

Greater Dublin Drainage

Public Consultation Report on 'Alternative Sites Assessment and Routes Selection (Phase Two): Emerging Preferred Sites and Routes, May 2012'



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1 INTRODUCTION

1.1 PROJECT BACKGROUND

The Greater Dublin Drainage initiative aims to provide strategic drainage infrastructure required for the Greater Dublin Area (GDA) to continue to develop, both socially and economically.

Greater Dublin Drainage aims to provide sustainable wastewater treatment for the Dublin Region, as well as Counties Meath and Kildare from the Mid-East Region. Wastewater treatment and drainage infrastructure are essential to meet societal requirements for health and wellbeing, prevent environmental pollution, and facilitate future economic development. Wastewater, if inadequately treated, could result in significant adverse health implications for the region and adjacent affected counties.

The GDA comprises two Regional Authority areas, the Mid-East Regional Authority, which includes Meath and Kildare County Councils (the Wicklow County Council area is in this region but is not included in this project), and the Dublin Regional Authority, which includes Dublin City Council and Dún Laoghaire-Rathdown, Fingal, and South Dublin County Councils.

To guide the future provision of wastewater infrastructure in the GDA, the *Greater Dublin Strategic Drainage Study (GDSDS) Final Strategy Report* and its subsequent *Strategic Environmental Assessment (SEA)* were prepared in 2005 and 2008 respectively. These documents were prepared on behalf of the seven local authorities that form the GDA.

The Greater Dublin Drainage project is being led by Fingal County Council, on behalf of Dublin City Council, Dún Laoghaire-Rathdown County Council, and South Dublin County Council, in partnership with Kildare and Meath County Councils. While Wicklow County Council is part of the GDA and contributed to the preparation of the GDSDS and SEA, it is <u>not</u> intended that the Greater Dublin Drainage project will take and/or treat wastewater from Wicklow County Council.

The Greater Dublin Drainage initiative involves the provision of:

- A new regional wastewater treatment works;
- A marine outfall; and
- A new drainage network in the northern part of the GDA.

As the project develops there are a number of public consultation opportunities, set out in Figure 1.1. This report describes the activities and feedback associated with the third phase of public consultation on the *Alternative Sites Assessment and Route Selection (Phase Two) – Emerging Preferred Sites and Routes Report, May 2012.* For clarity and ease of reference, this public consultation is referred to as the ASA Phase 2 Consultation in the remainder of this report. This public consultation stage is marked as "H" on the Project Road Map in Figure 1.1 on the following page.

Project Road Map

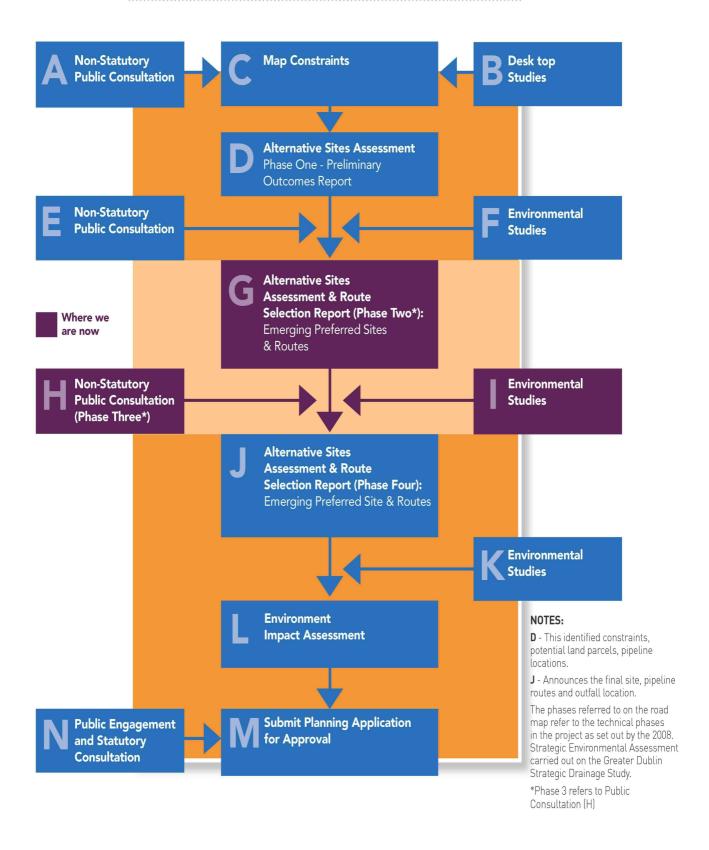


Figure 1.1: Project Road Map

1.1.1 Public Consultation 1: Constraints Consultation, May – June 2011

The first non-statutory public consultation on Greater Dublin Drainage ran from 30th May to 24thJune 2011 and focused on the constraints. Constraints are those features or designations, such as protected areas, in the landscape that might make an area unsuitable as a location for the project. The Project Team sought feedback on any constraints that should be considered as part of the initial selection process (the Alternative Site Assessment (ASA) process).

At the end of the six-week consultation period, all submissions were reviewed in their entirety by the Project Team in order to identify the key issues. The main issues that were identified by stakeholders and then considered as the Project Team moved towards the ASA Phase 1 Consultation included:

- Construction Impacts
- Consultation Process
- Ecology and Landscape Designations
- Energy Use and Requirements
- Health, Risk, and Nuisances
- Leisure, Local Amenity, and Visual Impact
- Location of the Outfall and Orbital Drain
- Planning Issues
- Site Selection Process and Selected Locations
- Sludge Management
- Social and Economic Factors
- Strategic Considerations
- Technology, Size, and Catchment of Plant

The full copy of the *Constraints Consultation Report* is available on the Greater Dublin Drainage website at http://www.greaterdublindrainage.com/project-reports/.

1.1.2 Alternative Site Assessment Phase 1: Preliminary Screening, October - November 2011

Fingal County Council ran an eight-week non-statutory public consultation, from 10th October to 2nd December 2011, on the Alternative Site Assessment (ASA) Phase 1. In October 2011, Fingal County Council published a report, entitled *Alternative Site Assessment Phase One – Preliminary Screening Outcomes Report*, and the conclusions of this report were brought out to consultation with the public. The report identified nine potential land parcels within which the proposed regional wastewater treatment plant (WwTP) could be located. It also identified pipeline corridors to and from the plant, as well as areas for a potential outfall to the Irish Sea.

This phase of public consultation was a very important part of the development of the project, as it offered a second opportunity for early engagement with members of the public and interested groups and organisations, as well as the opportunity for members of the public to share their knowledge of the area and local information with the Project Team. It helped the Project Team to further refine a number of emerging preferred sites for the WwTP.

At the end of the eight-week consultation period, all submissions were reviewed in their entirety by the Project Team in order to identify the key issues. The issues identified by stakeholders were considered by the Project Team in preparing the ASA Phase 1 Consultation. These issues included:

- Archaeology and Cultural Heritage
- Climate Change
- Community Impact
- Construction Impacts
- Ecology and Protected Habitats
- Flooding
- Geology and Soils

- Health
- Landscape and Amenity
- Livelihood
- Need for the Project
- Odour
- Overburdening
- Planning and Zoning
- Property and Land Value
- Proximity to Sensitive Receptors
- Public Consultation
- Risk Assessment
- Road Infrastructures and Traffic
- Technologies and Treatment Levels
- Water Quality

2 ASA PHASE 2 CONSULTATION (MAY – JULY 2012)

2.1 INTRODUCTION

In May, 2012, Fingal County Council published a report, entitled *Alternative Sites Assessment and Route Selection (Phase Two) – Emerging Preferred Sites and Routes Report* and commenced the third phase of public consultation. This report was the subject of a consultation with the public over an eight week period from 14^{th} May until 6^{th} July 2012. The report outlined the process under which the nine potential land parcel options¹, selected in Phase 1, were assessed. In parallel with public consultation, each of the land parcel options were independently assessed by environmental and technical specialists using desktop studies and visual inspections. This assessment process is set out in detail in the *Alternative Sites Assessment (ASA) Methodology Report*.

The Alternative Sites Assessment and Route Selection (Phase Two) – Emerging Preferred Sites and Routes Report identifies Annsbrook, Clonshaugh (Clonshaugh) and Newtowncorduff as the three emerging preferred site options².

The purpose of this consultation report is to document stakeholder feedback from the third phase of non-statutory public consultation and to ensure that the wider Project Team reviews and considers issues raised by stakeholders, as appropriate.³ This feedback along with a technical and environmental assessment will aid the decision making process in selecting a single preferred site option and will lead to the eventual planning sage.

2.2 CONSULTATION PERIOD

Fingal County Council ran an eight week consultation from the 14th May to 6th July 2012. During the eight week period, four Open Days took place in Fingal County Council's headquarters, Main Street, Swords. Here stakeholders discussed the Consultation Report on The *Alternative Sites Assessment*

¹ The term "Land Parcel Option" refers to a land parcel together with its associated pipelines and outfall location

² The term "Site Option" refers to a site of approximately 20 Ha, its associated orbital pipeline corridors from the load centres to the WwTP, pipeline corridors from the WwTP to the coast, marine pipeline corridor and marine outfall location.

³ Fingal County Council has engaged separately and directly with each of the owners of lands included within the nine potential land parcels, as identified from available land registry information. Feedback received as part of the landowner consultation process is not included in this report; although not published it has been reviewed and considered by the Technical Team. Due to the confidential nature of this information, a formal report on landowner consultations will not be published.

and Route Selection (Phase Two) – Emerging Preferred Sites and Routes Report with the Project Team, asked questions about the project, made their views known and made submissions.

This report documents feedback received during the formal non-statutory consultation period, from 14th May to 6th July 2012. In addition to the formal submission received a wide range questions were asked by stakeholders. The nature of the questions, while not formal submissions, also raised a number of issues that have been included in this report.

It is important to note that stakeholders can make submissions or provide feedback at any stage in the project. Submissions received outside these periods of formal consultation are reviewed and considered, even if they are not included in a formal consultation report.

2.3 TERMS OF REFERENCE

As part of the eight week public consultation, answers were sought to the following questions:

- 1. What are the public comments on the emerging preferred site options?
- 2. Has all the relevant criteria been considered when determining the three emerging preferred site options?
- 3. Is there anything else that should be reviewed and considered?
- 4. What should be considered as part of the selection for the final preferred site route and outfall?
- 5. What is the best way to communicate with the public as the project progresses?
- 6. Is there any other information that is relevant to the development of the project?

2.4 CONSULTATION GUIDELINES

As part of the *Alternative Sites Assessment and Route Selection (Phase 2): Emerging Preferred Sites and Routes Report* Consultation, Fingal County Council aimed to ensure that all engagement with stakeholders:

Was open and transparent;

- Demonstrated the stage of the project development;
- Ensured stakeholders were aware of the issues that were open for consultation during this phase; and
- Detailed how the stakeholder feedback will be managed and utilised.

2.5 PUBLICISING THE CONSULTATION

2.5.1 Media

Since the earliest stages of the project's development, the media has been used to help promote awareness of the project and to ensure as many interested stakeholders as possible are aware of the consultation. Media coverage included advertising, press releases, twitter and resultant media coverage in print, broadcast and online.

2.5.1.1 Advertising

As part of the process of ensuring that a wide number of people were aware of the consultation process, Fingal County Council placed advertisements in local and national newspapers. The advertisement advised interested stakeholders of the consultation, and listed opportunities for engagement. This phase of consultation and the Open Days was advertised over a two-week period in both national and local media. The table below indicates the publications and the dates of the advertisements that were booked by Fingal County Council and appeared in print. A copy of the advertisement can be found in Appendix A.

The advertisement was placed in the newspapers shown in Table 2.1.

24 th May 2012
29 th May 2012
30 th May 2012
28 th May 2012

Irish Independent	29 th May 2012

Table 2.1 List of Advertisements in Press

2.5.1.2 Press Releases

In order to raise awareness of the consultation process and to ensure members of the public were aware of the opportunities to engage, a number of press releases were issued to the national and local media. A copy of the press release can be found in Appendix B. In addition to issuing press releases, media were constantly briefed throughout the consultation and a number of interviews with the project team took place.

2.5.1.3 Resultant Media Coverage

Forty-three print articles have been published about the project as a result of the extensive public relations efforts to secure coverage during the consultation period. The details of the coverage can be found in Tables 2.2 to 2.3.

Date	Publication	Page	Title	Author
15.05.12	Fingal Independent	5	Community 'Horrified'	
15.05.12	Fingal Independent	4	Householders may have to pay new sewage charges says O'Brien	
15.05.12	Fingal Independent	4	Public Consultation	
15.05.12	Fingal Independent	1	Sewage Battle to Kick Off	John Manning
15.05.12	Fingal Independent	5	Three possible sites under consideration for new plant	
15.05.12	Irish Independent	6	Shortlisted sewage plant sites revealed	Paul Mella
15.05.12	Irish Times	7	Council shortlists three sites for giant sewage plant	Olivia Kelly
15.05.12	Fingal Independent	4	Sewage plant will be located at site deemed 'best for project'	John Manning
15.05.12	Evening Herald	12	Locals to fight giant sewage plant	
17.05.12	Malahide Gazette	7	Site shortlist for wastewater plant	Natalie Burke
17.05.12	Swords Gazette	1	Three sites up for wastewater plant	Natalie Burke
17.05.12	Swords Gazette	5	Three sites up for wastewater plant	Natalie Burke
21.05.12	North County Leader	1	Three Monster Sewage Sites Shortlisted in North County	
22.05.12	Fingal Independent	6	'A slap in the face'	
22.05.12	Fingal Independent	7	Council is' using and abusing Lusk'	
22.05.12	Fingal Independent	6	'Don't put this plant in Clonshaugh'	
22.05.12	Fingal Independent	7	Group not allowed to address Council	
22.05.12	Fingal Independent	6	Opposition to huge sewage plant steps up	John Manning
22.05.12	Fingal Independent	6	Some areas seen as 'soft touch', says Farrell	
29.05.12	Fingal Independent	4	First consultation day scheduled for the end of May	
29.05.12	Fingal Independent	5	Group vow to keep plant out of Lusk	
29.05.12	Fingal Independent	4	Meeting expected to draw a big crowd	
29.05.12	Fingal Independent	4	`'Preferred' site rejected for landfill eight years ago	
29.05.12	Fingal Independent	4	SOS group ready to up the ante	
31.05.12	Swords Gazette	1	Lusk waste plans 'a slap in the face'	Natalie Burke
31.05.12	Swords Gazette	6	'The council seem to think they can use and abuse Lusk'	Natalie Burke

Table 2.2 Media Coverage, May 2012

Date	Publication	Page	Title	Author
05.06.12	Fingal Independent	3	More Open Days. Scheduled	
05.06.12	North County Leader	1	Furious Lusk Residents Slam Sewage Proposals	Peter Kenny
12.06.12	Fingal Independent	6	Brown Flag protest during Ministers visit	John Manning
12.06.12	Fingal Independent	6	Residents fear sewage plant will open the door to toxic waste facility	
12.06.12	Fingal Independent	7	Sewage Outfall key to Portmarnock's success	
13.06.12	Northside People East	1	Hotel Manager warns of sewage plant implications	
19.06.12	Fingal Independent	1	Outrage on streets at sewage plant plan	John Manning
19.06.12	North County Leader	1	It is a sham!	Patrick Finnegan
19.06.12	Irish Times	8	TD rejects Clonshaugh site for sewage treatment plant	
20.06.12	Northside People West	11	Hotel manager warns of sewage plant implications	Aoibhinn Twomey
21.06.12	Swords Gazette	1	Water Plant Ire p1	Natalie Burke
21.06.12	Malahide Gazette	7	Water Plant to enhance Fingal Coast	Natalie Burke
21.06.12	Swords Gazette	3	Residents vent anger at sewage plant plan	Natalie Burke
21.06.12	Swords Gazette	7	Water plant to enhance Fingal Coast	Natalie Burke

Table 2.3 Media Coverage, June 2012

Date	Publication	Page	Title	Author
05.07.12	Swords Final	1	Call for Sewage plant views	Natalie Burke
05.07.12	Swords Gazette	5	Sewage plant objections lodged as deadline looms	Natalie Burke
05.07.12	Malahide Gazette	5	Sewage plant objections lodged as deadline looms	Natalie Burke

Table 2.4 Media Coverage, July 2012

2.5.1.4 Twitter

Fingal County Council has a popular Twitter page with over 3,000 followers and this account has been used to promote the consultation on Greater Dublin Drainage. Five "tweets" were issued by the Fingal Twitter account to promote the ASA Phase 2 Consultation. The tweets can be seen in Figure 2.1.



