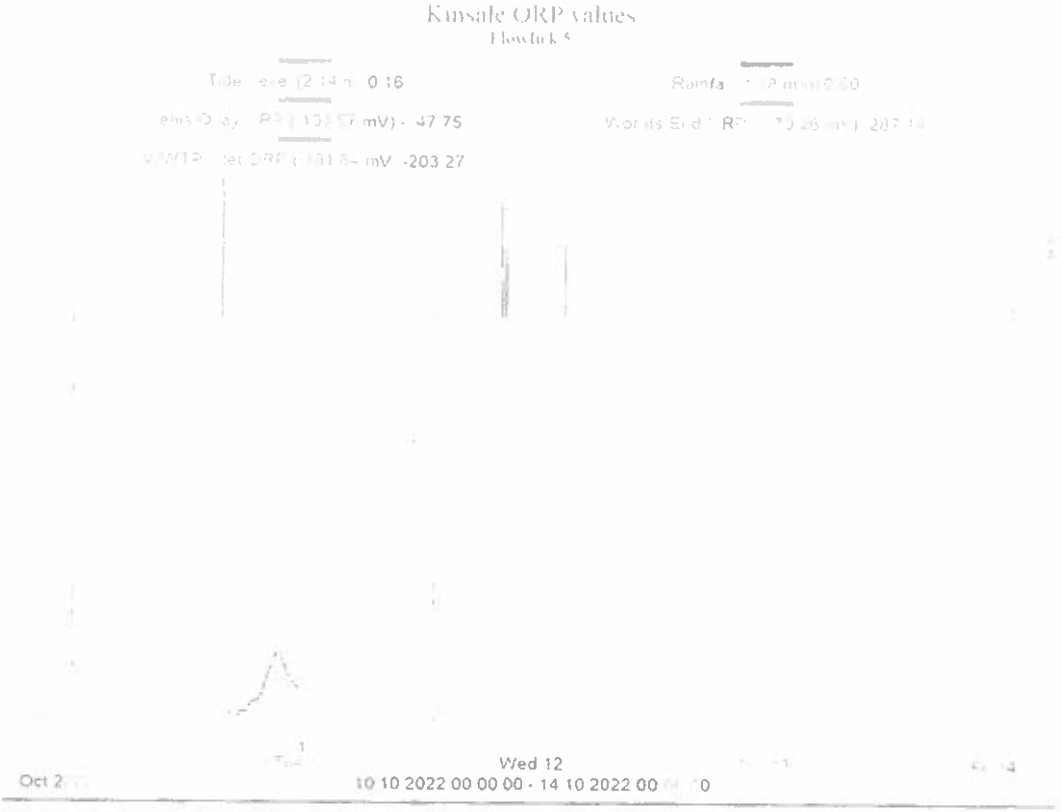
The data set for Scilly Inlet, Viking Wharf and the WWTP inlet is seen in fig 59

Fig 59- ORP data set for Scilly Inlet, Viking Wharf sump and WWTP Inlet



The general pattern recorded at the pump stations and the inlet to the WWTP are low negative mV values, often well in excess of -150 mV. During heavy rain periods these values trended towards positive figures. There was also a general cycling trend noted where values where less negative during the high tides as seen in Fig 60 which is a sample data graph between 10th to 14th October.

Fig 60 - ORP data showing mV cycling with tide events 10th to 14th Oct



The temperature was also logged during the survey with variation in the liquid temperatures from 17 C in early October to 9 C in December as seen in Fig 61. There was no obvious correlation between temperatures and ORP values noted.

Fig 61- Temperature data recorded during survey

4.2.a General Comment about ORP measurements

Measuring ORP was requested by Irish Water and was a unique part of the scope for this survey. While we have many years of experience carry out flow and load surveys, including tidal infiltration studies, this was our first time logging ORP in pump stations over a prolonged period.

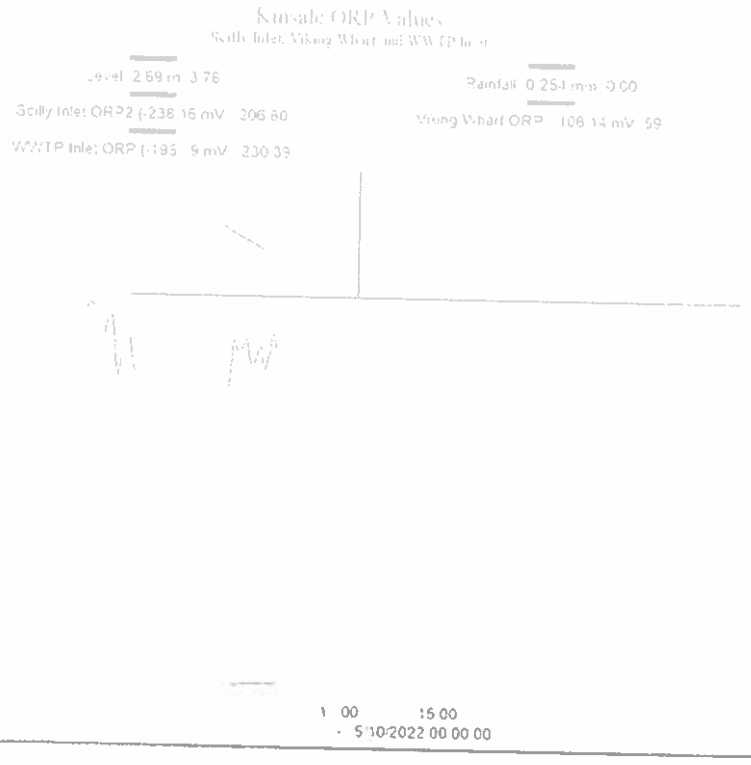
The sensors used were Aqualabo Ponsel pH/ORP sensors. These are a digital probe with Modbus/SDI 12 outputs which are compatible with our loggers. They are a multifunctional sensor which can be calibrated either for pH or ORP.
We followed manufacturer's instructions for ORP calibration. This is a 2 point calibration using
+ 200 mV electrolyte calibration solution, (certified from suppliers- Reagecon), and carrying out a zero calibration in air.

It was noted that calibration seemed less stable than, for example, then calibration of sensors for pH where buffers are used. It was noted that the probes would drift relatively quickly from the zero value in air after calibration. However, we did note that the values did return close to the 200 mV when returned to the calibration solution and seemed stable enough in this.

During the survey we visited the site every week and in general all sensors were cleaned at least every 2 weeks. Time logs of the cleaning date and times were kept for many of the visits, and in general we did not witness too many step changes, although some significant ones were noted.
For example, at WWTP inlet on the 24th Oct a step change of -246 mV to -156 mV was recorded before and after cleaning as seen in Fig 62.

The general conclusion therefore was that the probes were prone to fouling, which tended to drive the mV values more negative than the true value. This was further confirmed when we did some spot sampling with a handheld Odean ORP meter, which would sometimes show variations between the probes, typically up to -50 mV , but as high as -100 mV in worst case scenario. However, even just after cleaning, low negative values were recorded so we think that the general trend is correct and that low negative values were the true situation, even if sensor fouling tended to exaggerate the negativity of these values further.

Fig 62- ORP data has step change after cleaning at WWTP inlet



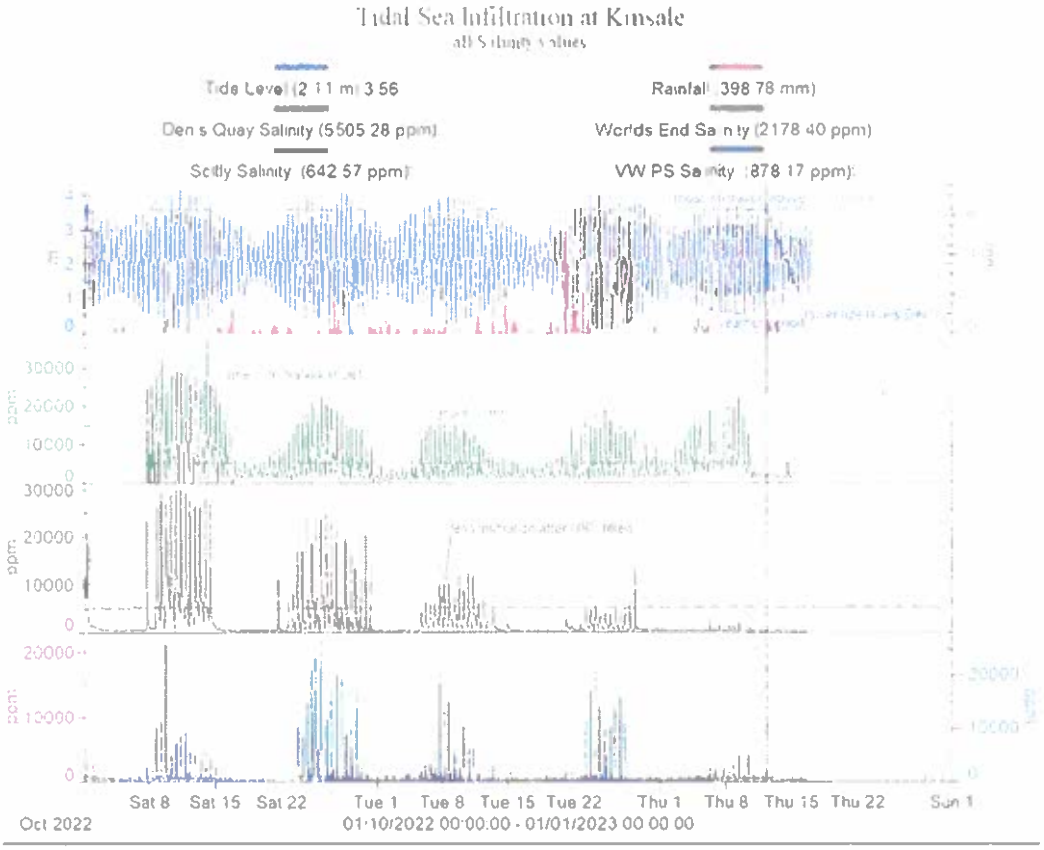
While we have no ORP data from previous surveys to use as a benchmark, we understand that in general the values recorded are lower than expected and that negative values below -100 mV would suggest a level of septicity. However, we did not witness any other data to support more sceptic conditions than normal. During the site visits we also monitored any smells and we did not witness any pungent odour at the pump stations, other than the normal level of sewage smell one would expect. Furthermore, we did not witness any other correlations in the results with the ORP data, such as; retention times in the sumps, temperature variation, or even with tidal infiltration. In that respect the ORP results are somewhat inconclusive. The ORP did trend showing more positive values in the heavy rain periods and cycled with the tidal infiltration. These trends would be consistent with normal water dilution within the sumps as would be expected and only stand to prove that the ORP probes were reacting.

4.3 Assessment of Salinity Results

Salinity is measured and logged directly from the Ponsel Conductivity/Temperature sensor so the trends for salinity mirror the conductivity trends.

In Fig 63 we record 4 of the pump stations which shows clearly the salinity spikes with each high tide event. This same trend is apparent at the inlet to the WWTP as we see in previous graphs

Fig 63 – Salinity data recorded at all Kinsale Pump Stations showing tidal spikes



At Worlds End Pump Station, (brown trend), we can see a clear improvement after the NRV was installed, with much less infiltration at this pump station recorded in December. However , while there is a general improvement, high salinity levels at Denis Quay Pump Station, and subsequently at the inlet to the WWTP are still being recorded, suggesting there are still several sources of sea infiltration.

4.4 Pumping Distances Velocities and Time lags:

On completion of the survey we were requested to include rough calculations for pumping velocities and time lags based on information provided for pumping distances and pipe diameters of the pressurise pipes at each pump station outlet. The velocities and time lags were calculated based on typical flow rates witnessed or logged at each pumping station. At Denis Quay we included an estimate for a typical flow with one pump and the pumping rate witnessed at high tide when several pumps were running.

Fig 64- estimations of pumped pipe velocities and time lags based on approximate pumping rates and distances

Pump Station	rising main pipe diameter (metres)	approx pumping distance metres	approx pump rate m3/hr	approx pump rate m3/s	estimated pipe volume m3	estimated velocity m/s	estimated time lag mins	comment
Summercove PS	0.3	1500	100	0.0278	16	0.885	28.13	pumping across to Scilly PS- typical 1 pump
Scilly PS	0.2	170	100	0.0278	1.7	0.885	3.20	Scilly to 750 gravity pipe across dock typical 1 pump)
Worlds End PS	0.1	250	27	0.0075	0.625	0.955	4.36	typical 1 pump
Denis Quay PS	0.4	2500	100	0.0278	100	0.221	182.40	normal conditions typical 1 pump varies with speed control
Denis Quay PS	0.4	2500	270	0.0750	100	0.557	74.58	at high tide observed flow with several pumps running

5.0 Final Conclusions

- There is clear evidence of tidal infiltration at all pump stations to varying degrees and subsequently at the inlet to the WWTP, resulting in unnecessary hydraulic loads and high chloride levels at the plant. It is likely that there are other sources of sea infiltration within the town other than the pump stations, which will require further investigative and remedial work. There may be an unknown source contributing to the high levels in infiltration logged at Denis Quay PS.
- Estimates of tidal infiltration during high tides in dry weather in December was 500 m3 per day at 3.8 metre high tide. The tidal infiltration could be significantly higher at spring tides.
- The retention times at all pump stations is under the pre cursor 5 hours for sulphide formation.
- A significant source of sea infiltration was noted at Worlds End Pump Station which has improved considerably further to the installation of a non-return valve by Cork County Council at the end of October, on the storm overflow pipe at the peer wall. Similar NRV installations at Scilly PS and Viking Wharf PS could further reduce the overall infiltration.
- Low negative mV ORP values were recorded at each pump station and at the inlet to the WWTP. although there was no evidence of septicity or bad odours noted during the survey.

6.0 Recommendations

- Like Worlds End PS, installation of non-return valves at Scilly and Viking Wharf pump station should be considered as infiltration was logged at these sumps as well.

- Worlds End Pump station should be inspected during a high a spring tide, (4.2 metres), to assess how well it is sealing, and to see can any further improvements be made.

- Similar manhole inspections should be carried out at the other pump stations and all other known storm overflows in the network to see is there any other sources of infiltration.

- Further to any remedial works carried out after visually inspections in 2023, a further survey in the summer months is advisable to log conductivity and the sump levels, particularly at Denis Quay. Flow and conductivity data should also be monitored at the inlet to the WWTP during the same period to quantify overall improvements .

This report was compiled on behalf of Water Technology Ltd for Irish Water by:

Finbarr O Riordan dated 12th January 2023

7.0 Appendix 1: Equipment used during Survey

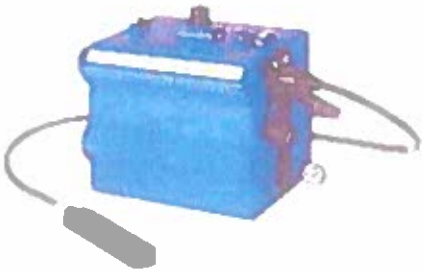
Item 1 : Teledyne ISCO 2150 Area Velocity Flow Module

Locations: Inlet to WWTP , Inlet to Scilly Sump, Inlet to Worlds End Sump, Inlet to Viking Wharf Sump

The 2150 Flow Module uses continuous wave Doppler technology to measure mean velocity. The sensor transmits a continuous ultrasonic wave, then measures the frequency shift of returned echoes reflected by air bubbles or particles in the flow.

The 2150's area velocity probe is built on digital electronics, so the analog level is digitized in the sensor itself. The probe is also factory-calibrated for 10-foot (3 meter) span at different temperatures.

In field use, the 2150 is typically powered either by two lead acid batteries within a 2191 Battery Module or an external deep cycle battery for long periods of measuring.



Above: 2150 with AV sensor and Battery Module

Right: up to 4 Modules stack together for multi-stream or redundant measurements

Item 2: Ponsel ORP ,Conductivity, Salinity, Temp probes Probe

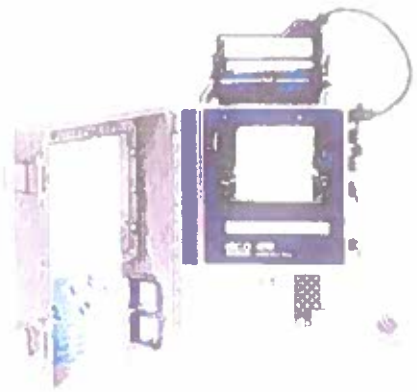
Location: Inlet to WWTP

The Ponsel conductivity temperature probe measures, conductivity, temperature and derived salinity, and the Ponsel ORP/pH probe measures ORP and temperature. They are digital sensors with Modbus and SDI 12 output to connect directly to logging devices. The sensor is calibrated using the handheld Odeon controller

Item3: Teledyne ISCO 4230 and 730 Bubbler level Meter

Location: sumps at Scilly PS, Dinish PS, Worlds End PS and Viking Wharf PS.

The 4230 and 730 uses the bubbler method of level measurement.
The operating principle is as follows:
A small compressor pumps air into a reservoir. This air is released slowly by a needle valve into a bubble line, a length of small diameter flexible tubing. The other end of this tube is submerged in the sump.Inside the, the bubble line also connects to one side of a differential pressure transducer. As air is released slowly into the bubble line by the needle valve, pressure builds inside the line to force the air out of the line into the flow stream. When there is enough pressure to counteract the hydrostatic pressure of the flow stream, a bubble will be forced from the end of the line. The amount of pressure required to force the bubble from the end of the line is directly dependent on the hydrostatic pressure of the flow stream over the end of the bubble line. The pressure transducer inside the flow meter senses this pressure and converts it into an electrical signal that the 4230 converts into level.



Item 4: Isco 2105G Logger Modem with Flowlink Pro Software

all locations

Data from the 2150 AV flow loggers and Ponsel probes were connected to the Isco 2015G platform with modem. Data was pushed in real time to our Flowlink Pro server were data is analysed using Flowlink software.

Appendix 6

Online Jou
Aug 9, 20 · 3 min read

Keep Kinsale Harbour Clean!

Keep Kinsale Harbour Clean!
Disposal Of Sewage By Visiting Yachts
Writes Leo McMahon
(Pier John Allen)
Disposal of sewage into Kinsale Harbour by visiting yachts and boats was an issue raised by Cllr Kevin Murphy (FG) at the monthly meeting of Cork County Council's Bandon-Kinsale Municipal District (MD).
He had a motion asking how vessels disposed of sewage when moored and said there was local concern this could be happening in an otherwise immaculate harbour at a time when Kinsale had a costly state-of-the-art sewerage scheme.
MD officer Enda O'Halloran then read out a written reply from harbour master Julian Renault stating that a discharge was recently brought to his attention.
'Along with the environment section, we are currently investigating and trying to identify the source of the alleged pollution which is believed to be in the Castlepark area
Mr Renault referred to international regulations on the matter. 'Vessels over a certain size (400 gross tonnage or certified to carry more than 12 passengers) are prohibited from discharging sewage into the harbour. Most yachts and small commercial vessels fall outside the remit of the current regulation. From that perspective, they legally can dispose of waste water into the harbour and this had been the practice for many years in most Irish and European harbours.
However,' he continued, 'the Port and Harbour of Kinsale Bye-laws 1961 state: no person shall throw, cast or empty in any part of the harbour any oil, acid, sewage, fish or foul offal or other noxious fluid or garbage of any kind whatsoever'. This was reinforced in the County Harbour Bye-laws of 2009 and specifically referred to sewage effluent and bilge water.'
Because of the conflict between local and international regulations, Mr Renault said he would need to seek legal advice on the issue but warned that enforcement of the harbour bye-laws would affect all users regardless of size, type and activity and could affect shore facilities such as boatyards, sailing clubs when it came to washing down boats or dinghies.
The harbour master added that a connection point into Kinsale's sewerage system was provided on Pier Road near the entrance to the yacht club marina. 'The installation of a publically available pump-out facility would require the provision of a floating marina similar to the pontoon currently being installed in Schull. However, because of the shallow depths in that area, it would also need to be dredged in order to allow larger vessels to access it at all tides'.
Cllr Murphy welcomed the report. He believed there was no reason nor excuse for any discharges and felt it was behoven on the yacht club and other marinas which collect mooring fees to take the necessary steps and ensure Kinsale was Ireland's cleanest harbour.
Cathaoirleach Aidan Lombard (FG) seconded but wanted to know if in fact, discharge of sewage was an issue. Cllr Gillian Coughlan (FF) also supported Cllr Murphy's motion stressing the need for the harbour, the jewel in the crown of Kinsale tourism, to be pollution free.
Cllr Murphy asked that his motion go to the full council as it was an issue concerning other harbours.
Executive engineer Brendan Fehily said the council had spent millions of euro cleaning up its harbours with residents of Castlepark levied up to €12,000 each towards this. He believed the bye-laws were enforceable adding that it was a 'no brainer' that the council should get a pipe from the Pier Head to the pumping station at Dennis Quay. He also disagreed with any suggestion of going to the cost of dredging when the port had a modern sewerage system.