Figure 2.1 ASA Phase 2 Consultation Tweets

2.5.1.5 Online Media Coverage

In addition to the project website a number of other websites independent of the project team issued information or published materials about the project and the ASA Phase 2 Consultation on their websites. The websites that posted information are listed in Table 2.6.

Online
www.irishexaminer.com
www.thejournal.ie
www.build.ie
www.fiannafail.ie
www.dublinpeople.com
www.greaterdublinsewage.com
http://cianocallaghan.com
http://zipupyerfly.blogspot.com/
www.cisireland.com
www.luskwastewatch.com
http://northcountyleader.ie
http://www.fctv.ie
www.enviro-solutions.com
www.fingal-independent.ie

Table 2.5 Online Media Coverage

2.5.2 Information Service

From the outset of the project, an information service for engaging with stakeholders has been in place. The information service includes:

■ Lo-call phone line: 1890.44.55.67

• Email service: info@greaterdublindrainage.ie

Postal service: Greater Dublin Drainage Project Manager, c/o RPS Group, West Pier Business
Campus, Dún Laoghaire, Co. Dublin, Ireland

Stakeholders have utilised these method of engagement throughout the consultation process. Full details of the feedback from the engagement can be found in Section 3.

Table 2.7 details the amount of engagement that has occurred during the ASA Phase 2 Consultation.

Method	Numbers
Emails	366
Letters	288
Open Days (including written submissions handed to	547
the Project Team)	
Petition Signatures	6,633
Phone	51

Table 2.6: Engagement Figures⁴

2.5.3 Website

A dedicated project website can be found at www.greaterdublindrainage.ie. The project website is updated regularly. New information regarding the ASA Phase 2 Consultation was added to the website as part of the project launch, including the *Alternative Sites Assessment and Route Selection (Phase Two) – Emerging Preferred Sites and Routes Report*, maps, and aerial photography. The FAQ section of the website was updated periodically throughout the consultation period to reflect queries raised by stakeholders.

The website published the contact details for the project team to facilitate the engagement. This included email address, postal address and phone number. All relevant reports and documents, including press releases (Appendix B), brochures (Appendix C) and posters (Appendix D) were available to download from the website. The project team also published answers to a list of frequently asked questions (FAQs) on the website.

2.5.4 Elected Members Engagement

In order to promote the consultation widely, all GDA elected representatives (except Wicklow) were sent an email that included the text from the first press release on 14th May 2012 announcing the ASA Phase 2 Consultation. The list included:

County/City Councillors

- MEPs
- Senators
- TDs

A briefing on this stage of the GDD project was given to Fingal's Councillors at their monthly Council Meeting on 14th May 2012. A briefing was also given to Dublin City Council's North Central Area Committee on the 21st May in their Coolock office.

2.5.5 Emails to Stakeholders

Since the launch of the project in April 2011, stakeholders have been able to subscribe to project updates on the Greater Dublin Drainage mailing list. As part of this phase of consultation, all stakeholders who had subscribed to the project mailing list were sent information regarding the consultation by email on the 14th of May 2012. This email was sent to 938 recipients.

2.5.6 Project Brochure

A brochure update, Greater Dublin Drainage Update: Issue 2, May 2012, was prepared for this phase of consultation. Provided in both Irish and English, it gave a brief background of the history of the project, its current status, and how stakeholders can participate in the consultation. A map of the three emerging site options was also included. The brochure was distributed by Fingal County Council to all community groups that had engaged with the project team during public consultation and requested to receive brochures.

Brochures were distributed to relevant local authorities to be made accessible to the public in these areas. Brochures were sent to the North City Area Office, Dublin County Council, and Fingal County Council offices and libraries.

Brochures were sent, by mutual agreement, to local communities groups that had engaged with the project team in the previous public consultation.

The brochure was available to download from the Greater Dublin Drainage website and a link to the brochure was attached to the project update email. The brochure was available at the Open Days and

⁴ Submissions also include all questions received during this phase, as these also contributed to the issues raised within this report.

in the Fingal County Offices throughout the consultation period. A copy of the brochure can be found in Appendix C.

2.5.7 Meetings with Stakeholders

In addition to the meetings that took place with those who attended the four public open days, the project team when requested met with individual stakeholders and community groups/ Residents' Associations from throughout the study area from both Fingal and the North City Area. The project team will continue to be open to meetings with stakeholders throughout the process.

2.5.8 Posters

Posters promoting the consultation were issued to key locations in Fingal and the wider GDA (excluding Wicklow). All the main libraries in Fingal, including Balbriggan, Baldoyle, Blanchardstown, Garristown, Howth, Malahide, Rush, Skerries, and Swords, as well as the four mobile libraries, were issued posters for display. Also, the posters were placed in the Fingal County Council offices in Blanchardstown and Swords. The Local Authority representatives on the Steering Committee, who represent all GDA counties except Wicklow, received copies of the posters to display in their planning offices.

Posters were also sent by mutual agreement to local communities groups that had engaged with the project team in the previous public consultation.

The poster was available to download from the Greater Dublin Drainage website and a link to the poster was attached to the project update email. A copy of the poster can be found in Appendix D.

2.5.9 Open Days

Four public Open Days were held in order to provide an opportunity for interested stakeholders to engage with the Project Team to discuss any issues or concerns that they have about the project and to provide feedback on the three emerging site options, marine outfall locations, and pipeline corridors.

The details of the Open Days can be found in Table 2.8.

Date	Time	Location	
30.05.12	2:00 - 8:00	Fingal County Council Offices, Swords	
02.06.12	11:00 – 4:00	Fingal County Council Offices, Swords	
14.06.12	2:00 - 8:00	Fingal County Council Offices, Swords	
16.06.12	11:00 – 4:00	Fingal County Council Offices, Swords	
Total Attendees*: 468			

Table 2.7: Open Day Details

A series of displays, were available at each Open Day for the public to review, including maps of the 3 emerging preferred site options. Appendix E contains a copy of the displays used at Open Days. The displays were erected in advance and left in-situ for the duration of the consultation.

Booklets of the maps and reference copies of the full *Alternative Sites Assessment and Route Selection (Phase 2): Emerging Preferred Sites and Routes Report* and its Executive Summary were made available at the events. Copies of the maps can be found at http://www.greaterdublindrainage.com/project-reports/maps.

The Project Team, which included staff from Fingal County Council, RPS Group, Jacobs / Tobin Engineers, met with attendees and facilitated discussions using a facilitation sheet (Appendix F). The facilitation sheet asked attendees to consider the questions that were raised in the consultation terms of reference (Section 2.3).

^{*}Total Attendees refers to the number of people that signed in

3 FEEDBACK

3.1 INTRODUCTION TO FEEDBACK

Each and every submission received by the Greater Dublin Drainage Team has been compiled and reviewed in its entirety by the Project Team⁵. To compile this report, the Project Team reviewed each submission and identified the key issues raised in relation to the project. This section of the report will review the feedback received.

Some of the issues raised are quoted directly from submissions. Others are an amalgamation of issues raised by a number of submissions. Everything included in the following sections is taken directly from stakeholder feedback. All issues are reported alphabetically and no bias is implied by the order in which they are presented.

Site specific comments have been collated under separate headings, as appropriate. As issues relating to the Annsbrook and Newtowncorduff sites were often discussed together, issues relating to these two sites will be covered under "Northern Emerging Preferred Site Options".

Some submissions covered more than one issue and for that reason may appear in more than one of the following sections.

This report, together with the submissions, will be reviewed by the full Project Team. Responses to issues raised in this consultation will be assessed and addressed (appropriately) in the *Alternative Sites Assessment and Routes Selection Report (Phases 3 and 4): Preferred Site and Routes Report* scheduled for publication in 2013.

3.2 FEEDBACK ON ISSUES

3.2.1 Agriculture and Horticulture

Agriculture and horticulture were issues raised in the majority of submissions in relation to all three of the sites. However they were raised most specifically in association with the two (Annsbrook and Newtowncorduff).

⁵ As this is a non-statutory consultation all personal data of the individuals who made submissions is being held in accordance with the Data Protection Act, 2003.

3.2.1.1 General Comments

Many of the submissions received included comments like "all of the sites listed are currently in agricultural use and are providing the best of vegetables (sic.) for the Country". Stakeholders are concerned that risks associated with the WwTP, including perceived risks, will discourage the consumption of produce from the region. Stakeholders said "this scheme will have a serious and negative effect on the market gardening hub of Ireland" and asked what "research GDD has conducted "on the ground" in this regard?"

3.2.1.2 Site Specific Issues

Most of the issues raised in relation to agriculture and horticulture were referred to the two Northern Emerging Preferred Site Options.

Many of the submissions received identified the importance of agriculture and horticulture to the area both from a financial and cultural perspective, with one stakeholder that the area is "strategically important for national food production". Another submission states that the area where the are located is one of the "biggest suppliers of vegetable seeds to commercial horticultural growers throughout Ireland". Stakeholders describe the struggle the farmers have been facing during the economic recession and explain that building the proposed WwTP in the area would put added pressure on the local farming community. "We are being asked in this current climate to support local farmers etc, yet we are willing to risk their industry with a giant sewage treatment plant?"

Disbelief was expressed in a number of submissions that this area of land could be put at risk for the proposed WwTP, "how the council could consider taking some of the best land in the Country for this use is beyond comprehension". Stakeholders are concerned that the Project Team are "ignoring" the fact that the Fingal region is "the biggest horticulture provider in Ireland". They feel the Project Team are "willing to risk this industry with a giant sewage treatment plant". They state "we will not ignore the fact that we are one of the biggest horticulture providers in Ireland and we will not risk closing this industry down!"

The importance of the agricultural and horticultural industry to Fingal was reiterated numerous times with one submission stating that "Horticulture, agriculture and food production are strategic industries of north Fingal" and that the project will have a "negative impact on the market gardening hub of Ireland". Another submission stated that the fear the project will "destroy the main vegetable producing industry in Fingal which is an intrinsic part of what Fingal is best known for Ireland".

The significance of agriculture and horticulture in relation to the Fingal "brand" was also discussed. One submission stated that the project is "a clear and definite threat to the 'Fingal' brand, which if lost due to a single massive sewerage treatment plant, will be destroyed forever".

The "Flavours of Fingal" concept was also referenced in one submission which stated "the concept of 'Flavours of Fingal' is 100% correct, however it is incompatible with the proposal to locate a regional sewage treatment plant in Lusk".

The "Flavours of Fingal" concept was also raised in relation to honey production in the area. One submission commented on the "growing market for honey" and the number of producers in Corduff that are the "largest producers of honey in the Fingal area". Their fear was that the location of a WwTP would impact on the quality of the honey, as the flavour is specific to the area and the large supply of clover. If this was to be adversely impacted it could impact on their production. Stakeholders had concerns about the "perception of [our] customers of the safety of the honey" as they felt their reputation as a "safe and natural product" could be damaged if the plant was to be located in this area.

Some submissions referenced the perceived reputational impact of the WwTP on the horticultural and agricultural industry within Fingal because "of the unhygienic associations with such a scheme". This was reiterated in another submission which stated that "this plant will seriously affect, for the worse, the high quality and reputation of Fingal's agricultural and horticultural produce. It will put some producers out of business". This feeling was summed up in one submission which stated that "once there's a link between sewage and food, you will ruin business for many farmers".

Stakeholders are concerned that "one leakage or spill will close down horticulture in Fingal". They explain that even if the WwTP operated without fault, it could still have a negative influence on the reputation of their produce. "Any risk to the produce whether perceived or actual would jeopardize those engaged in the sector".

The impact of this negative perception was also raised in the context of the supermarkets where growers sell their produce. One submission made reference to "supermarket specifications, combined with food hygiene requirements, will force farmers out of business". Another submission stated that "even perceived risk from this plant of contamination, smell, dust... and the supermarket will not take...produce". The supplying of supermarkets was also commented on in this submission, with the stakeholder stating that "supplying supermarkets is a year round business" and that if supply to them "is interrupted in any way by the construction" it will result in the loss of these markets. In addition to this, the work involved to "get the soils fertility and nutrition up to optimum levels, with

water access and roadways etc..." was also brought up in this submission, reiterating the work that goes into securing the sale of produce and the impact they felt the project could have on this.

A comment was made in one submission that "many suppliers and food manufacturers have already boycotted the use of human bio fertilisers. Installing such a plant in this highly sensitive agricultural hub will further damage this industry".

This reputational risk was also raised in the context of organic farming, with one stakeholder stating "there are also a few small organic farmers in the area. These farmers have worked hard to gain organic status over a number of years. How will this affect their status? Does proximity to such a site negate their organic status?"

One submission raised the concern that the project would deplete the amount of agricultural land that would be available in the area because of the "amount of prime horticultural/ agricultural land which will be directly needed". This was reiterated in another submission which stated that the project if it goes ahead in this area will be "destroying one of the finest land banks for farming and horticulture in all of Ireland".

One stakeholder said that the risk of depleting this agricultural land will result in "more pressure on the price of rental land which in turn will make growing vegetables less competitive and less viable". Another submission reiterated this point stating that "The available land bank for horticulture will be severely depleted" and that "Even now growers are looking for suitable rental land to ensure good rotation and maintain quality standards".

The construction impact of the project was also raised, with one submission raising this specifically in the context of dust, stating "dust during construction of the plant roadways and pipelines could destroy our livelihood by making our crops unsellable".

It was commented in many submissions that people feared that the WwTP would result in the loss of jobs in the region, due to the perceived negative impact the project would have on the horticultural and agricultural industry in the area. One stakeholder stated "the proposed location of the sewage plant would irreversibly damage and indeed result in these businesses closing down increasing local unemployment".

This was further discussed in one submission, which commented that if this project went ahead in the North Fingal area it would be a "tipping point" and that it would "put at risk" the jobs of full-time and part-time workers on farms. In addition to the impact on jobs directly associated with agriculture, one submission spoke about "the knock-on effect" that the project could have if it negatively impacted on

agriculture, which they felt could end up "destroying service industries...as growers will be forced out of business".

3.2.2 Climate Change

Climate change was raised in several submissions, with one stakeholder stating that there is "no reliable way of accounting for Climate Change...An increase of 20% is taken into account to roughly predict future flow. Generally these plants are designed for a 1 in 5 year storm/rainfall, so in theory should only resort to discharging untreated effluent one in every 5 years. However there has been a 1 in 200 year precipitation event for the last four years in a row" and reference was given to the torrential floods of 2011.

Climate Change was raised as an issue in relation to the proposed WwTP's Carbon footprint, with some stakeholders stating that Northern Emerging Preferred Site Options would be require a longer pipeline and therefore would have an increased carbon footprint in comparison with the Clonshaugh (Clonshagh) option. One submission asks "what about the carbon footprint" and whether this was being considered.

3.2.3 Community Impact, Community Burden/Overburden

This section will cover several topics that were raised in relation to the perceived potential impact of the Greater Dublin Drainage project on the community.

3.2.3.1 Community Impact

3.2.3.1.1 General

Community Impact is a common thread throughout most of the submissions, in which stakeholders expressed a feeling that the plant and its associated pipeline route and outfall will have a "negative effect on local communities". It was felt that the WwTP would lead to the "quality of life of people living in close proximity to this sewerage plant be[ing] irreparably damaged."

It was strongly felt that the selection process should "consider the impact on people not just the (questionable) technical merits".

It was apparent in a majority of submissions received that people felt the imposition of one regional WwTP on a community was inequitable, with one submission stating that they "regard it as an unfair solution to a problem that should be shared by all those responsible".

There were many submissions in relation to this issue that were made in reference to the emerging preferred site options.

3.2.3.1.2 Site Specific Issues

Clonshaugh (Clonshagh) Site Option

A number of submissions relating to the emerging preferred site in Clonshaugh (Clonshagh) talked about the work by communities and the local authorities to improve the area. One submission spoke about the "regeneration" of the area, and that it "has greatly improved". Another submission stated that "Clonshaugh residents have worked hard over the years to cultivate a safe and comfortable neighbourhood and we are determined that it stays that way."

The overriding feeling contained within these submissions was one of concern regarding the siting of a WwTP in this area will be a negative impact on the community, with one submission stating that they felt the Greater Dublin Drainage project "represents significant displacement of both the local population, the local environment and amenities associated with enjoying the areas in which we live and cherish as a city."

In a large number of submissions regarding the emerging preferred Clonshaugh (Clonshagh) site, it was suggested that the previous studies undertaken by the project team had not taken into consideration the impact the project would have on the bordering Dublin City Council residents. Several submissions cited the *Alternative Site Assessment (ASA) Phase 1 – Preliminary Screening Outcomes Report*, commenting that the Community Impact section of the report defined Community impact as "the potential for the proposed project to impact on both Fingal as a whole and on individual communities within Fingal...but what about the communities in Dublin City Council Area?"

Other submissions cited the locations of community amenities that they felt would be negatively impacted by the siting of a WwTP in the emerging preferred site in Clonshaugh (Clonshagh), citing that "the proposed WwTP would be beside Craobh Ciaran Hurling Club and not far from a settled traveller community at Caragh Park and Northern Park" and it was felt in one submission that it would be "unthinkable" to locate the plant near these amenities and to have "children and young people training and playing matches in the shadow of a massive sewage plant."

Northern Emerging Preferred Site Options

General comments regarding the two Northern Emerging Preferred Site Options, include the 'character' and 'charm' of the area and how the community has grown over the previous ten years and

yet remains a farming country village with "plenty of charm to offer the locals and visitors." It is felt that this would be negatively impacted by the project if it were to proceed in either of the Northern Emerging Preferred Site Options.

The importance of the coastline to the community in terms of livelihood and amenity was also commented on by stakeholders, who were anxious about how the outfall pipe could affect the quality of the water and beaches. "Both proposed outflow pipes will seriously impact on the vibrant recreational activities on our coast". This will be investigated further in Section 3.2.12

3.2.3.2 Community Overburdening and Community Burden

3.2.3.2.1General Comments

Almost all the submissions received about the project cited the issue of community overburdening and/community burden. One submission defined Community Burden as "the cumulative imposition of a negative burden on a community with respect to a facility(s) which is not directly linked or benefitting that community."

A general point made in many submissions is that "North County Dublin is constantly prejudicially selected for such large and unwanted projects- there never seems to be any such proposed locations in South County Dublin or Wicklow!"

3.2.3.2.2 Site Specific Issues

Clonshaugh (Clonshagh) Site Option

The submissions received in relation to the emerging preferred site in Clonshaugh (Clonshaugh) raised specific issues in relation to community burden, especially in terms of the previous development within the area and the impact of the economic slow down on the area.

Submissions referred to the wastewater treatment plant at Ringsend commenting that "Dublin City residents already have had their fair share of sewerage treatment at Ringsend", and stated that they were "urging" the project team and elected representatives to "dismiss this proposal out of hand. It is not right to impose such a facility on our residents as a result of very bad planning and urban sprawl in the greater Dublin area."

Many submissions cited that the residents in the area "have experienced significant residential development in recent years and all the problems associated with this including disruption from building work". This point was developed further in one submission which stated that "It is equally unacceptable that this plant and its pipeline to sea would be constructed parallel to the N32, the main east-west axis of the City's Northern Fringe (Belmayne-Clongriffin), a newly developed area that has experienced huge problems with unfinished estates, promised developments undelivered, and planning and development disasters (including Priory Hall)."

It was felt that the location of the proposed WwTP "would cause major disruption and inconvenience" to Clonshaugh (Clonshagh), an area that is "already struggling to contend with the failures of previous 'developer-led' planning." Stakeholders are concerned that the plant will cause ongoing issues for the local community. They describe the interference the construction of the plant would have with community life.

Submissions referred to the size of the plant and suggest that it may incur more problems as a result. "Residents in these areas are not prepared to accept the potential problems with such a large plant, both in terms of its on-going operation and the disruption that would be caused to residents during construction."

The proximity to Dublin Airport was also mentioned as an issue, with one submission stating that residents in the area "already suffer from extreme air pollution due to the proximity of Dublin Airport and the flight paths. Further unjust and unfair concentration of pollution in our area is not justified".

Cited in several submissions was the discovery "in 2001 of a major illegal dump on the I.D.A owned land just north of Clonshaugh (Clonshagh) and Priorswood Estates (about 250m from the proposed sewage plant." It was mentioned in a submission that this site contained "more than 45,000 tonnes of waste matter." This created a "hazardous environment for its residents" with another submission stating that "the environment is still recovering from the effects." It was felt that this site had already resulted in difficulties for the local community, with one submission stating that they felt "since the neighbourhood has already been left exposed to a toxic environment, it is unthinkable that its residents should tolerate being victimised yet again."

In addition to the issues raised in relation to previous development in the locality, the presence of long-term social issues within the area were also raised, with one submission stating that the area has "endured significant social problems" and that "Clonshaugh (Clonshagh) residents have worked hard over the years to cultivate a safe and comfortable neighbourhood", and are now concerned this is at risk, and therefore, locating a project of this nature which has had to deal with such social issues would be an "injustice" and a "grossly unfair distribution of community burden", which "would add

significantly to the stress already experienced by residents of these areas". This issue is also linked and developed in more detail in Section 3.2.3.6 of the report.

Common to most submissions was a feeling that an assessment of the community burden for this area had not been undertaken, with one submission stating that "The principal of community burden has not been factored into the site selection process to date."

Northern Emerging Preferred Site Options

In relation to the Northern Emerging Preferred Site Options, submissions identified previous projects that have been undertaken in the locality and the cumulative impact that these have had on their community. One submission stated that "currently the community of Rush are shouldering the burden of the developments of the East-West interconnector", which they feel has resulted in "complete disruption of the town for residents and businesses, over a prolonged period of time."

In addition to the East-West Interconnector, other works were also mentioned as having caused disruption, specifically to local growers, including "the National Roads Authority for road developments, the ESB for Pylons, Bord Gais for gas pipelines and a gas station which has been accident prone and emitting foul smells over the years".

Submissions received also referred to the dump at Balleally commenting that "Lusk has serviced a regional landfill at Balleally for the last 40 years." They feel that "credit must be recognised for the community burden already suffered by Lusk communities". They describe the burden of living close to Balleally stating it has "not been pleasant with odoursome trucks travelling to and from the Balleally landfill as well as the ongoing odour issues with the landfill" that they state "will be there forever". One submission reiterated this point and commented that there had been continued negative impact from Balleally Landfill, "despite claims to the differ, the smell from the dump is pervading and highly objectionable, even since the dump has been closed down."

Submissions also made reference to the emotional strain on the community in Lusk, with regards to the proposed Nevitt Landfill project. While this project has not gone ahead, the local community was stressed during the planning process. "Residents in the Nevitt area of our community have just been through eight years of stress and uncertainty as to whether their homes would be compulsory purchased for the purposes of a superdump, or whether they would have to live close by a facility". With one submission commenting, in relation to the Nevitt Landfill project, that they felt "Fingal County Council seem to have learned nothing from their previous failed proposals which have cost a fortune but which nobody seems to take responsibility for."

Reference was also made to the Bord Gáis Interconnector, commenting that "The community of Loughshinny have endured the Gas Interconnector for years on behalf of the people of Ireland and have been repeatedly told that we would not be asked to shoulder a burden like this again."

The overriding feeling from those submissions made about the Northern Emerging Preferred Site Options, was that "Lusk has done its part" and that Fingal County Council has "for many years targeted Lusk as a suitable dumping ground for the waste and effluent of Dublin City and County." One stakeholder goes on to comment that they feel "there seems to be a mind set within Fingal County Council that the Lusk area is a suitable dumping ground for all the rubbish of Dublin City and County."

One submission cited that they felt "the current proposals in terms of 'community burden' have reached a new and impossible level" as "Two of the three proposed sites are situated in Lusk for sewerage that is being drained from as far away as Kildare and Meath."

It was commented in submissions that their opposition to the Northern Emerging Preferred Site Options "is not a case of nimbyism, but a case of overburdening one section of the community again and again." This was added to in another submission, which stated that "this should not be perceived as NIMBYism ... because Balleally and the interconnector are already in our back yard."

One submission commented that all these proposals for the Northern Emerging Preferred Site Options are "being inflicted on North Fingal by a Council which is unelected and seemingly impervious to the opinions of the people they are supposed to be representing", with another submissions echoing this stance, stating that "the people of Fingal never gave Fingal County Council the permission or the right to voluntarily take the sewerage of Dublin, Kildare and Meath, to pipe it to the green horticultural fields of Lusk and then pump it into the waters of Rush and Loughshinny."

There was a sense from the submissions that people felt this area was continually being targeted for proposed development, with one submission asking "why is it always presumed that this part of the county is less important! We are humans too!" and another asking "why should Lusk/Rush carry the can – Again!"

The issue of overburdening was also related back to the issue of the proximity of the proposed plant to the load centres and multiple smaller plants (which are dealt with in Section 3.2.15 and Section 3.2.10 respectively). One submission stated that they felt "this is about equality and allowing communities to accept responsibility and take their fair share."

The issue of the construction of the plant and the impact that it would have on the community was also raised. One submission stated that "apart from the health hazards involved in many of these facilities,

there is also the logistical imposition that is yet again to be forced on this community during the construction of such a site".

Submissions received on the Northern Emerging Preferred Site Options are concerned that the size of the plant will have a significant impact on community life. "The imposition of a treatment plant of this size proposed on any community will have a detrimental effect on the residents of Loughshinny, Skerries, Rush and Lusk for many years to come."

A number of stakeholders said that the burden on the community is unjust considering "we treat our own waste in Lusk". There is concern that if the plant is built in the North Fingal area, there would be no community gain. They would just receive the entire burden and none of the benefit. "Why should we host a giant sewage treatment plant that we DON'T need that treats waste that is NOT produced here?" They ask "Why have you not taken community burden in Lusk into account?" This will be examined more in section 3.2.15.

3.2.3.3 Livelihood

Many of the submissions related to impact on livelihood. They referenced the impact on agriculture/ horticulture and the impact on business, which are covered in more detail in Sections 3.2.1 and 3.2.21.4.

The area enclosed by the study area is known for strong agriculture, fishing and tourism industries. Many stakeholders are concerned that the presence of the proposed WwTP may reduce the value of these industries and impact on the livelihood of the local people. Stakeholders believe that the proposed plant would "damage the economic potential of the locality."

One submission spoke about the negative impact the project "will have on the decent hard-working and already hard pressed families, deriving their income for generations from farming and horticulture."

3.2.3.4 Property Devaluation

The impact of the Greater Dublin Drainage Scheme on the value of property in the area is a worrying factor for stakeholders. "Already in negative equity – what will a giant sewage treatment plant do to the value of our homes?" There was a clear concern that situating a WwTP in any of the 3 emerging preferred sites would impact on property values, with one submission stating that "It will have a detrimental impact on the appeal and value on the greater numbers of domestic homes in this area. One submission in opposition to the Northern outfall locations stated that their home was "already in

crushing negative equity" and they felt that siting a WwTP in their area would "plunge" them further into debt.

Property devaluation was also raised in the context of cumulative impacts on the community with reference made to pre-existing problems in certain areas, and that "The proximity of a sewerage site to the estate would completely write off any value these properties may have."

3.2.3.5 Recreation and Amenity

Many of the submissions received included concerns about the impact the project would have on the recreation and amenity facilities that are used by the local community, and how important these were as tourism and business commodities in their own right. Recreation and amenity is dealt with in more detail in Section 3.2.18.

The coastline area of North Fingal was described as a key recreation and amenity resource, with one submission stating that "Portmarnock/Baldoyle/Sutton and Howth together are areas of key recreational importance for the residents of the North Fringe and Fingal as a whole." A further submission stated that "both proposed outflow pipes will seriously impact on the vibrant recreational activities on our coast."