Appendix 7

clear all round and lies 2 cables offshore and there is a rock called Sovereign Patch with only 2·1m on it between Little Sovereign and the shore. Ballymacus Shoal (3·8m), NW of Big Sovereign and at the W of the entrance to Oysterhaven, should not be approached closer than 0·75 cable.

OYSTER HAVEN *(see Chartlet)*

Oyster Haven is a good harbour but is subject to roll and squalls. Its NW arm is wooded and very attractive. The entrance to the harbour which is to the N of Big Sovereign Island is clear as far as Ferry Point on the W side, but opposite this point lies Harbour Rock with only 0·9 m over it. This rock is about halfway between Ferry Point and the opposite shore and must be passed on its W side.

Anchorages

1. In 2 to 5m NNW of Ferry Point in soft mud and sand which can choke a CQR anchor. Keep Kinure Point on the E side of the entrance open of Ferry Point and anchor midway between N and S shores. Do not be tempted to go further up the NW creek as it shoals suddenly.

2. Up the N arm of the harbour and off the W bank and just below two cottages on the shore. Do not go any further up as the holding becomes poor with much weed.

OYSTER HAVEN TO KINSALE

Keep 2 cable clear of Ballymacus Point and do not pass too close inshore between Ballymacus Point and Frower Point 1M SSW of it. There is no danger on the direct course. The Bulman Rock lies 2·5 cables S of Preghane Point. It is a three headed rock with a least depth of 0·9 m and with deep water all around it. It is marked by a S Card Lt buoy, Q (6) and L Fl 15s Bell moored 1 cable SSW of the rock. There is a passage inside the rock. Keep the N end of the Big Sovereign in line with Frower Point, 091°, and if turning inshore hard give Preghane Point a berth of 1 cable but do not go S of the 081° line.

KINSALE HARBOUR *(see Chartlet)*

This splendid harbour at the estuary of the River Bandon is easily entered by day or night. The entrance is between Shronecan Point on the W and Preghane Point on the E. Shronecan Point has rocks extending off it for nearly 0·5 cable but there is plenty of water close up to these rocks. Farmer Rock is 0·75 cable offshore 3 cables NE of Shronecan Point, and dries 0·6 m. There are no dangers on a mid-channel course up the harbour and the bar below Charles Fort has a least depth of 3m. If beating in or out note that Carrigmoone has now been covered with infill from the shore in Middle Cove on the E side.

Do not go within 0·5 cable of the E shore between Middle Cove and Charles Fort 0·5M N of it, as there are a number of rocks there, and note that the W side of the harbour from Money Point opposite to Middle Cove up as far as Blockhouse Point, over 0·75M N of it, is very shoal. There are 3 Red Can buoys marking the W side of the channel, which must be left to Port. The first, the Spur buoy, Fl (2) R 6s is opposite Charles Fort, the second, the Spit, QR is 2 cables N of Blockhouse Point, and the third Crohogue, Fl (3) R 10 s is 2 cables WNW of the second buoy.

Lights

A light is shown from a small White Tower on the ruins of Charles Fort, Fl WRG 5s,18m, W8M, R5M, G6M, G 348° to 358°; W then to 004°; R then to 168°. The narrow, white sector leads clear into the entrance. The Green sector is to starboard and the Red sector covers the rest of the harbour. Note that this light is obscured E of the entrance and over the Bulman Rock. The light is shown throughout 24 hours.

Anchorage and berthing

1. Yachts may enter Kinsale at all stages of the tide day or night. The only time it would be hazardous to enter Kinsale Harbour would be in Gale Force conditions from the S or SE in a strong ebb tide. The Kinsale Yacht Club has a Marina to the N of the town quay. It is marked by 2 FG Vert at each extremity. Apply to yacht club or HM for a berth. (HM 021-772503) VHF 14. VHF occasionally manned.

2. On the bank N of Blockhouse Point clear of the moorings in 2 to 3m. The bottom is shell.

3. 1 cable offshore E or SE of the town quay, in 13m. There is a strong tide in this position.

4. Further up the harbour in 4 to 10m. Keep clear of the channel leading to the town quay and use a riding light at all these anchorages.

5. Castlepark Marina is situated approx. 2·5M upstream from Kinsale Marina on the W shore of James Fort.

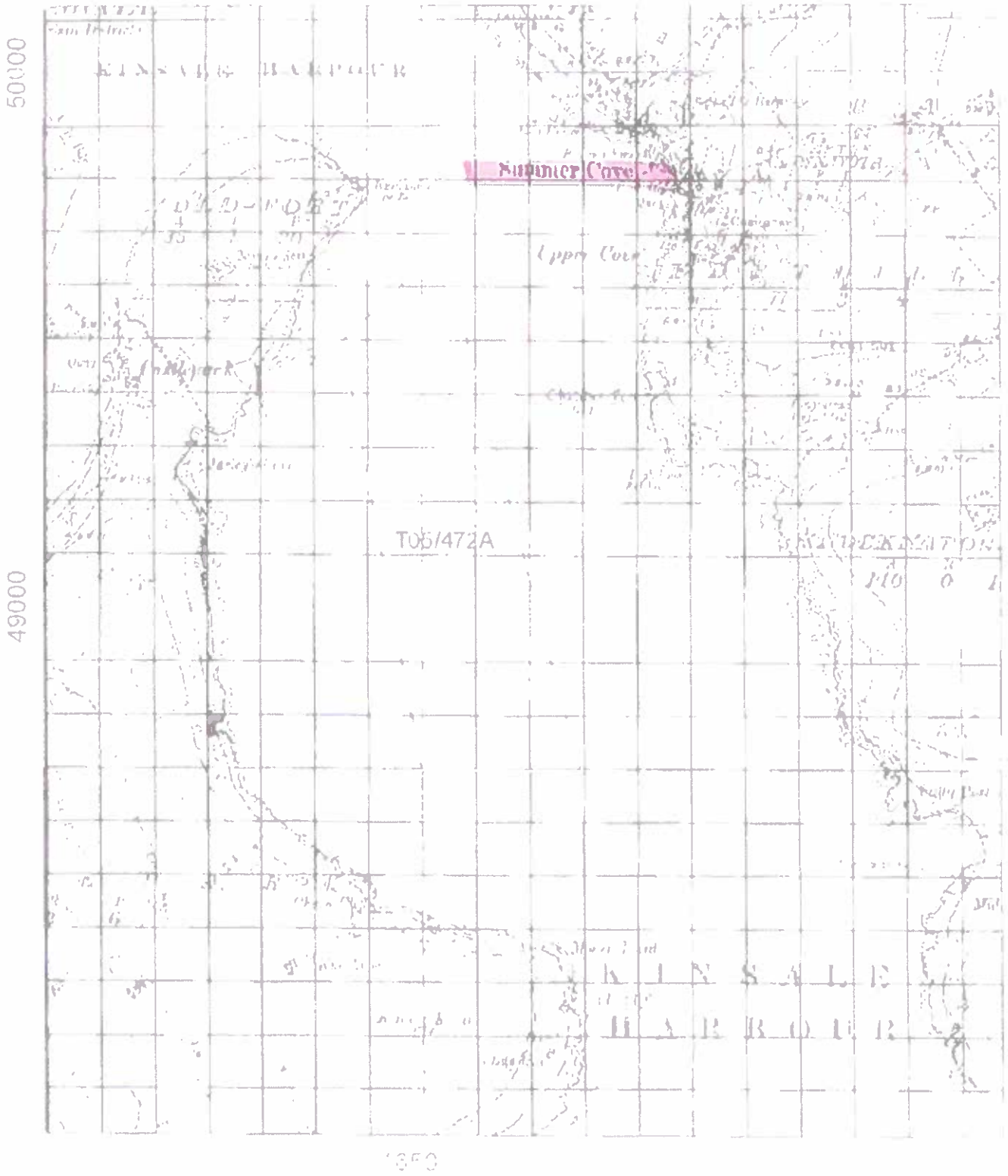
6. A new Pontoon has been placed off Ferry Slip. The pontoon is for fishermen's use only. It is fitted with 2 Vert G Lts. at either end. Anchoring is prohibited between Adams Quay and Lobster Quay. Speed limit of 6 knots in Harbour area.

Bridge

A bridge crosses the estuary above the town. Clearance is about 5m at HW springs and 7m at half tide and 8·7m at low water.

Facilities

All supplies are available, banks, hotels, seventeen restaurants and good shops and pubs. There is a bus service to Cork and to the airport. There is a yacht yard up the river. Petrol and diesel from the Trident Hotel, just S of the quay, water and diesel available on the quay where the HM's office is situated. There is a good slipway at the quay and the Kinsale Yacht Club is across the road opposite the quay. Kinsale is an attractive old town with a good museum. There is also a