Another submission stated that the "beaches are used by swimmers, canoeists, kite surfers, walkers, people fishing for pleasure, tourists and families who want to enjoy a day on the beach. Pumping effluent-treated or untreated will destroy this for all of us."

There was a concern that came across in one submission that the impact of the plant would "take away one of the few amenities" that people in the area have, and this was a strong issue that came across in relation to the risk of any type of failure or incident with the proposed WwTP, which is dealt with in greater detail in Section 3.2.17.1.

3.2.3.6 Socio-economic Issues

Many of the submissions received made reference to the potential for the project to have a negative social-economic impact on their area. In the case of Clonshaugh (Clonshagh) this was brought up in addition to the pre-existing socio-economic issues that they felt the area has experienced in the past.

This issue was raised particularly, in regard to the emerging preferred site in Clonshaugh (Clonshagh), with one submission stating that they felt "it is outrageous" to locate the project in "a residential district of vulnerable lower income residents". Another submission went on to state that they believed

that the plant would "damage" the "already fragile socio-economic prospects of the people of the North Fringe".

This point was reiterated in another submission which stated that the area surrounding the proposed Clonshaugh (Clonshagh) site has "endured significant social problems"; and it was deemed "unfair to select Clonshaugh (Clonshagh) given its ongoing significant challenges."

This was also brought up in terms of community burden/overburdening, which has been covered in Section 3.2.3.2.

This point is expanded on further in one submission, which comments that "No socio-economic impact survey has been undertaken by Jacobs Tobin of the negative impacts on almost 25,000-30,000 people who will be living directly adjacent to or metres away from this monstrous sewage plant." Another submission states that "many studies have shown that the technical and engineering solutions, to issues such as wastewater, cannot be separated from their social impacts".

It was felt that because this has not been examined by the GDD team, it has made the community feel a "sense of desolation" as the project is "ignoring the profound needs of larger local populations and ignoring the grave failures of the past" if the Clonshaugh (Clonshaugh) site option is chosen.

In addition to this, some stakeholders felt that there would be a negative impact on the settled travellers community that is near to the Clonshaugh (Clonshagh) site, stating that it is "a total injustice to place this SEWERAGE plant beside to halting sites on the N32 and the other in Clonshaugh (Clonshagh) Road Upper", as they felt that this group was already "discriminated and marginalised enough" and that the location of a WwTP in the area would add to this.

3.2.4 Consultation

3.2.4.1 General Comments

Issues in relation to the consultation process were raised in a number of submissions, with one stating that they "mistrust the bona fide[s] of this process, which appears to more or less to go ahead despite what is best or fair for all".

It was cited in another submission that "on the face of it, the process has the appearance of full and transparent public consultation, but the end result has always been a foregone conclusion". This was also commented on in another submission that stated that "it seems futile to be willing against it" as the "scheme is going ahead anyway".

Stakeholders are dubious about the influence the public consultation process has on the overall project outcomes. They ask "You received 10,000 submissions how have you changed the original plan to reflect community objections?"

Stakeholders feel that this process incurs large costs before any decisions on site locations are ever made, asking "Why have you spent so much money on this process and still don't know where the load centre and outflow pipe will be?"

3.2.4.2 Site Specific Issues

Clonshaugh (Clonshagh) Site Option

Concern was expressed in a number of the submissions related to the Clonshaugh (Clonshaugh) area, that the previous consultation phases had not included residents from Dublin City Council, who they feel will also be impacted by the proposed WwTP if it is placed in the Clonshaugh (Clonshaugh) site.

It was commented on in several submissions that they wanted to "protest at the manner in which this matter has been dealt with from the point of view of information and consultation with the general public and with public representatives" stating that "although support is sought for it [the project] by its promoter on a Dublin-wide basis, public information and consultation has been confined to the Fingal County Council area, as a planning authority".

Northern Emerging Preferred Site Options

It was felt that an Open Day should have been held in Lusk to accommodate the communities that would be impacted by the emerging site options at Annsbrook and Newtowncorduff with submissions asking "When are you having a meeting in Lusk?"

In addition to this, stakeholders felt that discussions should take place "with local recreational entities/clubs" about the impact of the outflow pipe on the coast."

3.2.5 Cultural Heritage and Archaeology

In this phase of the consultation, cultural heritage and archaeology have been combined as they were often mentioned together in submissions.

3.2.5.1 Site Specific Issues

Clonshaugh (Clonshagh) Site Option

In reference to the Clonshaugh (Clonshagh) site option a number of issues were raised, including one submission which raised the fact that it had "Bronze Age sites and a 'very significant' amount of prehistoric and early medieval finds as recorded by the National Museum of Ireland". This was reiterated by another submission which stated there are "Important heritage sites" and "recorded protected structures".

It was commented on in another submission that there were "many historic marine sites (wrecks) located off the coast that required consideration".

One submission felt that the project "would negatively impact on the overall aesthetics of the greater area of north county Dublin" and another went on to state that the impact on the "cultural heritage and tourist appeal of the local area renders the site most unsustainable".

Northern Emerging Preferred Site Options

In terms of the Northern Emerging Preferred Site Options, one very detailed submission referenced North County Dublin, particularly the coastal region as having "a very rich and diverse archaeological heritage covering all periods of pre-history to post medieval times".

Stakeholders identified sites close to the two northern emerging site options and explained that "the historical importance of sites like Loughshinny, Annsbrook, Newtowncordufff should not be underestimated."

It was noted in submissions that "ancient relics and monuments of vital historic interest are located along the [northern] route of the proposed discharge pipe". It is important to stakeholders that these relics and monuments receive "full investigation as they are an important part of Ireland's heritage". This submission went on to highlight that "recent geophysical survey work carried out by the Discovery programme in the townlands of Pope Shall, Loughshinny and Lane within the Northern Outfall site has identified extensive, previously unknown, archaeological sites".

Reference is also made to the work of the Discovery Programme, which is something that stakeholders asserted the project would need to be cognisant of.

Another stakeholder commented that "the rich and diverse nature of the archaeology and cultural heritage sites from Loughshinny and its hinterland evidences its importance as an area of trade and

settlement from prehistoric times" and that "Any development in this area has potential to have a profound negative impact on buried archaeological remains".

3.2.6 Ecology and Environment

The impact of the proposed project on the ecology and environment of North Fingal and the adjacent areas were significant issues raised in submissions.

3.2.6.1 General Comments

The potential for the outfall pipe to damage the ecology of the coastal waters was repeated throughout submissions. Stakeholders were concerned that the "resultant pollution" from the outfall pipe "will destroy our marine eco-system" and reduce the population of shell fish and subsequent catch - "the outflow from this plant will also kill off any shell fish in our bay". This would result in a loss of jobs for the local community. The impact of the outfall pipe is discussed further in Section 3.2.12.

Most of the submissions received referenced the various designations that are present in the areas where the emerging preferred site options are located.

It was felt that it would be of extreme importance to protect these designations, with one submission stating that "it is requested that these nature reserves and natural amenities are protected and included as such within any report that is completed". Another submission stated that they "believe that the precautionary principle of the Habitats Directive be used in order to protect" these designated areas. It was commented in on submission that "the project documentation provides no assurances to local residents and communities that these areas will be appropriately protected"

It was stated in another submission, that they believe that Rogerstown Estuary and Lambay Island to be in "danger of pollution", regardless of tidal conditions. This submission goes on to state that "Skerries Island, Rockabill and Balbriggan/Skerries designated shellfish areas would be in particular danger if the tide were in flood" and that the "Malahide Estuary, Ireland's Eye and the Malahide designated shellfish waters are in particular danger if the tide was in ebb".

3.2.6.2 Site Specific Issues

Clonshaugh (Clonshagh) Site Option

In relation to the Clonshaugh (Clonshagh) site option, many of the submissions received were in relation to the Baldoyle Estuary and the various designations that applied to it - "Baldoyle Bay and environs is a European Conservation Area and Natura 2000 site, placing a sewage outfall close to this location would be an incredible breach of EU environmental policy".

This was discussed further in another submission, in which it was stated that "potential negative impacts already indentified are the impact on Natura 200 wetland Baldoyle Bay, Fingal Ecological Network sites- Moyne River, impact on terrestrial habitats of high ecological value, moderate impact on protected species based on length of field boundary. Also the potential risk to Portmarnock Strand a blue flag beach, one of the few in this country".

It was also mentioned that "the site contains four habitats listed on Annex 1 of the EU Habitats Directives: Salicornia Mud, Mediterranean Salt Meadows, Atlantic Salt Meadows and Tidal mud flats".

The "conservation areas and the Velvet Strand, Baldoyle Bay and Malahide Estuary" were also discussed in a number of submissions, with one submission commenting that "the Velvet Strand is the finest beach ecosystem in Fingal and among the ten or twelve most remarkable and beautiful beaches in the Island of Ireland".

There was a common theme, referenced within submissions, that the Velvet Strand, Baldoyle Estuary and Malahide Estuary "will suddenly come under threat for their survival and could be seriously impacted without the appropriate measures being taken" and that "the proximity to and very real risk of damage to the environment" make the "Clonshaugh (Clonshaugh) site most unsuitable".

One submission also highlighted that "piping the outfall from the plant to the sea north of Ireland's Eye would pose a serious threat to the marine environment in Portmarnock, Baldoyle and Malahide". They state that this area is of "great environmental importance which must be protected".

It was commented on that "The proposed outfall works and wastewater sewage outfall is an act of national vandalism" and another stated that they felt that "All the natural conservation designations" at Baldoyle estuary "must rule it out for consideration as a route (even underground) for a marine outfall pipe located there".

Concerns were also raised with regards to the testing that would be needed to examine whether this site option could proceed. One submission stating that "further investigations will require detailed intrusive geotechnical investigations and associated access works to confirm ground conditions and these works themselves [could] result in serious negative impact on the areas in question".

Northern Emerging Preferred Site Options

Environmental concerns were raised in relation to the Northern Emerging Preferred Site Options. One submission stated that "The area of coast line along the proposed outfall location for Loughshinny is an area of outstanding beauty and has a protected species of flora, the Green Winged Orchid, Orchis Mono or Maguirlin Feitheach". This submission went on to state that they had found "approximately 50 of these orchids growing on the coast line on the 3rd July 2012. This species of plant is protected under the 1999 Flora Protection order. This makes this location unsuitable for such an outfall" (photos were included).

Another submission made reference to the fact that "North Beach in Rush has a Fingal County Council sign stating it is a 'marine research site',

Skerries Island was also raised as a concern with one submission stating that "Skerries Island, which is adjacent to one of the proposed locations for the outfall [Northern outfall location], is a Special Protection Area, (SPA004122), because of the marine and birdlife. This plant and its outfall will have a significant negative affect on this habitat".

One submission received raised the issue regarding the impact the project could have on bees in the locality, stating that it could put the breeding programme that was taking place there "at risk" as the area "would be the main forage area" for these colonies.

3.2.7 Fishing

Many submissions commented on issues relating to fishing as an industry, amenity and tourism activity. The issue of shell-fishing was raised often in submissions. These were usually raised in the context of the impact of the treated effluent from the outfall locations proposed.

3.2.7.1 General Comments

The position of the outfall pipe with respect to the fishing industry is of concern to stakeholders. Stakeholders in the Northern site option area feel that the "outflow pipe at both the proposed locations will...destroy the fishing industry in the North County Dublin area". Stakeholders ask "what local research/surveys have been done by GDD in this regard?"

Stakeholders are very concerned about the lateral effect the outflow pipe could have on the shellfish industry. They worry that the pipe would interfere with the natural habitat and reduce the population of shellfish. This in turn would decrease the profitability of the industry and damage community

livelihood. "The outflow from this plant will also kill off any shell fish in our Bay, resulting in loss of earning, poverty and an end for our fishing community."

Another submission referenced the impact that the plant could have on the fishing stock in the locality, stating that "we know the biodiversity of an area can be completely altered by just a tiny intrusion in the existing environment, which could destroy these people's livelihood".

It was also commented on that "the waters along the coast are used as breeding ground for Cod. Cod stocks are in depletion worldwide, and this could jeopardise them even further".

The issue of shell fishing was also raised in relation to the shell fish designations which were used to help determine the possible outfall locations, and it was felt that "the consideration of the entire coast has only recently been accepted by the project team as a requirement in order to adequately assess the environmental impacts to amenities such as shell-fishing or the use of the recently designated Blue Flag Beach, Portmarnock's Velvet Strand in 2011". This issue is examined further in Section 3.2.21.7 related to issues raised in relation to the ASA Phase 2 report.

3.2.7.2 Site Specific Issues

Clonshaugh (Clonshagh) Site Option

A submission received relating to the Clonshaugh (Clonshagh) site option stated that "it has been noted by residents in several meetings how important the continued amenity of shell-fishing is preserved".

Northern Emerging Preferred Site Options

In relation to the Northern Emerging Preferred Site Options (which share the proposed northern outfall near Loughshinny), many submissions spoke of the fishermen whose livelihood is dependent on the fishing industry there. One submission stated that "there are a number of local people in Rush, Loughshinny and Skerries who earn their living by fishing the water you have selected to pump effluent into".

3.2.8 Health

Issues relating to health were raised in relation to a number of areas, including those living near the emerging preferred sites, the health implications of vermin that they feel will occur as a result of the plant, and those health risks associated with the risk of any type of plant failure.

In terms of those living near the site, many submissions felt that having a plant in their area had the potential to impact negatively on their health.

It was commented on within one submission that "I have three children and would worry about the negative impact this will have on their health and well being" another stated that they had concerns about health and felt that their family had "the right to grow up in a clean, safe and healthy environment".

The health implications were also associated with the size of the plant. Stakeholders asked "why have you not considered health risk associated with facilities of such a scale?", which was reiterated further by another stakeholder who felt that "the size, the health implications and the negative environmental impact of a monster plant is not acceptable".

One submission also referenced the proximity of the emerging preferred site in Clonshaugh (Clonshagh) to a settled travelling community. Their concern being that the location of a WwTP would result in "bacteria and odour" being emitted from the plant, resulting in an impact on this community's health, a community that they stated, have already "suffer from the highest early death rate in the country".

It was commented on in one submission that there were concerns regarding "the chemical reactions between air borne sulphides and sulphates from sewage treatment plants world-wide" and how these petrochemicals create oestrogen-mimicking water soluble substances which would "pour into the Irish Sea" and have the potential to have "serious negative implications for men's health". This submission went on to state that they were "unable to find any academic papers from universities regarding safe ways to remove these oestrogen-mimicking substances from sewage waste water".

Stakeholders also raised issues in relation to possible health impacts from vermin that could be associated with the project. One such submission raised the issue of flies and mosquitoes which they felt are a risk to public health and that the plant would result in "an explosion of the population of mosquitoes", which they went on to state could lead to "two acute inflammatory viral diseases (St. Louis Encephalitis and West Nile Encephalitis) which are transmitted via the bite of infected mosquitoes" which can "be severe for infants, the elderly and those who are immuno-compromised".

3.2.9 Hydrology and Hydrogeology

The issue of hydrology and hydrogeology was raised mainly in reference to flooding issues in proximity to the emerging preferred site options.

3.2.9.1 Site Specific Issues

Clonshaugh (Clonshagh) Site Option

Flooding in proximity to the area surrounding the Clonshaugh site was raised in a number of submissions received, with one submission stating that "there has long been historic flooding of the rivers that are south of the planned site".

It was also commented on that "the area downstream from Clonshaugh (Clonshagh) is a low lying area and very prone to flooding with run-off from the back of the Airport running into the Moyne River together with the Grange stream, all running through very low lying land of a sandy nature". This submission went on to state that "this sandy soil proved difficult and hazardous when development was attempted at a number of locations in the area close to the proposed outfall".

It was stated within another submission that "the Moyne has seriously flooded at least ten times" and added that "it would be environmental lunacy to disrupt this already distinct and delicate environment by placing a massive sewage plant at Clonshaugh (Clonshaugh) in the Western area of this territory".

The risk to the water table was also raised in one submission which stated that they feared "possible leakage of toxins into the water table" if flooding occurs.

3.2.10 Need

The need for the plant was raised via a number of submissions in a number of ways; it was related to the cost of the project, in terms of the size of the plant and whether multiple smaller plants would be a better alternative. As a result we have covered these two areas in the section below.

There were a number of submissions made that acknowledged that there is a need to deal with Dublin's future drainage needs. For example one submission stated that "it is clear that the project is required in order to ensure the effective treatment of waste water and its safe disposal and I acknowledge that all local authorities have a role to play in ensuring the implementation of this objective".

This was reiterated in another submission which stated that they "welcome the forward planning by the four Dublin local authorities in providing waste water infrastructure that will facilitate economic expansion and job creation in Dublin in the coming years". This submission went on to state that they "believe that this piece of infrastructure is essential for the well being of Dublin City, its suburbs and surrounding towns and villages".

However, it is important to note that although these examples did acknowledge the need for adequate drainage for the Dublin region, they also made submissions objecting to the proposed WwTP in their respective areas.

In relation to both the cost and the size of the plant, a number of submissions stated that the need for the project was established at a time when the socio-economic conditions were different, and therefore, "the research for this plant was carried out at a time when Ireland was in the middle of a housing boom and building 10,000 new homes a year". This submission went on to state as this is no longer the case "surely the whole basis for this project has been changed and needs to be reviewed".

3.2.10.1 Cost

Issues relating to cost were raised in a number of submissions received with many feeling that the cost of the overall project was "not viable" with one submission going as far as stating that "in 2012, we don't need these expensive vanity projects". One submission stated that they felt the project was an "enormous waste of tax payer resources", another said that the project would run the "risk of incurring significant unnecessary cost to the state at the time of limited availability of capital". This sentiment was shared in another submission that stated money needed to finance the project was an issue "in a time where the Irish economy is in strife".

Stakeholders feel that the project was conceived during the economic boom, "a time when the country was awash with finance". They state "the country can ill afford to commit to spending over 2 billion euro on a project this type and size at this point or any in the future." Some submissions asked "how and where the funding for this project will be achieved?" and suggested that the Greater Dublin Drainage project should be reviewed with regards to the diminishment in funds. "The strategy for dealing with sewage waste for the Dublin area <u>must</u> be reconsidered in the light of finance available".

The issue of how the plant was going to be paid for was also commented on by a submission that stated that they felt "to fund this monstrosity would mean a hefty loan from Europe and estimates as to how much it would cost have, conservatively, in my opinion, been suggested at a couple of billion".

It was recognised in one submission that "this project represents one of the most significant capital infrastructural projects that has been proposed for the Dublin area in the past 20 years". This posed the question as to how the project will be costed and paid for, and several submissions made links to previous projects that had been proposed and where money had been spent but the project did not come to fruition, "like the dump or Thornton Hall."

Many submissions made comments about cost in relation to the project process, stating that they found it "strange that so far in the process no costings were included, surely that should be a consideration." Another submission echoed this sentiment stating that they had "considerable concern that the economic implications of this project are only being considered at this point in the selection process."

The issue of cost benefit analysis was also discussed with one submission stating that they felt there was a "lack of Cost Benefit Analysis for each of the nine sites" which they felt was a "grave deficiency" in the Alternative Sites Assessment and Route Selection (Phase 2): Emerging Preferred Sites and Routes Report.

Other stakeholders felt that the figures of cost that they had seen relating to the project made them feel that they "are not convinced that the engineering and cost benefit rationale given for the construction of a massive plant...is valid". Another submission stated that they felt that "it [the project] will represent very poor value for money for the taxpayer".

Many of the submissions in opposition to the location of the plant in either of the Northern Emerging Preferred Site Options raised the issue of cost in relation to the length of the pipeline that would be required to take the waste to the plant and the treated effluent to the outfall. One submission stated that "the figures declared for the plant do not consider the costs of the pipeline and other infrastructure enhancements required to service the plant and dispose of the sewage and waste products."

One stakeholder felt that "it is clear that the southern route and Clonshaugh (Clonshagh) site will be significantly more cost effective to deliver in comparison with the northern route" and another stated that "It will cost more to build these plants [here] in Lusk."

Issues with regards to cost were also intertwined with issues raised referring to outflow pipe, technology and consultation and will be explored further in their relevant sections.

3.2.10.2 Multiple small plants VS large regional plant

While it may have been accepted by some that it was important to cater for Dublin's future drainage needs, it was often suggested in submissions that one large plant was not the best option, and that multiple smaller plants would be a better solution. Stakeholders ask if the project team has "considered smaller sewage plants in a number of locations?" Smaller localised plants are considered to be a more conservative decision and could be "phased in over time as required" making

"better sense from both an economic and environmental point of view". This was linked to the issue of treating waste in proximity to where it was produced (which is dealt in more detail in Section 3.2.15).

One submission that exemplifies this stated that having one large plant serving the region "is not best practice, all over Europe they advocate smaller plants, which works well for the main part". The submission went on to state that the a better approach would be to treat sewage close to the source and not take it to other areas, especially those as highly populated as Clonshaugh (Clonshagh)".

This point was made within another submission, which related it to the treatment level they felt was required, stating that "smaller treatment plants in each region, with not just primary treatment being undertaken, but also tertiary treatment to minimise the effect on the local environment would seem like an obvious solution".

One submission related the issue to safety stating that they felt "that a network of smaller plants represents a safer and more efficient option".

This issue was also discussed in terms of the environment and the economic cost, with submissions stating that "smaller localised plants, phased over time as required would make more sense from both an economic and an environmental point of view". This point was developed further in a submission which stated that "smaller local plants have the effect of improving our water quality and treating our waste in a manner that has much lesser impact on our community and environment".

Overall the feeling shared in a majority of submissions was that "a number of smaller plants specifically attached to smaller local populations rather than the monster sewage plant" would be better "on cost, engineering and social equity grounds".

3.2.10.3 Size

The size of the proposed WwTP was a concern for many stakeholders and it was suggested that smaller plants be installed as an alternative. Stakeholders feel that smaller local plants will have less of an environmental impact, cost less, incur less risk and will have a smaller community burden (see section 3.2.3.2). Many stakeholders concluded that this plant is too large for what was required. This was related to the previous studies upon which the project relies and which were carried out before the current economic downturn. The whole basis for this project has been changed and therefore "needs to be reviewed".

3.2.10.3.1 Clonshaugh (Clonshagh) Site Option

Stakeholders object to its construction on the grounds that it will have a serious negative effect on the chosen area – "a plant this size will have a detrimental effect on this area, economically and environmentally". They state that "the Department of the Environment and the Council should go back to the drawing board and develop alternative plans for more economic and more environmentally sustainable small local plants". The perception that this plant is too big is reflected in the way that many submissions have named the plant "monstrous", "monster", "massive" with one submission against the Northern site option locations stating that it is "far too big" for the area.

The issue of the restrictive size of the Clonshaugh (Clonshagh) site was raised in a submission, in which it was stated that it had "little room for any expansion and stated that it would be "short sighted to locate the plant on the smallest site...given the rate at which the population of Fingal has grown of late". Concerns have been raised by stakeholders in Clonshaugh (Clonshagh) that "large treatment plants such as that proposed for Clonshaugh (Clonshagh) do not conform to modern international best practice in developed countries" and that "the objective of building a single massive plant is seriously misguided and represents a very poor return for taxpayers' money".

A number of submissions, specifically related to the Clonshaugh (Clonshagh) site option, stated that they believe that "plans for such a large plant should be put on hold pending a thorough examination of all alternative options." They are not convinced that "the engineering and cost benefit rationale given for the construction of a massive plant (700,000 plus population) is valid."

3.2.10.3.2 Northern Emerging Preferred Site Options

Submissions received regarding the proposed Northern Emerging Preferred Site Options commented they feel that the "imposition of a treatment plant of the size proposed on any community will have a detrimental effect on the residents of Loughshinny, Skerries, Rush and Lusk for many years to come".

The issue of population figures used was also raised in relation to the need for the plant and its size, with one stakeholder commenting that "we would consider that the present unprecedented economic situation in this country poses serious questions over any model which considers only population growth and does not assess the possibility of static or declining population levels".

This stakeholder went on to state that it would be a concern if the project does "not include an assessment of potential impacts of a change in government policy of decentralisation and regional development" stating that this would mean the project is "based on a limited approach that does not address the sustainability for the Country as a whole".

3.2.11 Odour

This section sets out the issues raised by stakeholders in relation to odour and prevailing wind.

Prevailing winds are also dealt with in Section 3.2.21.5.3 in the context of the Alternative Sites Assessment and Route Selection (Phase 2): Emerging Preferred Sites and Routes Report.

There is a feeling from almost all those who made submissions, that there will be "inevitable odour problems" because "as organic material is broken down it naturally releases gases". Stakeholders also felt that the amount of sewage being treated at the proposed plant will lead to odour that "will be too much".

One submission commented on existing odour impacts, stating that "We can smell the farms when manure is put on the fields so to suggest the prevailing winds won't affect us is ludicrous".

A number of submissions received raised concerns with the potential impact of odour on their daily lives, and fear that their outdoor living space will be "ruined by the smell".

One stakeholder representative group also shared concerns over the management of odours should the plant receive planning approval, stating that "without rigorous and diligent management there is the potential for a significant odour impact from the facility".

This group went on to state that it was "how such an issue would be managed, particularly if operated by a private company under the commercial pressures of a PPP or DBO contract" that would be of concern because "once operational, it will realistically be impossible to halt operation of a plant due to odour issues and specific plans for management of odour issues need to be in place before any scheme proceeds."

3.2.11.1 Odour and Health

A number of stakeholders asked "what research has been completed by GDDC⁶" that has taken "into consideration local factors", as they felt that "the effects of odours on the various communities have never been properly considered, both in respect of quality of life and health issues".

 $^{^6}$ Some submissions made reference to GDDC and our understanding of this in the context of said submissions is that it is a reference to GDD or Fingal County Council

This was also raised in the context of the working environment of farm workers, with one stakeholder stating that "the present healthy working environment on farms" would be "destroyed by the inevitable smells and consequent health risks".

Another submission related the issue of odour to the airport, and referred to that they felt that paragraph 6.5.8 on the air quality and odour in the Alternative Sites Assessment and Route Selection (Phase 2): Emerging Preferred Sites and Routes Report, stating they felt that it was "a total copout...since it ignores the emissions issue and gives no reference se[w]age plant just a few hundred meters" away from a main airport flight path" and that this odour would impact on those using the airport.

3.2.11.2 Odour Issues at Existing WwTP

In reference to odours, reference was made by many stakeholders to the issues that have occurred at other WwTP nationally and internationally. Most cite Ringsend as an example of the odour issues they associate with such facilities, and gave their personal experiences of the odour from it. One submission said that "on many occasions you can smell Ringsend in Dublin city".

The issue was also raised that the odour from Ringsend was not just a one off issue but that it was an ongoing issue, stating that residents from the area "have testified to continued odours irrespective of the direction of the prevailing wind."

The point was made in one submission that the time of year will also impact on the potential for odour, stating that "odour, despite attempts to seal it off will be a very severe problem in fine summer weather".

3.2.11.3 Prevailing Winds

Many of the odour issues raised by stakeholders were inextricably linked to the impact of prevailing winds on the dispersion of odour, as indicated above. There were many detailed submissions that made specific points regarding the odour dispersion models that were referenced in the Alternative Sites Assessment and Route Selection (Phase 2): Emerging Preferred Sites and Routes. These points will be dealt with in Section 3.2.21.5.5.

In addition to this some stakeholders mentioned prevailing winds directly, stating that the direction of the prevailing winds is an important factor, and that it would be "disingenuous to say that the prevailing local wind is onshore and comes from the South-East, especially in warm weather",

3.2.11.4 Site Specific Odour Issues

Clonshaugh (Clonshagh) Site Option

There were a number of specific odour issues raised regarding the emerging preferred Clonshaugh (Clonshagh) site option. One submission spoke of the existing odour issues that they have, stating that "we already have two food manufacturing plants within the area, whose presence we are reminded of on a daily basis depending on which direction the wind blows".

Particular reference was made to the proximity of the site to Dublin Airport and other nearby businesses and the impact that potential odours could have on economic development. One such submission stated that prevailing winds should be taken into account when considering the proximity of the site to Dublin Airport "our main airport and the first part of Ireland than any unsuspecting tourist smells and sees while visiting our beautiful country".

Additionally, it was mentioned in many other submissions that any odour issues that emerged as a result of the plant would "endanger" businesses in the area.

Many stakeholders feel that the Alternative Sites Assessment and Route Selection (Phase 2): Emerging Preferred Sites and Routes Report understates the potential impact of odour for Clonshaugh (Clonshagh). "Your assessment company Jacobs/Tobin suggestion that our homes in Clonshaugh, Riverside, Darndale, Moatview, Priorswood, Ard na Greine, Clare Hall, Balmayne will not smell - [sic] is ludicrous." This will be examined further in section 3.2.21.5

Northern Emerging Preferred Site Options

In terms of issues related to odour and the two Northern Emerging Preferred Site Options (Annsbrook and Newtowncorduff), many submissions stated that "the smell will affect quality of life in Lusk especially Dun Emer and Chapel Farm" as "Lusk is directly downwind from it [the proposed WwTP]"

One stakeholder feared the impact of any odours from the proposed plant would mean that they "will be prisoners in our own homes" stating that they feared that it would prevent friends and family coming to visit them because the "smell is going to be so lethal" due to the fact that their estate is "less than 500m from Newtowncorduff. This is too close!"