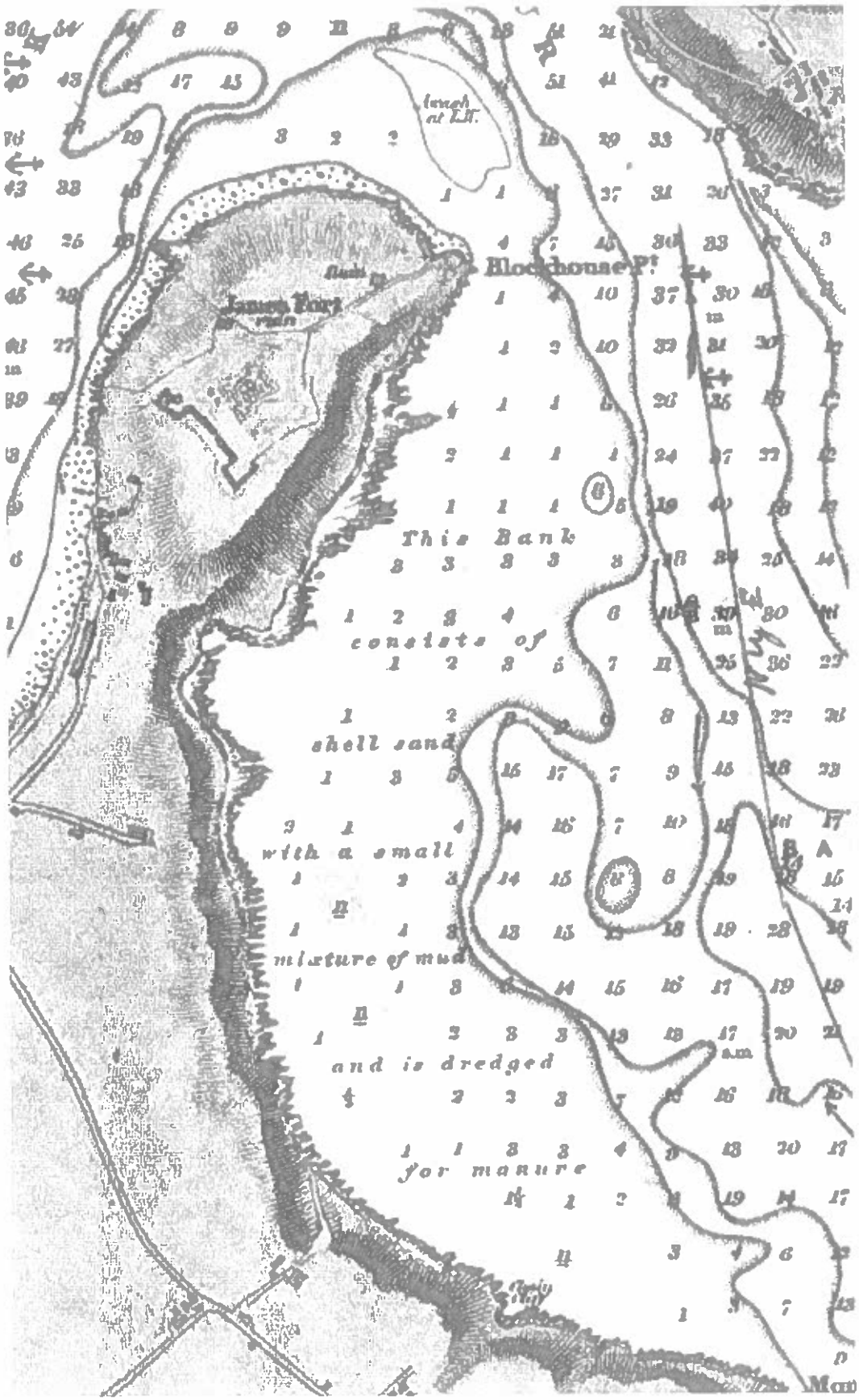
Aqua Culture Sites
Site_Status

1:10,000

Site highlighted in red denotes application

Agriculture, Fisheries and Food

Appendix 8


Blockhouse Pt
This Bank
consists of
shell sand
with a small
mixture of mud
and is dredged
for manure

Appendix 9

Kinsale Notice Board.

Jack O Sullivan June

One of the features of Morecambe Bay, on the North-west coast of England (where I worked as a biologist) is the irregular but frequent occurrence of large and extensive mussel spat settlements. These settlements were usually very dense with little or no embyssment to the underlying substrate and the mussels quickly built up large amounts of soft sediment and pseudo-faeces (mussel mud). Within a very short space of time these populations become unstable and vulnerable to erosion through weather and/or tide or predation from vast numbers of starfish which become attracted to the submerged mussel beds.

At the proposed site in Kinsale harbour the mussels will not become exposed at low tide, but they will nevertheless build up a layer of loose sediment which will have the effect of making the layer of mussels vulnerable to being lifted and relocated somewhere else in Kinsale Harbour by tidal currents. This is an issue which should be addressed in any appraisal of the proposed mussel farm.

Another potential problem is the introduction into Kinsale Harbour of non-native species such as Japweed (*Sargassum muticum*), Leathery Sea-squirt (*Styela clava*) and Chinese Mitten Crab. These non-native species may already be present in the harbour; and if Kinsale Harbour has been the subject of a large number of ecological surveys, that information should be available.

There are many potential problems with this proposed shellfishery which neither the applicant nor the Aquaculture Licensing Board have addressed in sufficient detail, to show that there will be no detrimental effects.

Appendix 10

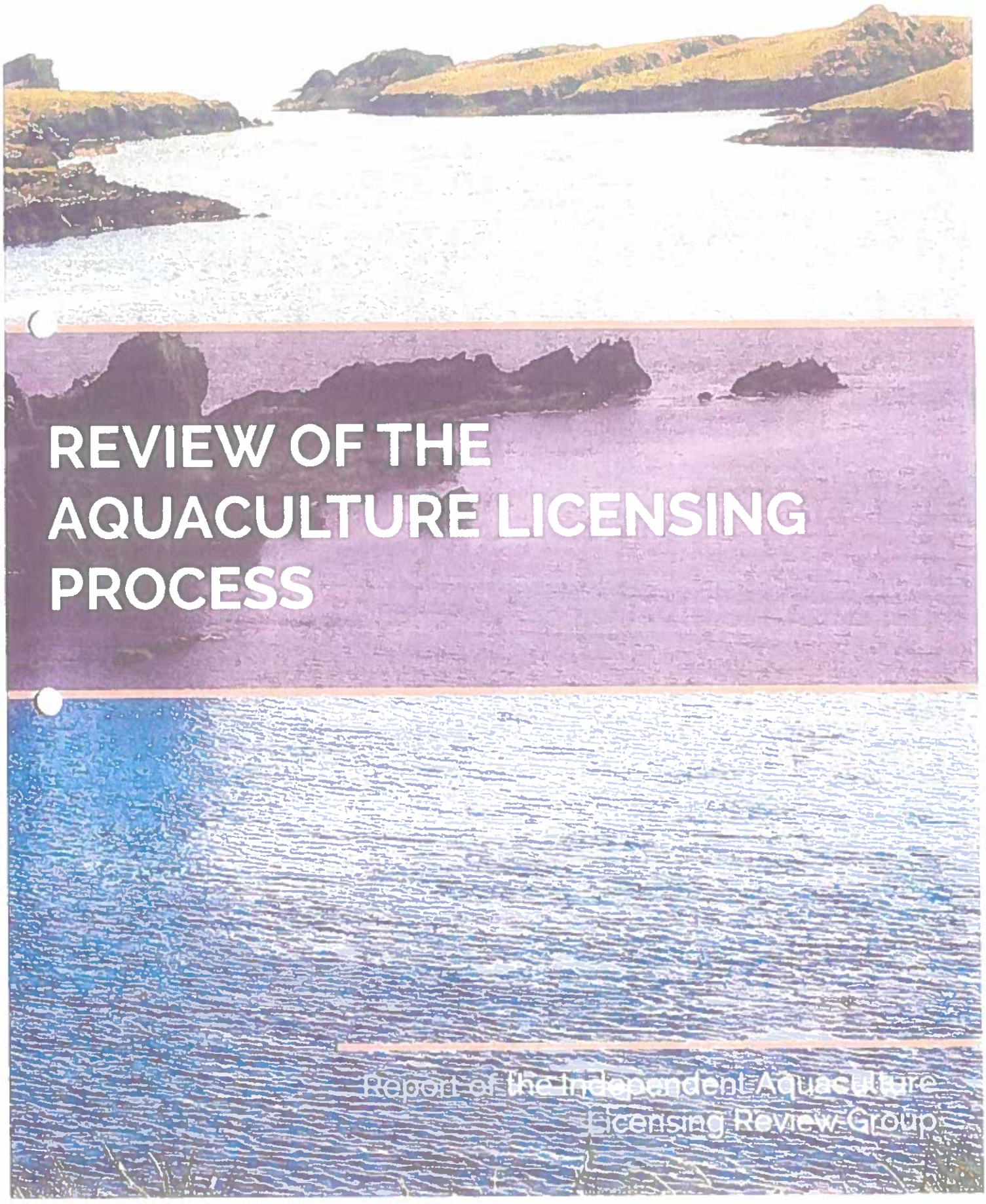
OUR MUSSEL FARMS

READ MORE >

Appendix 11


KINSALE
KINSALE HARBOUR
KINSALE
HARBOUR
LICENCED MUSSEL
FARM AREA T05-472A
LEISURE
BEACH ACTIVITES
YACHT CLUB
SAILING / TRAINING
JUNIOR SAILING AREA
SURVEYED
SEAGRASS AREA
(Zostera Marina)
EXISTING SHRIMP
POT FISHING
AREAS

Appendix 12



REVIEW OF THE AQUACULTURE LICENSING PROCESS

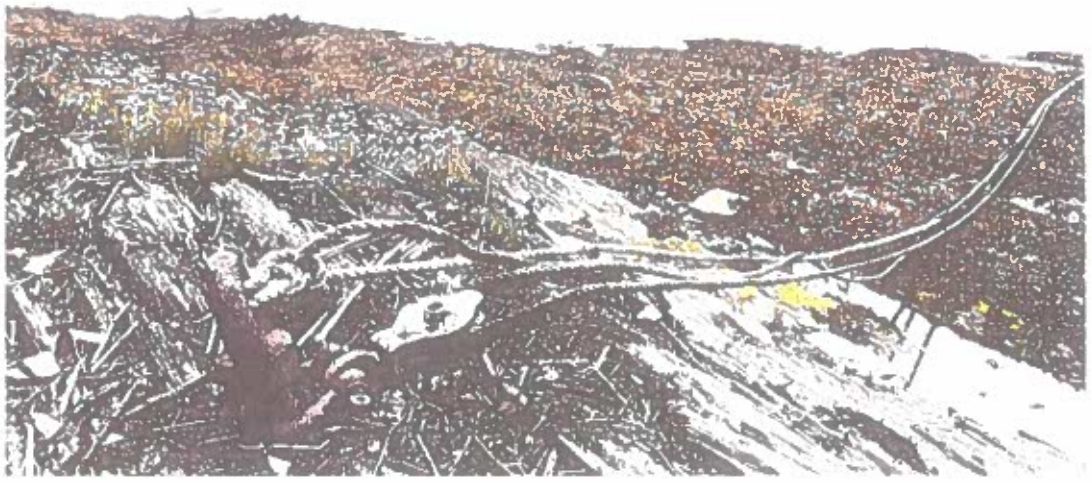
Report of the Independent Aquaculture Licensing Review Group

2.3 Government and EU policy on Aquaculture

Government policy on aquaculture has evolved over the past thirty years, with the general aim of expanding production and employment in shellfish, finfish and seaweed aquaculture. Policy has been set out in statements from the lead government department and the key development agencies related to the sector, Bord Iascaigh Mhara (BIM) and Udaras na Gaeltachta (UnaG).