Submissions regarding the Northern Emerging Preferred Site Options also referenced that they feared any potential odour from the proposed plant would have an impact on the working environment on farms in this area stating that it will be "destroyed by the inevitable smells."

One submission made specific reference to the impact of the prevailing winds in relation to the Northern Emerging Preferred Site Options, stating that "the prevailing winds in this area are from the West and South and some Northerly and Easterly [in] late winter and early spring". Consequently, they felt that "locating [the proposed WwTP] inland is the worst option in this scenario for Fingal and its residents".

Stakeholders identified that they already have had to deal with "odoursome trucks travelling to and from the Balleally landfill as well as the ongoing odour issues with the landfill". They feel they have put up with their "fair share" of odour. This issue of community overburden is examined further in section 3.2.3.2.

3.2.12 Outfall

Many of the submissions received (for all of the emerging preferred site options) identified issues relating to outfall and the impact that this would have on the environment, tourism recreation and amenity and the potential risk failure (these are dealt with in more detail in section 3.2.6, section 3.2.18, section and section 3.2.17 respectively)

3.2.12.1 General Comments

There were many submissions regarding the outfall - "any pipeline would need to drain into the middle of the Irish Sea where there are stronger currents to disperse the outfall". This was also commented on in another submission that related to tidal dispersion along the coast stating that "the tidal flow is North-South and South-North wave movement will drive effluent ashore all along the coast".

It is felt that the outfall from the proposed WwTP will pollute the water. Stakeholders are concerned that this will damage shellfish waters, marine ecology, beaches and fishing. These concerns are closely linked with livelihood, amenities and tourism. Stakeholders worry that the water will become a hostile environment for fish and shellfish, "the resultant pollution on our coastline will destroy our marine eco-system" and reduce the catches which will have a negative effect on this local industry. "The outflow pipe at both of the proposed locations will (sic.) destroy the fishing industry in the North Dublin area." Stakeholders ask "what research/surveys ... have been conducted on the impact on individual species as a result of the outflows?" Stakeholders are concerned that the outfall pipe could damage the coast line. "Both proposed outflow pipes will seriously impact on the vibrant recreational activities on our coast."

The impact of "synthetic chemicals and endocrine disrupting chemicals in wastewater outfalls" was also raised as an issue in terms of the impact the outfall will have on ecology. One stakeholder stated that they had concerns regarding "chemical run-offs from human medicines" into the "fragile marine environment".

This submission goes on to state that they are unsatisfied that "no effort of any kind" has been made to research or evaluate the impact of such chemicals, which could have a "disastrous impact" on bivalve molluscs. The submission mentions chemicals, such as alpha-ethinylestradiol (EE2). This submission goes on to state that this issue has been published in EU Commission reports and also by the EPA who "issued a research call for proposal to examine the damage caused to the marine environment by chemicals such as EE2".

The location of the outfall was also discussed in reference to the issue of the back wash of effluent onto beaches, and how the tide would affect this back wash, with one submission stating that "Significant analysis of tidal patters will need to be carried out to ensure that there is no risk of effluent been washed up on to our beaches and our swimming waters".

3.2.12.2 Site Specific Issues

Clonshaugh (Clonshagh) Site Option

There were a large number of submissions received that raised issues with the Southern outfall associated with the Clonshaugh (Clonshagh) site option, due to the designations under which the pipe to the outfall would have to pass in order to be discharged into the sea.

It was stated in one submission that "the proposed pipeline would drain into the Irish sea in a location to the east of Ireland's Eye. This is far too close to the sand bank in the northern Dublin Bay region".

Stakeholders opposing the Southern outfall route were also concerned that "the outlet pipe would run into the sea off the Velvet Strand in Portmarnock, on one of the finest beaches in Ireland."

The feeling "that the planned outfall into Baldoyle Bay is impossible on environmental grounds" was raised in a number of submissions.

It was commented on in one submission, that "the possible consequences for the location of the proposed outfall could be considered as an act of national vandalism", with another submission stating that "Any disruption to amenities and wildlife enjoying these internationally recognised

protections is prohibited if there are viable alternatives. In this case there are multiple viable alternatives to drilling under the Baldoyle Estuary including taking a different route altogether".

In addition to the operational impacts of the WwTP, the construction impacts were also of concern, one submission commented on the drilling that would be involved stating that "the proposed outfall north east of Ireland's Eye would entail drilling underneath the Baldoyle Estuary" and was of "grave concern from an environmental view point".

It was commented on in one submission that "the core coastal area of the North Fringe at Baldoyle/Portmarnock is a polder", and that "there were earlier proposals to locate a huge Northside sewage plant at Baldoyle which were defeated because in effect most of Baldoyle and South Portmarnock is a polder" which resulted in the major sewage transfer station that was built in Sutton, the impacts from which the Dublin City Council residents are "already contending with".

They are also concerned that the proposed southern route could impede on existing environmental restrictions. "With regards to Baldoyle Bay, for example, it is noted that Fingal County Council, on environmental grounds, has refused permission for the development of a footpath along the adjacent Coast Road – yet the development of a major pipeline th(r)ough this highly sensitive area is contemplated."

Northern Emerging Preferred Site Options

Submissions received relating to the Northern Emerging Preferred Site Options, state that the Northern outflow route is longer and therefore more expensive and ask "why are you still considering the longest outflow pipe when cheaper options are available?" and "if you were a private business spending your own money would you choose the longest or shortest pipe?"

It was felt by a large number of stakeholders that "the cost of the Northern route will be significantly more than the provision of the Southern route" and "the Northern route proposal would cost significantly more than the Southern route on the basis of the information provided to date".

The Northern outfall location was also discussed in terms of the carbon footprint it would have, which is discussed more in Section 3.2.2.

⁷ A Polder is a low-lying tract of land reclaimed from the sea or a lake and enclosed by embankments known as Dykes.

Additionally, submissions regarding the Northern Emerging Preferred Site Options were concerned that the outfall route will have a negative impact on tourism. "Our coastline is invaluable to us in terms of tourism – we will not let it be destroyed" which is discussed further in Section 3.2.18.

3.2.13 Planning and Development

A large number of submissions raised issues relating to planning and development. These covered a broad spectrum from issues relating to past, current and future developments.

3.2.13.1 General Comments

A number of submissions received stated that the region has been poorly developed in terms of planning. One submission stated that "Fingal County Council like other councils has allowed development to happen without due concern to waste, roads, fixed line transport and proper infrastructure.

Many submissions discussed specific planning issues they were concerned about in relation to their particular area, and these are examined below.

3.2.13.2 Site Specific Issues

Clonshaugh (Clonshagh) Site Option

A large number of submissions regarding the Clonshaugh (Clonshagh) site option raised issues related to planning. Many submissions examined the zoning conditions of the land in the area, with one submission stating that the site and the associated buffer zones "fails to take cognisance of land uses already determined in the development plan which would give rise to a buffering requirement".

The issue of the project in relation to the Local Area Plans was raised, with one submission stating that locating a WwTP on the site "would completely wreck the two Local Area Plans for this region which are currently being developed for this region by Dublin City Council and Fingal County Council". This sentiment was echoed in another submission which stated that "the current wastewater proposal would be a disgraceful attempt to pre-empt the purpose of those Local Area Plans". Another submission felt that the plant "runs contrary to those legitimate expectation as expressed in Dublin City Council's Clongriffin-Belmayne Local Area Plan currently in the process of public consultation".

Future planning issues were also raised, with one stating that "Belcamp (next to Clonshaugh) has been identified as a possible site for the new Children's Hospital, and the decision to locate a treatment plant in the vicinity could have a negative impact on this proposal".

Current zoning was also raised, with one submission stating that "there have been proposals for the implementation of a 'high tech hub' in the neighbouring IDA site and this plant would adversely affect that project being realised".

One submission goes on to state that the "site encroaches on, and its buffer encompasses circa 30 hectares of lands zoned 'HT'⁸, circa 1.5 hectares of lands zoned 'RA'⁹ and circa 10 hectares of land zoned 'OS'¹⁰. The proposal effectively sterilises these important land banks". It was further commented that "what distinguishes the site from the other sites is that it is "a strategic land bank" that it is "next to the population centre of Dublin, next to Dublin airport, next to the M50 and next to the M1 economic corridor".

The submission also stated that "the costs associated with the sterilisation" of this land "while difficult to quantify but no doubt considerable, cannot be ignored".

In addition to this the submission comments that in terms of the 10 hectares of land zoned 'OS' "this is the only place the development plan allows for such future facilities within the South Fingal Fringe area" and that "the proposal takes a significant chunk out of this leaving a gaping hole which would prevent the successful implementation of this vision".

This submission concludes that "land zonings are designated in the interest of the common good after much research and consultation by an inter-disciplinary body of professionals lead by planners" and that "this must be given appropriate weighting in the assessment of the Clonshaugh site, as it impinges so significantly on the zoned lands".

This was reiterated in another submission that stated that the residents in Clonshaugh (Clonshagh) are expecting "hotels and light industry" development in the area as well as the "realignment of a much needed road". They are concerned that the siting of a WwTP in Clonshaugh (Clonshagh) will discourage these developments. "Let's face it no one would want to place a factory, hotel or any other

⁹ 'RA' stands for Residential Amenity

⁸ 'HT' stands for High-Tech

^{10 &#}x27;OS' stands for Open Space

facility anywhere near this. Economically, this would have far reaching effects on our residents and the local community."

It is highlighted in submissions that the community of "the Northern Fringe area has a right to expect major improvements in their environment and living conditions, given ... the potential for enhanced development in the future". It is felt however that the "construction and operation of a sewage plant on their doorstep runs contrary to those legitimate expectations".

It was commented on again that the Clonshaugh (Clonshagh) site is "right in the middle of the planned development of a major new city region stretching from the coast along the Moyne river basin and the N32 and right across to the Airport lands" and that "a massive sewage plant would tear to shreds the appropriate and cohesive development of lands at this location".

In addition to this it was commented on that "it would be contemptible to jeopardise these longstanding plans to further develop employment initiatives in this area by locating a massive regional sewage plant at the location" and that it was "unacceptable that this plant and its pipeline to the sea would be constructed parallel to the N32, the main E-W axis of the city's Northern Fringe".

Objections to the Clonshaugh (Clonshagh) site also refer to its distance to the Clonshaugh (Clonshagh) Industrial Estate. It is felt that positioning a WwTP in this site would "adversely affect(ing) the potential further expansion of this estate as a 'high tech hub with associated employment, for example". It is stated that the proposed WwTP would create a "dead zone" and would have "negative implications for the economic development of the area".

The potential impact of the plant on commercial areas during construction was raised particularly in relation to "Dublin Airport, the M1 motorway and the two major hotels in the area". Stakeholders in Clonshaugh (Clonshagh) clearly indicated that there is a strong concern that the proposed WwTP will "totally undermine future development plans for the North Fringe area".

Reference was made to "the phase 2 report p.64¹¹" as "the authors note that Clonshaugh site is one of the weaker of the sites in terms of the determination of local character as the site is located in a zone of transition".

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¹¹ This is a reference to the Alternative Sites Assessment and Route Selection (Phase 2): Emerging Preferred Sites and Routes Report

Several submissions also made reference to the issue of the proposed pipeline running from the site at Clonshaugh (Clonshaugh) to the southern outfall under the Baldoyle Estuary. The issue raised was in relation to a past planning proposal, where "Fingal County Council has previously refused permission for the construction of a footpath from Portmarnock Village to Baldoyle, yet the construction of a pipeline along this highly sensitive area is being considered".

The cumulative impact of previous planning issues within the area was also raised with one submission stating that "the Clonshaugh location would compound the North Fringe planning failure". This was reiterated in another submission which stated that "Given the range of planning challenges facing the North Fringe it would be catastrophic to locate a major new sewage and wastewater plant in the wider North Fringe region (which is where the Clonshaugh site lies)".

Northern Emerging Preferred Site Options

Those submissions regarding planning and development in relation to the Northern Emerging Preferred Site Options feared that the project would "drive away new ventures from our community along with our friends and family"

It was also commented on that a WwTP is not consistent with the local landscape in this area and would be better suited to a more industrial setting. "An industrial plant should be built in an industrial zoned area in keeping with the development plan." One submission commented that "Both the Lusk sites are zoned as agricultural and each has a long term zoning status in their areas" and that "in comparison, Clonshaugh is situated on the fringe of Dublin City. This area is in a transitional phase of development in sharp contrast with north Fingal. The transitional fringe zone of Dublin has the capacity to accommodate the proposed treatment plant".

3.2.14 Population Density

The issue of population density was raised specifically in relation to the Clonshaugh (Clonshagh) site option. Stakeholders state that the proposed site at Clonshaugh (Clonshagh) is "immediately adjacent to over 2,500 homes". It was also commented on that the site at Clonshaugh (Clonshagh) was in "close proximity to heavily populated residential communities including Darndale, Belcamp, Balgriffin, Kinesealy and Baskin Cottages" and "Priorswood...Darndale, Newtown Court and Clare Hall" and "Belmayne, [and] Clongiffin" which makes the Clonshaugh (Clonshagh) site option "entirely inappropriate".

Another stakeholder stated that it "urges Greater Dublin Drainage to locate its plant in a less densely populated area than Clonshaugh (Clonshagh), which has already been punished by business interests at the expense of the quality of life or its residents".

This issue was also raised in relation to the Ringsend treatment plant, with a submission stating that "from past experiences from the city treatment plant at Ringsend a location less densely populated would appear to be the better option".

3.2.15 Proximity to Load Centres

Most of the submissions received included comments on the perceived issue that the plant was not going to be located near the load centres from which the waste water would primarily originate. Most of the comments regarding this issue were related to the specific emerging preferred sites and the following sections examine these.

3.2.15.1 General Comments

Overall, a common thread throughout submissions was that "sewage should be treated as close as possible to the source of its production." This was felt on the grounds that "the polluter pays principle and also because the development of multiple, smaller treatment plants mitigates the environmental impact." It was felt in one submission that it is unjust to build "regional waste facilities that do not serve the community being asked to host the facilities." They ask "how can pumping live sewage across the county be the best option for treating waste? Surely treating it at source makes the most economic, environmental and community sense?". Across the submissions there was a strong feeling that "treating waste from miles away is just not fair" and that "waste should be treated nearer to the source".

One stakeholder wanted to know why "Fingal County Council offered to treat sewage from all over County Dublin, Wicklow and Kildare". "Why can't Wicklow treat their own waste? Why can't Meath treat their own waste? Why can't Kildare treat their own waste?" as they and many other submissions felt that "The proposed load centres do not relate to our community."

3.2.15.2 Site Specific Issues

Clonshaugh (Clonshagh) Site Option

Specific issues relating to proximity to load centres were made in relation to the Clonshaugh (Clonshagh) site and its location on the border with Dublin City Council, and the impact that this would have on the Dublin City Council residents whose waste would not be treated at the plant.