Government policy for the aquaculture sector is set out in two headline documents, "Harnessing our Ocean Wealth" 2012 which has an overall marine development focus and "Food Wise 2025", the Report of the 2025 Agri Food Strategy Committee which focuses on the development of the food sector, including seafood.

Aquaculture policy has most recently been articulated in Ireland's Operational Programme for the European Maritime and Fisheries Fund 2014-2020 (EMFF) which refers to targeted growth of the aquaculture industry by 45,000 tonnes to 81,700 tonnes by 2023. This level of projected increase is based on a range of factors which have impinged on the output volume of the sector since 2000. The approach taken was to review the historic performance of each of the key species and production systems and to aim to restore each of those species to their previous peak production levels. It is intended that the future increase in production will be derived from a combination of increased and or restored productivity from the existing aquaculture licence portfolio and [illegible] limited number of new licences. The makeup of this increased output will include shellfish, finfish, novel species and seaweed in a variety of different production systems, both intensive and extensive. This overall output increase will be largely dictated by market forces and site suitability for the cultivation of particular species".



Appendix 13

Risk Assessment

Otter are reported within Kinsale Harbour. Otter are an opportunist hunter, mainly eating fish, but also eats frogs, small birds, eggs, mussels, crabs and other invertebrates. The nature of this extensive aquaculture means it is not likely to have an effect on the number or availability of prey for the otter. While the general habitat in the area is likely to support otters, the intertidal areas of extensive aquaculture are not considered ideal foraging areas for otter, which prefer shallow, rocky environments with seaweed cover for foraging. The extensive aquaculture, being in the intertidal area, and the access routes, being in well-travelled routes, are highly unlikely to interfere with the couches and holts within its territory, nor to disturb the breeding locations. The proposed subtidal aquaculture activity will unlikely interact with otter.

The main impacts associated with the proposed projects on otter are related to

- Obstruction (intertidal) - The trestles and activities associated with this form of oyster culture structures are positioned on, and rising to approximately 1m above, the intertidal seabed. They are oriented in rows with gaps between structures, thus allowing free movement through and within the sites. The structures are placed on the lower shore, in the intertidal area, which is covered by water for most of the tide. They will not interfere with the natural behaviour of the otter.
- Entanglement - Shellfish and seaweed production activities are highly unlikely to pose any risk to otter populations through entrapment or direct physical injury
- Displacement - The number of couching sites and holts or, therefore, the distribution of the otter, will not be directly affected by aquaculture activities.
- Disturbance - The proposed operations are generally carried out in daylight hours. The interaction with the otter will be minimal, given that otter foraging is primarily crepuscular. Disturbance associated with vessel traffic could potentially affect otter at these sites. However, the level of disturbance is likely to be very low given the likely encounter rates will be low dictated primarily by tidal state and in daylight hours.

Appendix 14

An Bord Pleanála

Inspector's Report ABP-315940-23

Development	Drainage Upgrade Works.
Location	Dunmore East Harbour, Dunmore East, Co. Waterford.
Planning Authority	Waterford City and County Council
Planning Authority Reg. Ref.	221007
Applicant(s)	Department of Agriculture, Food & Marine.
Type of Application	Permission.
Planning Authority Decision	Grant
Type of Appeal	Third Party
Appellant(s)	Paul Barrow.
Observer(s)	Peter Sweetman Greagoir O'Cathasaigh.
Date of Site Inspection	14th March 2024.
Inspector	Peter Nelson

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Appendix 1 – Form 1: EIA Pre-Screening

1.0 Site Location and Description

1.1. The site is located in Dunmore East, County Waterford and includes a section of the Harbour Village. The proposal is for drainage works, therefore the site is linear. The site extends from the western section of The Harbour Village and extends in front of a number of harbour-related units before turning toward the cliff wall and then out towards the sea. The units adjoining the linear site include East Pier Fish Shop/Takeaway, Irfish Ltd, Dunmore East Fisherman's Co-op, Woodstown Bay Shellfish Operations and Tawnagh Ltd.

1.2. To the south of the site is a car park, and to the north is the Dunmore East Fisheries Centre. To the east is the Dunmore East Harbour.

1.3. The drainage works are to serve the surrounding business premises on The Harbour Village Road. The stated site size is 0.1130 hectares.

2.0 Proposed Development

2.1. Permission is sought for drainage upgrade work at the Dunmore East Harbour.

2.1.1. The development will consist of the following works:

- A new foul water drain, 245m in length, will be installed along Harbour Village Road to connect foul effluent from an existing business premises. This foul effluent will then be discharged into the public network. The connection to the Irish Water pumping station will be carried out in accordance with the requirements of Irish Water.
- A section of the existing drain and outfall (106m in length) will be replaced where the current capacity is compromised due to compacted material in the system.
- Existing rock armour will be removed locally over the route of the outfall to facilitate the new pipeline. The rock armour will be removed locally over the route of the outfall to facilitate the new pipeline. The rock armour will then be replaced and grouted into place.

3.0 Planning Authority Decision

3.1. Decision

Waterford City and County Council granted permission for the proposed development on the 12th February 2023, subject to 5no. conditions.

Condition No.3 is of note:

'This planning permission is predicated upon the developer obtaining the necessary consent (and complying with all conditions) from Irish Water to connect to the water and foul drainage networks. No development shall commence until such time as the developer has obtained a connection agreement with Irish Water for the provision of water services necessary to enable the proposed development.

Reason:

To ensure an adequate standard of development and in the interest of the proper planning and sustainable development of the area.'

3.2. Planning Authority Reports

3.2.1. Planning Reports

The main points raised in the planning report dated the 27th January 2023 can be summarised as follows:

- Noted that the development will result in a slight improvement in water quality as sanitary and trade effluent discharging untreated will be treated.
- Currently, there is no segregation between foul and surface water, and foul water is being discharged directly into Waterford Harbour.
- The proposed foul drain will collect foul effluent from the existing businesses, connect it to an Irish Water pumping station, and then be directed to the public network.
- The Stage 1 AA and Water Framework Directive screening and EIAR screening document have been reviewed, and it is the opinion of the Planning

Authority that the proposed development would not be likely to have a significant effect on a Natura 2000 Site and an EIA is not required.

3.2.2. Other Technical Reports

The main points raised in the Heritage Officers report dated the 26th January 2022 can be summarised as follows:

- The proposed development will not incur direct loss or disturbance to the qualifying interest habitats of The Hook SAC or give rise to significant effects on their conservation objectives.
- The proposal will have a positive effect on local water quality, which is in the interest of the favourable conservation conditions of habitats and species that occur in the impact zone of the proposed development in the River Barrow and River Nore SAC.
- It is concluded that the proposed development will not give rise to significant effects on the conservation objectives of the Natura 2000 Network.

3.3. **Prescribed Bodies**

None.

3.4. **Third Party Observations**

Three observations were received on the planning file. The main points raised can be summarised as follows:

- The Department of Agriculture Food and the Marine is not the relevant authority to make the application.
- It appears that the application represents project splitting.
- There are serious water quality issues in the Waterford Estuary.

- Without knowledge of future volumes and type of effluent to be discharged the impacts of this development and its consequential ongoing discharge on a cumulative basis have not been adequately assessed.
- The application has not satisfied legal requirements.
- Waterford City and County Council has failed to assess the overall development and its constituent parts in compliance with the requirements of the Habitats Directive.
- The development must be assessed for compliance with the requirements of the Water Framework Directive.
- The development is within the Zone of Influence of a number of SAC's and SPA's.
- The proposed development would have significant effects on the environment.
- The application has not considered the cumulative impacts of the development on several other proposed and permitted developments, all of which impact negatively on the environment.
- The AA screening has failed to consider the impacts arising from a foreshore licence which will be required to facilitate the proposed works.

4.0 Planning History

P.A. Ref: 2051

Permission was granted on the 9th July 2020 for the retention of a pedestrian footbridge from the car park to the coastal walk, concrete path and steps and associated lighting and site work from the car park down to the harbour, and a section of fencing on the western boundary of the car park.

P.A. Ref: 18869

Permission was granted on the 21st February 2019 for the demolition of an existing industrial building and associated concrete platform and ramps.

5.0 Policy Context

5.1. Development Plan

The Waterford City and County Development Plan 2022-2028 is the operational plan for the area. The plan came into effect on the 19th July, 2022.

The site is zoned GZT Zone – Light Industry/High Technology/Manufacturing Campus Development. The objective of this zone is to *'Provide for light industry, general enterprise, business development, office, research and development and high technology/high technology manufacturing type employment in a high quality built and landscaped environment.'*

Policy

C&M 01 Protecting our Coast and Marine

All development proposals will be required to comply with standards and legal requirements of the following where they apply;

- National Seascape Character Assessment.
- NMPF National Marine Planning Framework.
- Marine Area Planning Act (2021).
- Geological Survey Ireland Coastal Vulnerability Index (CVI).

BD 05 Protection of European Sites

Projects giving rise to adverse effects on the integrity of European sites (cumulatively, directly or indirectly) arising from their size or scale, land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall not be permitted except as provided for in Article 6(4) of the Habitats Directive, viz. There must be a) no alternative solution available, b) imperative reasons of overriding public interest for the project to proceed; and c) Adequate compensatory measures in place.

Specific Development Objective

DM08: It is a policy of the Council to support the development of the harbour area for tourism/leisure and commercial uses including the provision of a boating marina whilst also facilitating the development of a new breakwater and port.

5.2. Natural Heritage Designations

River Barrow and River Nore: Special Area of Conservation (002162)- 3.5km NE of the site.

Hook Head: Special Area of Conservation (000764)- 3.8km E of the site.

Tramore Dunes and Backstrand: Special Area of Conservation (00671)- 5km NW of the site.

Bannow Bay: Special Area of Conservation (00697)-9.7km NE of the site.

Lower River Suir: Special Area of Conservation (002137)- 10.4km NW of the site.

Seas off Wexford: Special Protection Area (004237)- 2.5km SW of the site.

Tramore Back Strand: Special Protection Area (004027)- 5.1km W of the site.

Bannow Bay: Special Protection Area (004033)- 11.4km NE of the site.

Mid-Waterford Coast: Special Protection Area (004193)- 11.9km W of the site.

5.3. EIA Screening

I note that drainage improvement works are not an activity listed in Part 1 and Part 2 of Schedule 5 of the Planning and Development Regulations. Notwithstanding this, in relation to the proposed development consideration was also given to the following activities listed in Part 1 of Schedule 5:

13. Wastewater treatment plants with a capacity exceeding 150,000 population equivalent as defined in Article 2, point (6), of Directive 91/271/EEC.

and listed in Part 2 of Schedule 5:

10. Infrastructure Projects:

(b) (iv) Urban development which would involve an area greater than 2 hectares in the case of a business district, 10 hectares in the case of other parts of a built-up area and 20 hectares elsewhere.

Having regard to the nature and scale of the proposed development, which is for drainage upgrade works at the Dunmore East Harbour, there is no real likelihood of significant effects on the environment arising from the proposed development.

Therefore the need for environment impact assessment can be excluded at preliminary examination, and a screening determination is not required.

The EIA Pre-Screening and Preliminary Examination is discussed further in Section 7 Assessment of this report.

See Appendix 1 of this report for further information (EIA Form 1: Pre-Screening and Form 2: EIA Preliminary Examination).

6.0 The Appeal

6.1. Grounds of Appeal

The main points of appeal can be summarised as follows:

- The Minister and the Department of Agriculture Food & the Marine is not the competent/relevant authority to make the application.
- Irish Water and Waterford County and City Council are the statutory bodies vested with the function of erecting outfalls for the purposes of wastewater management.
- It appears that the application is part of a larger future project (project splitting)
- There are serious water quality issues in the Waterford Estuary.
- The applicant has not adequately assessed the impacts of this development and its consequential ongoing discharge on a cumulative basis together with the current pressures on the protected waterbody.
- The environmental report fails to properly assess the cumulative impacts of the other pressures in the harbour.

- The EIA & AA screening reports fail to assess the cumulative effect of the outfall alongside existing pressures and the existing pipe.
- The AA screening report acknowledges potential risk factors and relies on dilution for any contaminants entering the water body.
- The AA screening conclusions are flawed, and an AA is necessary.
- The AA screening has failed to consider the impacts arising from a required Foreshore Licence.
- Sufficient particulars and/or appropriate scaled drawings have not been submitted.
- The public notices have not been erected in compliance with the Planning and Development Regulations.
- The EIA screening report has not considered alternatives.
- The Local Authority has ruled out the requirement for an EIAR without assessing the subthreshold impacts.
- The Local Authority has failed to consider the 'at risk' nature of the waterbody properly.
- The development should have been refused as the high-status protection of the water body cannot be guaranteed.

6.2. Applicant Response

The main points raised in the applicant response dated the 23rd March 2023 can be summarised as follows:

- This technical application is intended to improve the drainage infrastructure supporting the industrial estate.
- The documentation submitted clearly describes the limited nature of the development and provides environmental and ecological assessments to indicate no potential significant effects upon the designated sites.
- Class 21 of the planning and development regulations would normally apply to this land.

- As the Minister is not an industrial undertaker but the site owner, it was decided to apply for planning permission
- The proposed development is not part of a larger or future project.
- The proposed development will result in an improvement in water quality, and therefore, there is no potential for cumulative impacts to occur.
- Any future connection agreements made to Irish Water will be subject to the required statutory consents and, therefore, do not need to be considered as part of this application.
- While the designated sites are hydrologically connected, there is no potential for impacts, and no mitigation measures are required to avoid impacts on water quality within the two European sites.
- The legal opinion sought confirms that a foreshore lease or licence is not required for development carried out by the Minister on State foreshore.
- Waterford City and County Council had no issue with the erected site notice, the planning drawings or the submitted reports.
- The development is not a type of development which would require a mandatory EIAR.
- There are no requirements as part of the EIA screening to consider alternatives to the proposed development.
- The Water Framework Directive Screening concluded that the proposed development will not negatively impact the Water Framework Directive status of the Waterford Harbour and will improve local water quality.
- The improvement in water quality will ensure compliance with the EU Shellfish Waters Directive, EU (Wastewater Discharge) Regulations 2022 and the Bathing Water Quality Regulations 2008.
- The EU Directive on Control of Major-Accident Hazards involving Dangerous Substances is not applicable.
- The appeals points raised are not accompanied by any technical or expert assessment.

6.3. **Planning Authority Response**

The main points raised in the Planning Authority Response dated the 23rd March 2023 can be summarised as follows.

- The submissions/observations were considered in the assessment of the proposed development.
- The appeal does not include any additional grounds for overturning the Council's decision to grant planning permission.
- It is the opinion of the Planning Authority that the details lodged with the application are in accordance with the requirements of the Planning and Development Regulations 2001, as amended.
- The Heritage Officer that concluded that she was satisfied that the proposal would not have significant effects on objectives under the Habitats, EIA or Waste Framework Directive.

6.4. **Observations**

Peter Sweetman

The main points raised in the observation by Peter Sweetman can be summarised as follows:

- Based on the total lack of certainty in the information submitted, it is not possible for ABP to carry out an assessment under Article 6(3) of the Habitats Directive, which would remove all reasonable scientific doubt as to the effects of the works proposed on protected sites.
- The Planning Authority makes no assessment as required under the Habitats Directive.
- It is the duty of the Planning Authority to make an assessment of the proposed Irish Water connection to the foul and water drainage networks to ensure that it will not be contrary to Environmental Protection Legalisation.

Greagoir O'Cathasaigh

The main points raised in the observation by Greagoir O'Cathasaigh can be summarised as follows

- The role of the Department of Agriculture, Food and the Marine in this application is not transparent.
- The issue of landowner consent has not been addressed.
- The EIA Screening Report is based on a 'preliminary' layout drawing and not the same layout drawing that accompanies the planning application.
- In the EIA Screening Report, the entire area of the works needs to be identified.
- No background analysis has been done on the existing site.
- The impacts of the wastewater system have not been considered in the EIA Screening Report.
- It is not possible for An Bord Pleanála to consider this application, in terms of the assessments required under EU Directives without having a copy of the stormwater overflow standards that are being relied on by Irish Water on this sewerage system.
- There is not enough information before the Board to allow it to determine the likely impacts of this development on shellfish and Natura 2000 habitats and species.
- The omission from the EIA Screening Report also serves to handicap the AA Screening.
- Given the lack of information, it is not possible for ABP to adopt the assumptions in the AA Screening Report regarding the impacts on the aquatic environment when the proposed development is in operation.

6.5. Further Responses

6.5.1. Department of Agriculture, Food and the Marine

7.4. **EIA Screening**

7.4.1. The appellant states that the Environmental Impact Assessment Screening Report submitted with the planning application is flawed as it does not consider the issue of alternatives. Criteria to determine whether projects by virtue, inter alia, of their nature, size or location should be subject to EIA are set out in Schedule 7 to the 2001 Regulations, as amended (Annex III of the 2014 Directive). The consideration of alternatives is not required at the EIA Preliminary Examination stage.

7.4.2. The appellants also commented that the EIA Screening Report failed to assess the cumulative effect of such an outfall alongside existing pressures and the existing pipe.

7.4.3. The proposed development is a minor alteration to the existing harbour development. The proposed development will upgrade the existing drainage and improve the discharges by separating foul drainage, which will be discharged to the wastewater treatment system, and surface water, which will be discharged to the estuary.

7.4.4. Currently, there is no segregation between foul and surface water discharge onsite, and therefore, there will be an improvement in the local water quality. As the proposed development improves the current situation, the issue of significant cumulative effects will not arise.

7.4.5. One of the observers raises concerns about the lack of detail in the Environmental Screening Report. Having regard to the criteria set out in Schedule 7 of the Planning and Development Regulations, I consider that the information contained in the Environmental Impact Assessment Screening Report and the details and particulars included with the planning application are sufficient for An Bord Pleanála to ascertain if there are real or significant effects on the environment, and whether an EIAR is required.

7.4.6. Section 5.3 and Appendix 1 of this report deal with the EIA Screening of the proposed development.

7.5. AA Screening

7.5.1. An Appropriate Assessment Screening Report dated November 2022 carried out by Maone O'Regan Environmental, was submitted as part of the planning application. I note that the Seas off Wexford SPA was designated after the preparation of this Screening Report.

7.5.2. In one of the observations, it is stated that given the lack of certainty in the information submitted, it is not possible for An Bord Pleanala to make a decision to grant permission. I consider that adequate details, drawings, and technical information have been submitted with the application to make a complete and definitive conclusion as to the effect of the proposed development on any European Site.

7.5.3. The appellant states that the AA screening report failed to include cumulative impacts with respect to the many pressures on the harbour. As part of the requirements Section 177U (4) of the Planning and Development Act 2000 when screening for Appropriate Assessment, I have investigated the potential effects of other plans and projects seeking consent, and any effects of completed plans or projects, any extant permission not yet started and any ongoing projects subject to regulatory review.

7.5.4. I also note that the Specific Development Objective DM08 contained in the Waterford City and County states that 'It is a policy of the Council to support the development of the harbour area for tourism/leisure and commercial uses including the provision of a boating marina whilst also facilitating the development of a new breakwater and port.' This Development Plan includes an Appropriate Assessment (Appendix 20) which concluded that the Waterford City and County Development Plan 2022-2028 will not adversely affect the integrity of the Natura 2000 Network either alone or in-combination with other plans or projects.

7.5.5. The appellant also states that the applicant has failed to consider the impacts arising from a Foreshore License in the AA. The applicant states that a legal opinion confirms that a foreshore lease or licence is not required for development carried out by the Minister on State foreshores. I note that now under section 282(1)(b) of the Planning and Development Act 2000 (as revised) a person is eligible to make a planning application on a site partly in the nearshore area of the coastal planning

Potential impact mechanisms from the project

The project will improve discharges into the sea by separating foul drainage from process and surface water. The foul water is intended to be discharged to the wastewater treatment system and process and surface water to be discharged into the estuary.

As the development is not in or immediately adjacent to a European site, it is considered there will not be any direct impacts. The nearest site, the Seas off Wexford SPA, is c.1.6km from the site.

Potential surface water pollution from construction-related activity can include the release of sediments/silt, hydrocarbonates, and other construction-related pollutants. The site is adjacent to the waters of Waterford Harbour, so there is a hydrological link. It is considered that there are three protected sites within a zone of Influence from potential surface water pollution: River Barrow and River, Nore SAC, Hook Head SAC and the Seas off Wexford SPA.

It is stated that works will be conducted at low tide, and in-water works will not be required; therefore, effects on aquatic species associated with noise can be dismissed. Given the distances to the nearest protected site, it is considered that the construction noise will not present a risk to the waterfowl qualifying interest.