It is very strongly felt that placing a WwTP on the border with Dublin City Council was "just not fair". Some submissions questioned why "Fingal should be allowed to place its poo and stench on people in another council area". These submissions went on to state that it was not "ecological to move waste so far from the origin... and then so far to sea".

Many submissions also cited the Alternative Sites Assessment and Route Selection (Phase 2): Emerging Preferred Sites and Routes Report, which estimates that by 2020 65% of the waste will come from Fingal yet only 15% will come from North Dublin, stating that "surely on this ground alone" why should they have the proposed plant in their area.

There was a strong feeling in submissions regarding this site option, that placing the site on the boundary of the two local authorities is "cunning and underhanded" as they have already had "their fair share of sewerage treatment at Ringsend". Stakeholders feel that pushing the plant out to the boundaries is unfair and that "Fingal County Council needs to deal properly with your own planning in the middle of your council area not on the periphery which will affect our day to day lives".

This feeling was repeated in another submission, which stated that "This proposed plant will cater for Swords, Blanchardstown and the rest of Fingal plus parts of Meath, and therefore clearly should be located in central Fingal area and not as proposed on the Dublin City boundary"

Northern Emerging Preferred Site Options

In relation to submissions received regarding the Northern Emerging Preferred Site Options, many stakeholders commented on the issue that the waste treated at the plant would not be coming from that area, commenting that there was a "disconnect between the load centres and the proposed northern route and associated Annsbrook/ Newtowncorduff sites". Other submissions stated that "Annsbrook and Newtowncorduff are not located near any of the load centres, and therefore fall outside the site selection requirements."

One stakeholder commented that they object to the project on "the grounds that the region of North Fingal will not contribute to the 'load', as this area already deals with its own sewage, through a number of treatment plants".

Another stakeholder stated that they felt "no house, business or enterprise north of the airport falls within the primary load centre designation and therefore no benefit accrues to the communities which would suffer the burden associated" with the location of the proposed WwTP in a northern location.

Many submissions opposing the Northern Emerging Preferred Site Options stated that, in relation to the Clonshaugh (Clonshagh) site option, that "it is clear that the communities in the vicinity of the southern pipeline route will directly benefit from the construction of the southern pipeline i.e. the airport, northern fringe and Portmarnock communities".

3.2.16 Proximity to Sensitive Receptors

This issue was raised by a number of stakeholders, who felt that the proposed emerging preferred site options were too close to sensitive receptors.

3.2.16.1 Site Specific Issues

Clonshaugh (Clonshagh)

In reference to the Clonshaugh (Clonshagh) site, a number of submissions raised the figures that were given in the Alternative Sites Assessment and Route Selection (Phase 2): Emerging Preferred Sites and Routes Report to emphasise the number of sensitive receptors that were located near to the site. An example of which was given in one submission that stated that "there are 83 residential and commercial buildings within 300m-500m of the site boundary, 1445 residential and commercial buildings within 5-1 km and you still insist on the site being shortlisted".

Another spoke of the site's "proximity to the highly populated areas of Swords, Kinsealy, Belcamp and the Malahide Road" and how this "renders the site most unsuitable".

This issue was also raised in relation to figures mentioned in the Alternative Sites Assessment and Route Selection (Phase 2): Emerging Preferred Sites and Routes Report, in that some submissions stated they felt there were inconsistencies in the figures given, and some receptors that were not listed. This is covered in more detail in Section 3.2.21.5.

Northern Emerging Preferred Site Options

In terms of the proposed Northern Emerging Preferred Site Options it was mentioned in a submission that they were "adjacent to a number of child care facilities which would undoubtedly go out of business if the proposed site" goes ahead.

This issue of proximity was also raised in relation to impact on health which is covered in further detail in section 3.2.8.

3.2.17 Risk and Health & Safety

Issues regarding risk were raised often in relation to a number of key issues, including plant failure, flooding, pollution, and health issues from the plant and its associated processes and failures that have occurred at other WwTPs.

This section is sub divided into the aforementioned issues, however due to their nature there may be some overlap between them.

3.2.17.1 Risk of Failure

3.2.17.1.1 General Comments

Risk of plant failure and resultant pollution was widespread, both in terms of impact and likelihood of occurrence. Stakeholders sought assurances that the plant would be "protected and secure from contaminating the area surrounding our land in the event of a system failure" and felt that the proposed WwTP presented "serious implications if there was a sewage leak from the plant".

The probability of an inevitable failure was highlighted in a number of submissions, with one stating that "the health and safety of the population surrounding the plant will be at risk in the event that there is a flood causing a sewer overflow". Another submission went on to state that "statistically, the chances of an overflow caused by a flood, human error, system or mechanical failure are significant".

Reference was made in many submissions to the outcomes they feared would occur as a result of failure at the plant, with one submission stating that "One leak and you will destroy a massive amount of farms and jobs". Another submission spoke of the fear of the consequences of any possible failure stating "it is one thing dealing with the consequences of a systems failure in a small plant, but something on this scale will have detrimental effect for a very long time to come".

The risk of failure and its impact on the environment has also been cited as a concern in the majority of the submissions received. One submission stated that "...should there be a failure of the treatment plant the raw sewage will be discharged by gravity into the sea, further destroying the environment potentially from Dublin through Carlingford Lock in the north and beyond". This submission goes on to

ask "have FCC or this Government engaged with the Government of Northern Ireland on the potential likelihood and hazards arising from such a situation?"

Submissions enquired as to whether a risk assessment has been carried out and what studies have been undertaken to date. One submission questioned "on what basis have these risk assessments been conducted and how is the risk of significant sewage discharge deemed to be acceptable".

The impact of a potential failure on the shellfish waters was also recognised as a potential risk, one submission stated that "the impact of a failure of the WwTP on the shellfish waters and indeed the entire North Dublin coastline would be catastrophic".

Another submission spoke of the risk of pollution as a result of flooding which would result in "possible leakage of toxins into the water table".

Risk was also examined in terms of plant design, one submission stated that "the design of the plant should incorporate sufficient redundancy and fail safe measures to ensure that this [pollution as a result of flooding] does not occur". This submission also stated that "the commissioning procedures for the WwTP should also incorporate measures to ensure that there is no release of unhealthy or partially treated wastewater from the outfall".

The risk of pollution was also raised in reference to a potential plant failure, one submission talked about the "real threat of pollution resulting from an accidental or systems failure; or as an inevitable consequence of the deliberate release of sewage through the marine environment outfall pipe following heavy rain".

3.2.17.1.2 Site Specific Issues

Clonshaugh (Clonshagh) Site Option

In relation to the emerging preferred Clonshaugh (Clonshagh) site option, there were specific issues raised regarding risk.

It was commented on in several submissions that they felt "the risk to adjacent water courses is not addressed" by the technical team. Specifically, one submission cited that they had a fear that "The Cuckoo River, a tributary of the Moyne (Mayne) River and the Moyne River itself may be exposed to risk in the event of a 'catastrophic failure' of a significant control within the proposed plant".

It was also commented on within this submission that "the direct impact of any significant failure of the plant will ensure that the Cuckoo River (already under pressure from Dublin Airport) and the Moyne River will experience direct impact on the local residential areas".

In addition to the impact on local water courses in this area, submissions also spoke about the risks associated with the site being in proximity to the airport. One submission spoke of "the alarming scenario where possible methane and other dangerous gas emissions at the locality would pose a significant potential risk to airplanes landing and taking off from the Airport". It was stated in this submission that they felt this issue has not been investigated at all in Jacobs Tobin report.

Northern Emerging Preferred Site Options

Submissions received regarding the Northern Emerging Preferred Site Options were concerned that the potential risks associated with a WwTP could negatively affect the reputation of the horticulture area and impact on livelihood. "Lusk is a horticultural area and any risk to the produce whether perceived or actual would jeopardize those engaged in this sector." One submission went on to state that "The northern route represents far higher risk of failure than the southern route." The perceived impact on agriculture and horticulture is discussed further in Section 3.2.1.

Submissions relating to Loughshinny and Rush raised concerns about the risk of laying the outflow pipe close to the existing gas infrastructure commenting that "adding further complex drainage and outflow pipes work could result in very serious dangers to residents of Loughshinny and Rush.

The length of the pipeline is also of concern as stakeholders put forward that the longer outfall pipe will incur more risk. "The longer the pipe route the greater potential for points of failure. The northern route represents far higher risk of failure than the southern route."

3.2.17.2 Failures at other WwTP

Failures at other WwTPs was a common issue cited by stakeholders and used as evidence of the possibility of the failure occurring. One submission spoke about the Swords pumping station, commenting that there "was a failure over the bank holiday weekend in June, alas it cannot be fixed until the 'PARTS' are flown in from the UK, this will take approximately two whole weeks what prey will happen if this were to happen in Clonshaugh (Clonshagh) and planes over head, a plant that will be on a massive scale in comparison to Swords".

Incidents that that have occurred as a result of the operation of other WwTPs have alarmed stakeholders. "The history of management of sewage plants by County Councils in this State does not

inspire confidence." Stakeholders refer to malfunctions in WwTPs in Midleton in Co. Cork, Ringsend and Balydoyle in Co. Dublin and Newport in Co. Mayo and "many smaller plants throughout this county and the rest of the country." Stakeholders reflect that these malfunctions have "caused nuisances to their local environments and communities in recent years."

Failures at plants internationally were also cited in submissions. One submission spoke of "a comparable scheme in Edinburgh has resulted in social and environmental degradation, with persistent air and water pollution" which they stated "is NOT the result of occasional catastrophic plant failures, but of the constant release of pollutants into the sea and the atmosphere".

Another submission mentioned the North Ring WwTP in New York City, which they cite experienced a fire in July 2011 which resulted in sewage being discharged into the Hudson River. This location of this plant was cited as inequitable as the Harlem WwTP was meant for the New York Upper West Side, but due to "powerful political influence" it was placed in the less affluent Harlem area. A comparison was made between this and the prospect of siting GDD in Clonshaugh (Clonshagh) and not within the more affluent areas.

The explosion of the Struthers WwTP in Pittsburgh Pennsylvania was also cited as an example of plant failure. A failure at a plant in Halifax in Nova Scotia was also cited, where high rainfall and mechanical failure resulted in 187 million litres of raw sewage being released into Halifax Sound.

3.2.17.3 Risk and Dublin Airport

A number of submissions raised the issue that they were concerned about the proximity of the site at Clonshaguh to Dublin Airport and the risks they felt were associated with such proximity. One submission felt that "it is UNSAFE to put this treatment plant on the flight path of the planes for Dublin Airport".

Stakeholders are concerned that placing a WwTP close to an international airport could raise serious health and safety issues. "There is a serious disquiet that the proposed massive sewage plant will be located on the edge of the Inner Safety Zone of Dublin Airport, one of the busiest airports in Europe"

It was felt in one submission that there was an issue "of possible methane and other dangerous gas emissions at Clonshaugh (Clonshagh)" which they felt posed a "threat and risk to airplanes landing and taking off from Dublin Airport" and that they felt have not "been examined or investigated in the Jacobs/Tobin Report". This submission also stated that they felt the report "ignores the emission issue and gives no reference to any other major international airport with a massive sewage treatment plant just a few hundred meters down the main flight path".

3.2.18 Tourism, Recreation and Amenity

These three issues are covered together as in most submissions they were mentioned in conjunction with one another. Submissions often made the link between having an amenity that is used by both the local community and by tourists alike and the importance of that amenity for the local/national population, businesses and the economy of the region at large.

3.2.18.1 General Comments

Many submissions received (in relation to any of the three emerging preferred site options) shared the concern that "if sewage is allowed to discharge off the coast, the likelihood is that this [tourism] industry will be decimated" and that "the news of effluent in our waters will naturally deter ... people from staying here, removing this very important income to the local economy". This point was also made in relation to recreational tourism.

3.2.18.2 Site Specific Comments

Clonshaugh (Clonshagh) Site Option

A number of stakeholders identified the coastal area from Malahide to Howth as having "major recreational and tourism value". One submission stated that "Portmarnock/Baldoyle/Sutton and Howth together are areas of key recreational importance for the residents of the North Fringe and Fingal as a whole" and went on to state that the "the beaches are used by swimmers, canoeists, kite surfers, surfers, walkers, people fishing for pleasure, tourists and families who just want to enjoy a day on the beach. Pumping effluent-treated or untreated, will destroy this for all of us". It was also commented that "the proposed outfall North of Ireland's Eye is in close proximity to a number of bathing locations"

Concern was expressed concern that the WwTP would damage these amenities and that—"soon enough 'trip advisor' and the like will tell any prospective travellers 'beautiful hotel except for the stench'" and "if the plant goes ahead it will take away one of the few amenities the people of this area have".

In conjunction with these amenities being of significant importance to the community in the area, the link was also made with the recreation activities that are attracted tourists to the area. One submission stated that "a large number of water based sports and activities take place in the area including international and World Championships hosted by Howth Yacht Club" and that "the maritime

activities in Howth attract very significant numbers of tourists and visitors generating significant revenue while supporting local businesses and jobs".

Overall it was felt in a number of submissions that the Clonshaugh (Clonshagh) site would "deliver severe loss of amenity to long-standing local communities and recreational organisations".

Northern Emerging Preferred Site Options

Throughout the submissions regarding the Northern Emerging Preferred Site Options, it was evident that tourism was an important industry within the study area. In particular stakeholders in Fingal identify the coast and cultural heritage as major tourist attractions. They worry about "the negative impact on tourism in the area of Fingal which has a strong coastal amenities and cultural heritage". This profitable industry is important to community livelihood. As a result stakeholders feel that the impact of the proposed WwTP should be taken into account when assessing emerging site options "why have you not considered tourism?"

Stakeholders are concerned that the proposed WwTP and associated outflow pipe will spoil the coastline and deter tourists "Who will visit Lusk when it has a huge treatment plant? Our local coastline is invaluable to us in terms of tourism." They state "we will not let it be destroyed". They feel that their concern is something that should effect the site selection process and that currently it is not "Our coastline in Fingal is key to our tourism industry – why have you not considered this?"

Specific reference to swimming beaches near the Northern outfall was made in submissions with one submission identifying that "the North Beach in Rush is in fact a swimming beach".

A further submission stated that "the proposed location of a regional sewage treatment plant in north Fingal is totally at variance with the objectives of developing the seaside, food and historic amenities of north Fingal for tourism and amenity" and that it would impact on this areas potential to develop further.

3.2.19 Traffic and Road Infrastructure

Specific issues relating to traffic and road infrastructure were made in relation to the three emerging preferred site options. Traffic and road infrastructure were also raised in relation to the construction phase and operational phase of the proposed plant, orbital pipeline and outfall and then during operation.