Through the waters of the Waterford Harbour, the site is hydrologically connected to the River Barrow and River Nore Sac, which supports otters. Otters are predominately found in aquatic habitats along rivers and estuaries and have the ability to disperse from the water. Their territories can extend to over 15km, and therefore, there is potential for the otters to use Waterford Harbour and the coastline surrounding the site. Therefore, further consideration is required for this species to be protected under the River Barrow and River Nore SAC.

European Sites at Risk

Table 1 European Sites at risk from impacts of the proposed project

Effect mechanism	Impact Pathway/Zone of Influence	European Site(s)	Qualifying Interest features at risk
Water quality Impairment: Pollution Siltation	Hydrologically connected via Waterford Harbour	River Barrow and River Nore SAC (002162)	All water species dependent on high water: Fresh Water Pearl Mussel, Sea Lamprey, Brook Lamprey, River

			Lamprey, Twaite Shad, Atlantic Salmon, Otter
Noise Disturbance	Hydrologically connected via Waterford Harbour	River Barrow and River Nore SAC (002162)	Otter
Water Quality Impairment	Hydrologically connected via Waterford Harbour	Hook Head SAC (000764)	Reefs, Vegetated Sea Cliffs, Common Bottlenose Dolphin, Harbour Porpoise.
Water Quality Impairment	Hydrologically connected via Waterford Harbour	Seas off Wexford SPA (004237)	Sea Birds: Red-throated Diver Fulmar Manx Shearwater, Gannet, Cormorant, Shag Common Scoter, Mediterranean Gull, Black-headed Gull, Lesser Black-backed Gull, Herring Gull, Kittiwake, Sandwich Tern, Roseate Tern, Common Tern, Arctic Tern, Little Tern, Guillemot, Razorbill, Puffin.

River Barrow and River Nore SAC (002162)

This site consists of the freshwater stretches of the Barrow and Nore River catchments as far upstream as the Slieve Bloom Mountains, and it also includes the tidal elements and estuary as far downstream as Creadun Head in Waterford. Waterford Harbour is a deep valley excavated by glacial floodwaters when the sea level was lower than today. The coast shelves quite rapidly along much of the shore. The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the EU Habitats Directive: Estuaries, Tidal Mudflats and Sandflats, Reefs, Salicornia

Mud, Atlantic Salt Meadows, Mediterranean Salt Meadows, Floating River Vegetation, Dry Heath

Hydrophilous Tall Herb Communities, Petrifying Springs, Old Oak Woodlands, Alluvial Forests, Desmoulin's Whorl Snail, Freshwater Pearl Mussel, White-clawed Crayfish, Sea Lamprey, Brook Lamprey, River Lamprey, Twaite Shad, Atlantic Salmon, Otter and Killarney Fern.

Hook Head SAC (000764)

The areas of conservation interest at Hook Head comprise marine subtidal reefs to the south and east of the Hook Head Peninsula, and also sea cliffs from Hook Head to Baginbun and Ingard Point. The peninsula forms the eastern side of Waterford Harbour, while to the east it adjoins the estuary mouth of Bannow Bay. Hook Head itself is composed of Carboniferous limestone overlain by Devonian Old Red Sandstone and is palaeontologically of international importance. The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the EU Habitats Directive: Large Shallow Inlets and Bays, Reefs, Vegetated Sea Cliffs, Bottlenose Dolphin and Harbour Porpoise.

Seas off Wexford SPA (004237)

This SPA includes the marine waters off the coast of County Wexford which constitute a valuable feeding resource for the seabirds that return every spring to Wexford's coastal and island colonies to breed. Outside of the summer months these relatively shallow coastal waters provide safe feeding and roosting opportunities for a range of marine birds overwintering here or on passage. The Seas off Wexford SPA extends offshore along the majority of the county Wexford coastline and is approximately 3,054 km^2 in area. The site is a Special Protection Area (SPA) under the EU Birds Directive, of special conservation interest for the following species: Common Scoter, Red-throated Diver, Fulmar, Manx Shearwater,

Gannet, Shag, Cormorant, Kittiwake, Black-headed Gull, Mediterranean Gull, Lesser Black-backed Gull, Herring Gull, Little Tern, Roseate Tern, Common Tern, Arctic Tern, Sandwich Tern, Puffin, Razorbill and Guillemot.

It is considered that due to the distance from the subject site, the following protected sites are outside the Zone of Influence of the effects of the project and have been excluded further consideration: Tramore Dunes and Back Strand SAC, Bannow Bay SAC, Lower River Suir SAC, Tramore Back Strand SPA, Bannow Bay SPA, Mid-Waterford Coast SPA.

Likely significant effects on the European sites 'alone'

Table 2: Could the project undermine the conservation objectives 'alone'

European Site and qualifying feature	Conservation objective	Could the conservation objectives be undermined (Y/N)?	
		Water Quality Impairment	Noise Disturbance
River Barrow and River Nore SAC	https //www.npws.ie/protected sites/sac/002162		
Fresh Water Pearl Mussel,	Under Review	N	N
Sea Lamprey	Restore FCS Extent of spawning habitats: No decline	N	N
Brook Lamprey	Restore FCS Extent of spawning habitats: No decline	N	N
River Lamprey	Restore FCS Extent of spawning habitats: No decline	N	N
Twaite Shad	Restore FCS Extent of spawning habitats: No decline	N	N
Atlantic Salmon	Restore FCS Number and distribution of redds: No significant decline in number or distribution. Water quality, Q4	N	N
Otter	Restore FCS Extent of Marine habitat: No significant decline in mapped area; 2.6ha.	N	N
Hook Head SAC	https //www.npws.ie/protected-sites/sac/000764		
Reefs	Maintain FCS:	N	N

	Habitat Area: The permanent area is stable, subject to natural processes.		
Vegetated sea cliffs of the Atlantic and Baltic coasts	Maintain FCS: Habitat distribution: No decline subject to natural processes.	N	N
Common Bottlenose Dolphin	Conservation Objective: Not listed (recent addition)	N	N
Harbour Porpoise	Conservation Objective: Not listed (recent addition)	N	N
Seas off Wexford SPA	https //www npws ie/protected-sites/spa/004237		
Red-throated Diver	Restore FCS. Forage spatial distribution, extent and abundance: Sufficient number of locations, area of suitable habitat and available forage biomass to support the population target	N	N
Fulmarus	Restore FCS. Forage spatial distribution, extent and abundance: Sufficient number of locations, area of suitable habitat and available forage biomass to support the population target	N	N
Manx Shearwater	Maintain FCS Forage spatial distribution, extent and abundance: Sufficient number of locations, area of suitable habitat and available forage biomass to support the population target	N	N
Gannet	Maintain FCS Forage spatial distribution, extent and abundance: Sufficient number of locations, area of suitable habitat and	N	N

	available forage biomass to support the population target		
Cormorant	Restore FCS Forage spatial distribution, extent and abundance: Sufficient number of locations, area of suitable habitat and available forage biomass to support the population target	N	N
Shag	Restore FCS Forage spatial distribution, extent and abundance: Sufficient number of locations, area of suitable habitat and available forage biomass to support the population target	N	N
Common Scoter	Restore FCS Forage spatial distribution, extent and abundance: Sufficient number of locations, area of suitable habitat and available forage biomass to support the population target	N	N
Mediterranean Gull	Maintain FCS Forage spatial distribution, extent and abundance: Sufficient number of locations, area of suitable habitat and available forage biomass to support the population target	N	N
Black-headed Gull	Maintain FCS Forage spatial distribution, extent and abundance: Sufficient number of locations, area of suitable habitat and available forage biomass to support the population target	N	N

Potential Impairment to Water Quality.

Construction:

It is noted that the proposed construction works are small-scale in nature and confined to a small area of the harbour. The qualifying habitats for River Barrow and River Nore SAC are located c.3.5km from the site and are separated from the site by the Waterford Harbour. The Hook Head SAC qualifying habitats are c.3.8km from the subject site and are again separated by the Waterford Harbour. Given the small scale of the construction works and the scale of the waterbody that any potential pollutants or slit will be dispersed, diluted or settled out of the waterbody before reaching the qualifying habitats.

Similarly, given the small scale of the construction work, the proposed adherence to best practice guidance to prevent water pollution, the preparation of a Construction Management Plan (CEMP) and the scale of the waterbody, I considered that there is no risk of significant effect on the conservation objectives to maintain or restore the qualifying species of River Barrow and River Nore SAC.

Given the scale of the separating waterbody, the proposed construction work, the proposed adherence to best practice guidance to prevent water pollution and the preparation of a Construction Management Plan (CEMP), I considered that there is no risk of significant effect on the conservation objectives to maintain or restore the qualifying seabird species of the Seas off Wexford SPA.

Operational:

The proposed development will result in the foul drainage from East Pier being diverted from into the drain to connect to the Irish Water network. The Uisce Eireann Wastewater treatment capacity register 2023 states that there is spare capacity in the Dunmore East Wastewater Treatment Plant. As there will be an improvement in the water quality entering the sea, I considered that the proposed development will not undermine the conservation objectives of the River Barrow and River Nore SAC, Hook Head SAC and Seas off Wexford SPA.

Noise Disturbance

Construction:

I consider the limited nature of the construction, its localized nature and the proposed compliance with current construction industry guidelines that there will no significant effects on the conservation objectives of the of Hook Head SAC, River Barrow and River Nore SAC, and Seas off Wexford SPA.

Operational:

I conclude that the proposed development would likely have no significant effect 'alone' on any qualifying features of Hook Head SAC, River Barrow and River Nore SAC, and Seas off Wexford SPA. Further AA screening in combination with other plans and projects is required.

Where relevant, likely significant effects on the European site(s) 'in combination with other plans and projects.'

After investigating the potential effects of other plans and projects seeking consent, and any effects of completed plans or projects, any extant permission not yet started and any ongoing projects subject to regulatory review, I conclude that the proposed development would have no likely significant effect in combination with other plans and projects on the qualifying features of any European sites No further assessment is required for the project.

Overall Conclusion- Screening Determination

In accordance with Section 177U (4) of the Planning and Development Act 2000 (as amended) and on the basis of objective information, I conclude that the proposed development would not have a likely significant effect on any European Site either alone or in combination with other plans or projects. It is, therefore, determined that Appropriate Assessment (stage 2) [under Section 177V of the Planning and Development Act 2000] is not required.

This conclusion is based on:

- Objective information presented in the Screening Report
- The scale of the proposed development.
- Distance from European Sites,
- The limited zone of Influence of potential impacts restricted to the immediate vicinity of the proposed development.
- Standard pollution controls that would be employed regardless of proximity to a European site and effectiveness of the same.
- The proposed improvement in water quality when operational.
- Any Impacts predicted would not affect the conservation objectives.
- Any potential effects of other plans and projects seeking consent, and any effects of completed plans or projects, any extant permission not yet started and any ongoing projects subject to regulatory review.