3.2.19.1 General Comments

The issues raised in relation to traffic and road infrastructure often spoke of the truck movements they felt would occur as a result of the plant. One submission stated that "pollution and danger would arise from the HGVs that would be travelling on the roads in the area to the sewage plant", and another submission stated that it "objects to the certainty of vastly increased traffic and the damage that would do to our roads".

It was raised in one submission that the "management of traffic and the operational implications of the implementation of the project have not been adequately dealt with" and that the "report does not adequately address the impact of construction traffic on the areas, given the volume of heavy construction traffic on narrow roads that are predominantly rural in nature".

The movement of sludge to the plant was also raised as an issue with one submission stating that "sludge is the big issue with the sewage treatment works. A big sewage plant still produced tonnes of sludge. A massive regional sewage plant will produce 30 to 40 trucks of sludge a day - that is more than one an hour, 24 hours a day, 365 days a year". The submission further states that "these trucks will be travelling in country road infrastructure which is ill equipped to deal with this type of movement".

3.2.19.2 Site Specific Issues

Clonshaugh (Clonshagh) Site Option

In terms of the emerging preferred site in Clonshaugh (Clonshagh), comments suggest that the site poses traffic difficulties and that the "Clonshaugh road is unsuitable to take construction traffic". The risk of increased traffic was also raised as an issue with one submission commenting that "increased volume of large trucks moving within an area with significant numbers of small to teenage young people has also not been addressed and requires serious attention" and went on to state that "without adequate safety procedures this may cause incidents that may lead to fatalities".

A number of submissions referenced plans to upgrade roads within the area, commenting that "both Dublin City Council and Fingal County Council are working on a diversion of the Malahide Road (West of Clare Hall Avenue/ Malahide Road/ N32 Junction) to permit the development of the surrounding area" and that they felt that "the imposition of a sewage treatment plant just west of this division of the Malahide Road would destroy years of work by road and traffic engineers who are endeavouring to improve the movement of traffic for the densely populated area".

Reference was made in another submission to the Alternative Sites Assessment and Route Selection (Phase 2): Emerging Preferred Sites and Routes Report, stating that they see an inaccuracy on the maps, stating that "documents say the entrance would be from Stockhole Lane, when in fact it is actually Clonshaugh road". This submission goes on to state that "Stockhole Lane is simply unsuitable for the volume of traffic that would be entering and exiting the proposed facility".

Northern Emerging Preferred Site Options

A number of submissions received regarding the Northern Emerging Preferred Site Options spoke of the existing road infrastructure in the area, commenting that they did not feel it was capable of dealing with any increased traffic. One such submission stated that "most of the roads around here are small country roads, with only single lane traffic" another commenting that "the infrastructure simply cannot cope".

The risk associated with the increased road traffic was also discussed, with one submission stating that "the traffic that the construction of such a plant would bring to the already overstretched N32 would be destructive resulting in traffic back-ups on the M50 and Malahide Road".

The perception of the safety issue in relation to any increase in traffic was stated in one submission as being "completely unsafe, and will lead to many accidents, as well as gridlock".

Another submission referenced the impact on their children who go to a local school, stating that "the effect that the hundreds, if not thousands of trucks ...would result in the total destruction of daily living here". This submission went on to state that "bringing kids to and from school would be treacherous and the whole character of the area changed for ever".

Historical traffic issues and their cumulative impact it has had had were also raised, with one submission referring to the traffic going to and from the Balleally Landfill stating it has "not been pleasant with odoursome trucks travelling to and from the Balleally landfill".

3.2.20 Treatment

The issue of treatment levels was raised in many of the submissions received, and they often referenced tertiary treatment. It was commented on in one submission that "sewage treated in the plant will only be brought to stage two treatment which is outdated and insignificant for the treatment of sewage".

Stakeholders questioned the process of spending " \Leftrightarrow million without even knowing what sort of plant you are building i.e. primary or tertiary?" Stakeholders also felt that the Greater Dublin Drainage project should be reviewed in light of "next generation treatment processes" and asked "has the GDD taken into account the next generation treatment processes and also forthcoming EU Directives in this regard?"

It was stated in one submission that "outflow treatment would have to be of a standard higher than second level to avoid damage to marine life and coastal environment". Another submission commented that "no commitment has been made to treat the sewage to tertiary level. A commitment to treat it to 'acceptable levels' is vague and misleading".

In one submission the risk to the environment meant that "if the outfall does proceed to the North East of Ireland's Eye it should only do so if the wastewater is subject to the highest possible standard of tertiary treatment", a point that was reiterated in another submission that stated "from a long-term point of view, tertiary treatment should be considered".

Stakeholders opposed to the Southern outfall route remarked that the treatment level employed in the WwTP will affect Baldoyle Bay and it is important that water quality at this site is maintained. Thus treatment levels should be chosen in accordance with international standards. "Given ongoing upgrading of standards for emissions from (even) tertiary treatment plants in the EU generally and the UK, we believe that the planned outfall into Baldoyle Bay is impossible on environmental grounds."

The issue of treating effluent to potable levels was also raised in terms of "meeting future standards". "Some more lateral thinking needs to be applied to the re-use/recycling of treated water. The matter should be considered in conjunction with the clean water needs of Dublin into the future, rather than crude traditional dumping at sea".

Another submission stated that "the design of the plant should be 'future-proofed' to address issues of tertiary treatment and reuse of grey water".

3.2.21 Other Issues

3.2.21.1 Alternatives

Alternative options to those put forward by the project were mentioned in several submissions.

It was commented on in one submission that it would be preferable to locate the plant "very close to the coast though not on the coast and possibly at an outcrop of land very near the east coast and the outflow pipe out to sea several miles".

A number of submissions made reference to the issue that stakeholders felt that "there is also the potential that new and different proposals may emerge over time which will address the sewage requirements of the Swords/Malahide area independently".

This idea was added to in one submission, in which it was commented that a more modular approach should be taken, stating that "The secondary load centres of Swords and Malahide would not be required to be accommodated for a number of years thus facilitating modularity in terms of the pipeline construction".

3.2.21.2 Community Gain

Many stakeholders identified the need for community gain to be taken into account when assessing the emerging site options. Stakeholders commented that "a weighting should be given as to whether the community will benefit from the facility." This request is closely link to the proximity principle and community burden.

3.2.21.3 Compensation

One submission enquired as to "How are the landowners going to be compensated for the disruption and damage they will experience to their lands and losses incurred during the process".

Another submission stated that they felt that if compulsory purchase was going to be used that it was "a recurring blunt instrument".

3.2.21.4 Impact on Business

The impact on the socio-economic make up and employment in the area was raised in numerous submissions and has been mentioned in greater detail in this report. However, this issue was also raised in reference specifically to business, with one submission stating that "It will have a detrimental effect on the appeal of business and agricultural investment in the economy for which North Dublin and County are suffering from in greater proportions to other site".

Submissions regarding the Clonshaugh (Clonshagh) site were concerned that the construction of a WwTP and associated outfall pipe would damage the "economic potential of the locality which, given its close proximity to Dublin airport" which they felt is an area "of major strategic importance to Fingal and Dublin as a whole."

3.2.21.5 Issue regarding the ASA P2 Report

A number specific issues were raised in submissions related to sections of the Alternative Sites Assessment and Route Selection (Phase 2): Emerging Preferred Sites and Routes Report, and these are covered under the relevant headings below.

3.2.21.5.1 Buffer Zones

It was commented on in one submission that the use of EPA guidelines relating to the buffer distance between a sensitive receptor and a WwTP was inappropriate because these guidelines were related to the minimum distance of 50m to be established as a buffer zone between plants with a capacity for up to 160 PE from small communities and hotel developments. Therefore it was commented that it was not relevant to use this as a reference for the plant being proposed as its capacity will be 700,000 PE, and that therefore the buffer distance given in the Alternative Sites Assessment and Route Selection (Phase 2): Emerging Preferred Sites and Routes Report is "clearly insufficient".

3.2.21.5.2 Community Impact

The main issue raised regarding community impact was that "the impact on the Dublin City Community relating to the Clonshaugh site was ignored" and that the report only looked at the impact on the community in Fingal County, and not the community in Dublin City adjacent to the Clonshaugh (Clonshagh) site.

These submissions refer in particular to the statement in the ASA Phase 2 report where it states that "Community Impact – The potential for the proposed project to impact on both Fingal as a whole and on individual communities within Fingal has been considered both under a number of the criteria included in the ASA process, including Landscape and Visual; People and Communities; Noise etc."

This is followed up in further detail in section 3.2.3.

3.2.21.5.3 Odour

The odour issues raised in this section are those that are specifically related to the Alternative Sites Assessment and Route Selection (Phase 2): Emerging Preferred Sites and Routes Report,

There were several submissions in which the issue figures used relating to the odour modelling and the Clonshaugh (Clonshaugh) site were raised.

It was commented on within many of the submissions received that the ASA Phase 2 Report "understates" the potential impact of odour for Clonshaugh (Clonshagh). "Your assessment company Jacobs/Tobin suggestion that our homes in Clonshaugh, Riverside, Darndale, Moatview, Priorswood, Ard na Greine, Clare Hall, Balmayne will not smell a thing is ludicrous." These inconsistencies were also reiterated in one submission (relating to the emerging preferred site in Clonshaugh (Clonshagh) site) that stated that "You argue on one side of your own report that the playing fields are less than 1 km away, with this being so, how can you then say that the closest population centre is 5 km away".

Specifically, in submissions received regarding this issue, point to Table 12.0 of the report "Potential for Odour Impacts". This table states that there is "sparse population within 500 m in direction of prevailing winds; closest population centre in this direction: Balgriffin is at 1 km". However, stakeholders indicate that elsewhere in the report it is conversely stated that "sparse population within 500 m in direction of prevailing winds; closest population centre in this direction at \rightarrow 5km distance" and "1443 residential and commercial buildings within 0.5 – 1.0 km of the site boundary".

3.2.21.5.4 Population Density

A number of submissions received in relation to the Clonshaugh (Clonshagh) site option raised issues relating to the numbers used in the Alternative Sites Assessment and Route Selection (Phase 2): Emerging Preferred Sites and Routes Report and felt that there were inconsistencies in this regard. One submission stated that the figures given are "a gross underestimation of the number of resident households and businesses which will be adversely affected by the sewage plant".

This issue was also raised in the context that those Dublin City Council residents living on the border of the Fingal site in Clonshaugh (Clonshagh) were not being taken into consideration. One submission stated that "The plant would be situated with "8,000 adjacent households from Clonshaugh across to Darndale Belcamp and onto Belmayne and Balgriffin". With another submission stating "There are around 14000 householders" in the area on the boundary with Dublin City Council.

Likewise, it was commented on in submissions that "the report states that the nearest playing fields are 500-800 meters and the nearest urbanization is accordingly 5 kilometres away which is clearly wrong."

A large number of stakeholders recognised that businesses located close to the proposed sites were not identified by the report - "Woodlands Crèche ... is located within 1 Kilometre of the boundary of the

proposed Wastewater treatment plant [at Lusk] and wasn't even acknowledged in the Alternative Sites Assessment and Route Selection Report (phase 2)".

3.2.21.5.5 Prevailing Winds

A number of submissions raised issues regarding Alternative Sites Assessment and Route Selection (Phase 2): Emerging Preferred Sites and Routes Report and the topic of prevailing wind, commenting that "The team does not state in the report what they regard as prevailing winds". They state that this is an issue for them as "If it is generally recognised that prevailing winds are South-Westerly, then Baskin cottages/ Ashgrove and Kinseally Village have to be considered. Baskin Cottages are within 1 km of the Clonshaugh site" however, "If it is a south-westerly wind then, Baskin Cottages/Ashgrove and Kinsaley village have to be considered."

Another submission stated that if the prevailing wind (which is indicated on the table within the report) is Westerly then not only will the Balgriffin population be impacted but also the Clongriffin area and other "major population centres within 2 km of Clonshaugh site".

A further comment was made in one submission that "It is disingenuous to say that the prevailing local wind is onshore and comes from the South-East, especially in warm weather. This will bring the effluent from the outfall directly onto the beaches of Fingal, some of which have only recently regained blue flag status".

3.2.21.5.6 Risk of Flooding

The risk of flooding and how this risk would be dealt with as stated in the ASA Phase 2 report was also raised in a submission, which commented that the report states that it is expected that some storm water will enter the system and in order to deal with high or extreme storms, balancing tanks and storm water storage will be provided both at the WwTP and upstream in the individual catchments. It was stated within this submission that "There are too many assumptions to this approach" and that "The outcome of problems happening to the Cuckoo River (already under pressure form Dublin Airport) will impact [on] 1. Residential areas... 2. Environmental problems for Baldoyle Estuary and Dublin Bay".

3.2.21.5.7 Shellfish Designations

The shellfish designations were also raised as an issue in a number of submissions. It was commented on in one submission that "The designated shellfish area maps are out of date and the

process is now flawed, given that it is now stated in the [ASA] Phase 2 report¹² that "Marine modelling is now being undertaken as an integral part of selecting the location for the marine outfall location".

It was stated in another submission that "It is evident that an update of the designated shellfish area would include the area highlighted as the southern marine outfall" and therefore "a full reassessment of the shell-fish areas be carried out in conjunction with the modelling process".

In addition to this it was commented on in a submission that "The team have stated they will in their deliberations consider the whole coast, as if it were all designated. However, in accepting that, they should step back at least a stage and review the outfall, whenever the marine modelling process is finished".

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¹² Alternative Sites Assessment and Route Selection (Phase 2): Emerging Preferred Sites and Routes Report

4 NEXT STEPS

The issues raised during the public consultation and scheduled in the ASA Phase 2 Consultation Report are being reviewed by the Project Team and considered as part of the assessment process to identify the emerging preferred site options. Details of such considerations will be included in the Alternative Sites Assessment and Route Selection Report (Phase 4): Emerging Preferred Site and Route.

Where specific sites, features, or constraints, locally known or otherwise, were identified in stakeholder submissions, these have been checked by the relevant specialists to ensure they have been included in their assessments. Where any listed sites, features, or constraints have not been included, the relevant specialist has been required to clearly detail to the Technical Team the reasons and justifications for this.

The next phase for the project will focus on the identification of emerging preferred site option and will take place in the coming months. In accordance with the Project Road Map (Figure 1.1), an Alternative Sites Assessment and Route Selection Report (Phase 4): Emerging Preferred Site and Route will be published (Step J). The feedback in consultation alongside the results of ongoing environmental investigations (Step K) will be examined, and the emerging preferred site, along with the associated pipeline and marine outfall location, will be identified (Step J). An Environmental Impact Statement will be prepared on this preferred site, the associated pipelines and marine outfall location (Step L). Finally, a planning application for the full project will be made directly to An Bord Pleanála (Step M). There will be a full statutory consultation process as part of the submission of the planning application (Step N).

Fingal County Council would like to thank all participants for their feedback and to commit to continuing future engagement with them on the future development of Greater Dublin Drainage.