No measures intended to avoid or reduce harmful effects on European sites were taken into account in reaching this conclusion.

Irish Water v Woodstown Bay Shellfish Ltd

Jurisdiction	Ireland
Judge	Ms. Justice Baker
Judgment Date	06 April 2017
Neutral Citation	[2017] IEHC 223
Docket Number	[2016 No. 194 CA]
Court	High Court
Date	06 April 2017

CORK CIRCUIT COUNTY OF CORK

BETWEEN

IRISH WATER
APPELLANT

AND

WOODSTOWN BAY SHELLFISH LIMITED
RESPONDENT
[2017] IEHC 223

Baker J.

[2016 No. 194 CA]

THE HIGH COURT ON CIRCUIT

Environment, Transport & Planning Fisheries & Wildlife Planning & Development – Environmental Impact Assessment ("EIA") – Notice of intention to lay drainage pipes – S. 97 of the Water Services Act 2007 (https://ie.vlex.com/vid/water-services-act-2007-808131897) – Development of drainage system – Jurisdiction of the Circuit Court – Habitats Directive (https.//eu.vlex com/vid/council-directive-92-43 843173600)

Facts The appellant had filed an appeal against the Circuit Court order for refusing to make directio to permit the appellant to carry out inspection of the mussel bed at the relevant Harbour, which was the property of the respondent. The respondent argued that the proposal to lay down the drainage

pipe by the appellant at the said seabed would disturb all of the mussel beds. The appellant served a notice of intention to the respondent asking for its consent, which was refused by the respondent. The appellant had thus, lodged an appeal to the Circuit Court, which was pending determination. The appellant argued that it was necessary to inspect the relevant site for weighing the rights of the respondent in its mussel fishery against the public interest.

Ms. Justice Baker dismissed the appeal. The Court held that since the alleged inspection involved a European site, the appellant's application would be gleaned under the Habitats Directive (https://eu.vlex.com/vid/council-directive-92-43-843173600). The Court held that the Circuit Court was correct in refusing the appellant's application as such an application had to be determined by the assessment of proportionality of the alleged inspection with the environmental imperatives under the Habitats Directive (https://eu.vlex.com/vid/council-directive-92-43-843173600). The Court observed that the appellant had not demonstrated the position of the proposed pipelines and its possible impacts on the relevant site, which would definitely cause some level of destruction and give rise to an application for compensation, the matter which was outside the jurisdiction of the Circuit Court.
JUDGMENT of Ms. Justice Baker delivered on the 6th day of April, 2017.

1 This judgment is given in an appeal from the order of Judge Riordan, judge of the Cork Circuit Court, given on 27th July, 2016 by which he refused to make directions permitting the appellant to carry out an inspection of the mussel bed at Youghal harbour in the County of Cork, the property of the respondent.

2 Youghal harbour comprises an area of approximately 491 hectares and the Devonshire Estate is the owner of the seabed. The town of Youghal has a population of 8,000 people which increases to 14,000 in the summer months. The town has for a long number of years been drained by three storm and foul water drains directly into the harbour. In or around the year 2000 Youghal Urban District Council commenced the process of the provision of a main drainage scheme for the town with a view to modernising the storm and foul drainage in the town.

3 An Environmental Impact Assessment ('EIA') was carried out by An Bord Pleanála for the purpose of the works in or around the year 2001. Because the works involved significant works of development, Youghal Town Council (formerly Youghal Urban District Council) required at a minimum a foreshore licence, a waste water licence, and other licences and permissions the granting of which involved several state agencies. By the middle of 2015 all relevant licences and authorisations had been received and the works were ready to commence.

4 Irish Water is the successor in title of Youghal Urban District Council and is the agency now responsible for the management of water services including the drainage scheme proposed for the town of Youghal.

5 Woodstown Bay Shellfish Ltd ('Woodstown') is a limited liability company which has had since 2002 a licence from the Duke of Devonshire to occupy the entire bed of the harbour. The owner of the reversion is now Lismore Realty Limited and it renewed the licence of Woodstown by formal agreement made on 7th July, 2014, for a further period of ten years.

6 The main drainage scheme proposes *inter alia* the laying of a pipe of 710 millimetres diameter along a route of approximately 365 metres to a channel in the centre of the harbour. Irish Water estimates that the pipe will occupy 0.2% of the entire area of the bay.

7 It is accepted for the purposes of the present application that the laying of the pipe will almost certainly disturb the seabed, is likely to raise silt which will 'blanket' the mussel farm, and that the result may be the loss of some or all of the mussel beds. Mitigation measures are proposed, the nature and efficacy of which are not an issue in the present application.

8 Having regard to the licence under which Woodstown is entitled to occupy the entire of the seabed of the harbour, it is accepted that it has sufficient interest in the area through which the main drainage pipe is proposed and has locus standi to oppose the scheme. For the purposes of the present application Irish Water accepts that the enterprise of Woodstown will be impacted.

The statutory provision for entry to lay and maintain pipes

9 Section 97 of the Water Services Act 2007 (https://ie.vlex.com/vid/water services-act-2007-808131897) ('the Act of 2007') makes provision for the laying of water mains, sewers, service connections and related cables and wires for the purposes of the statutory function of the water services authority. This judgment concerns the import of that section and the correctness of the order given by Judge Riordan on an interlocutory application relating to preparatory work for the laying of such mains and sewers.

10 Section 97 in its relevant part provides as follows

> *'9.-(1)-(a) Where in the opinion of a water services authority it is considered necessary for the purpose of any of its functions to*
>
> *(i) place, construct, lay or connect, as may be appropriate, water mains, sewers, service connections or any ancillary fixtures or fittings or related cables or wires on, into, through, under or over any land not forming part of a public road*
>
> *then it may, after giving 28 days notice of its intention to the owner and the occupier of that land or premises, as the case may be, indicating the position of the proposed installations referred to in subparagraph (i), and with the consent of the said owner and occupier, place, construct, lay or connect water mains, sewers, service connections or any ancillary fixtures or fittings or related cables or wires, or attach to the premises such bracket, or notice referred to in subsection (2), or other fixture as indicated in the notice given under this subsection, and may, from time to time, inspect, repair, alter, renew or remove any of them.*

11 Provision is made for a response:

> *(3) Where a person to whom a notice under subsection (1) is addressed has not, within 28 days of the giving of such notice, indicated his or her consent, that person's consent shall be deemed to have been withheld.*

12 Application is made to the Circuit Court in the case of a failure or refusal to consent:

> *(4)(a) Where a person to whom a notice under subsection (1) is addressed has withheld his or her consent, or where his or her consent is deemed to be withheld under subsection (3), then, the water services authority which issued the notice may appeal to the Circuit Court.*

13 The powers of the Circuit Court are set out in the Act:

> *(4)(b) The Circuit Court in considering an appeal under this section may, by order—*
>
> *(i) confirm the notice, with or without variation, or*
>
> *(ii) set the notice aside,*
>
> *but shall not determine any matter to which subsection (8) refers*

14 The effect of an order of the Circuit Court is:

> *(5) Where the Circuit Court confirms, with or without variation, a notice under subsection (1), consent shall be treated as having been given for the purposes of subsection (1), with effect from the date of such confirmation.*

15 I am advised by counsel that the section is entirely free of authority, and that no judgment has been given by any court of record relating to the operation of the section, or of the powers of the Circuit Court on appeal.

16 The basic scheme of the legislation requires the water services authority to give 28 days notice of its intention to lay or place water mains or sewers and any ancillary services through, on or under an identified place in the lands of a third party. The notice can be given only after the water services

authority has ascertained the position of the proposed installations, and the section requires that the formal 28 day notice to be furnished must indicate the position of such.

17 Any person to whom a notice of intention to place or lay a sewer or pipe is served may indicate his or her consent thereto, but if consent is not given within 28 days after the giving of such notice that person's consent is deemed to have been withheld: s. 97(3).

18 Irish Water served a notice on Woodstown on 20th January, 2016, and Woodstown formally replied refusing consent by letter of 26th January, 2016.

19 The statutory scheme provides for an appeal to the Circuit Court of a refusal or withholding of consent by the owner or occupier of land on, under or through which it is proposed to lay an installation.

20 An appeal was lodged dated 15th February, 2016 to the Cork Circuit, County of Cork by which Irish Water sought the confirmation of its notice without variation pursuant to s. 97(4)(b) of the Act of 2007.

21 That appeal is yet to be determined by the Circuit Court.

Procedure

22

23

cases

Search in 2 citing cases

Kemper v an Bord Pleanála (https://ie.vlex.com/vid/kemper-v-an-bord-849638192)

Ireland High Court 23 September 2020

...J to recuse himself on the ground that he had previously acted for Irish Water in the case of Irish Water v Woodstown Bay Shellfish Ltd [2017] IEHC 223. Late in the afternoon of the fourth day Allen J decided that he should not recuse himself. In an ex tempore ruling he gave an outline of h.....

North Westmeath Turbine Action Group CLG v Westland Horticulture Ltd, Cavan Peat Ltd and Coole Windfarms Ltd (https://ie.vlex.com/vid/north-westmeath-turbine-action-918060617)

Ireland High Court 21 December 2022

...on which it can make a determination has been reiterated since that decision. For example in Irish Water v Woodstown Bay Shellfish Ltd (2017) IEHC 223 Baker J said: "40. In concrete terms, this means in the present case that an order may not be made by the court permitting inspection of the.....

Appendix 15

Aquaculture/Foreshore Licence Applications - Cork

From: Department of Agriculture, Food and the Marine

Published on: 18 November 2020

Last updated on: 26 May 2025

1. Cork Harbour July 2021
2. [redacted]
3. Clonakilty Bay April 2021
4. Baltry Bay September 2020
5. Bantry Ba y Ju y 2 21
6. Roaring water Ba July 2021
7. Bantr Ba March 2022
8. Bantry Bay April 2022
9. Bantry Ba June 2022
10. Dunmanus Bay June 2022

This section contains details of New, Renewal and Review Aquaculture/Foreshore Licence Applications.

Public Consultation Periods exist for each application based on the date of the Public Notice in the relevant Newspaper. Please contact the Aquaculture & Foreshore Management Division for specific deadlines for individual applications as comments received outside the deadline cannot be accepted under the Public Consultation phase.