

Administration,
Environmental Licensing Programme,
Office of Climate, Licensing & Resource Use,
Environmental Protection Agency,
headquarters,POBox3000,
Johnstown,Castle Estate,
County Wexford.
Your Ref.:A0439-01

Our reference:MS/Bally/11

28 February 2011

Sub.: Ballymacoda Agglomeration (Register No. A0439-01) Regulation 25(c)(ii) Further Information Response

Dear Sir/Madam,

With reference to your letter of the 14 of December 2010, please find the following attached:

- 1 Original of the Ballymacoda Agglomeration (Register No. A0 439 -01) Regulation 25(c)(ii) Further Information Response.
- 1 Copy of the Ballymacoda Agglomeration (Register No. A0 439 -01) Regulation 25(c)(ii) Further Information Response.
- 1 Original of attachments
- 1 Copy of attachments
- 1 CDROM with the Further Information Response & attachments in PDF Format.

Yours faithfully,

Ms Patricia Power,
Director of services, Water Services,
Cork County Council,
County Hall, Cork.

Ballymacoda Regulation 25 Further Information Response

Question 1

Assess the likelihood of significant effect of the waste water discharges from the above agglomerations on the relevant European sites by referring to Circular L8/08 “Water Services Investment and Rural Water Programmes – Protection of Natural Heritage and National Monuments” issued by the Department of Heritage and Local Government. In particular, the flow diagram in Appendix 1 should be completed and the results of each section recorded. Provide details of the results of this assessment within one month of the date of this notice and provide a reasoned response for the decision. If significant effects are likely then an appropriate assessment must be carried out and a report of this assessment forwarded to the Agency by within 1 month of the date of this notice. You are advised to provide the requested information in accordance with the “Note on Appropriate Assessments for the purposes of the Waste Water Discharge (Authorisation) Regulations, 2007 (S.I. 684 of 2007)”

Wastewater Discharge Licence Application: A0439-01

Circular L8/08 2 September 2008

Water Services Investment and Rural Water Programmes –
Protection of Natural Heritage and National Monuments

1.1

Introduction

Ballymacoda is a small village located 12 miles south east of Middleton Town . The existing sewerage treatment system is serving a population equivalent of 200 and discharges to a small stream which travels in a north easterly direction for approximately 0.5km until it discharges to the Womanagh Estuary. All effluent from the septic tank is discharged directly to the stream there are no distances to groundwater or any other media.

Ballymacoda system is a septic tank which was built in the 1950s the PE contributing to the septic tank is approximately 200. The passage of sewage through a septic tank helps in the removal of suspended solids but there is very little biological activity and the removal of BOD is not significant. The sewage from all premises is collected via the existing sewer network and is treated in conjunction with the domestic waste at the Septic tank. The septic tank does not receive any other sludge imported from other municipal waste water sources or septic tanks.

The final discharge is to Womanagh Estuary . The average outflow from the septic tank is in the order of 270m³, which is equivalent to a PE of 400.

1.2 Documentation

This document brings together all of the information necessary to make a determination as to whether there are likely to be significant impacts arising from the discharge from Castlemartyr WWTP on the designated site at Ballymacoda/Clonpriest.

Step 1:

Provide a description of the plan and other plans and projects that, in combination, have the potential to have significant effects on Natura 2000 sites within the potential impact zone;

Step 2:

Identify Natura 2000 sites which may be impacted by the plan, and compile information on their qualifying interests and conservation objectives;

Step 3:

Determine whether the plan needs to be screened for potential impacts on Natura 2000 sites;

Step 4:

Carry out an assessment of likely effects – direct, indirect and cumulative – undertaken on the basis of available information as a desk study or field survey or primary research as necessary;

Step 5:

Assess the significance of any such effects on the Natura 2000 sites within the impact zone.

1.3 The assessment has been prepared in accordance with the following guidance:

European Commission (2000) Managing Natura 2000 sites: the provisions of Article 6 of the Habitats Directive 92/43/EEC.

European Commission (2001) Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Articles 6(3) and (4) of the Habitats Directive 92/43/EEC.

Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities. Environment, Heritage and Local Government, 2009.

2 Appropriate Assessment Screening Matrix

2.1 Description of project	
Location	Ballymacoda, East Cork.
Description of the key components of the project	<p>Ballymacoda Septic Tank:</p> <p>Ballymacoda system is a septic tank which was built in the 1950s. The PE contributing to the septic tank is approximately 200. The passage of sewage through a septic tank helps in the removal of suspended solids but there is very little biological activity and the removal of BOD is not significant.</p> <p>The sewage from all premises is collected via the existing sewer network and is treated in conjunction with the domestic waste at the Septic tank.</p> <p>The final discharge is to Womanagh Estuary . The average outflow from the septic tank is in the order of 270m³, which is equivalent to a PE of 400.</p>
Distance from designated sites in potential impact zone*	Approx. 1km

2.2 Description of the Natura 2000 sites within the potential impact zone ¹	
Name	Ballymacoda Clonpriest
Site Code	000077 (SAC)/004023 (SPA)
Site Description	The site comprises the estuary of the Womanagh River, a substantial river which drains a large agricultural catchment. Part of the tidal section of the river is included in the site and, on the seaward side of the boundary, the site extends to the low tide mark. The inner part of the estuary is well sheltered by a stabilised sandy peninsula (Ring peninsula).
Qualifying Interests of designated site	<p>SAC The macro invertebrate fauna of the intertidal flats is well developed, with the following species occurring: <i>Corophium volutator</i>, <i>Hediste diversicolor</i>, <i>Arenicola marina</i>, <i>Macoma balthica</i>, <i>Scrobicularia plana</i>, <i>Cerastoderma edule</i> and <i>Lanice conchilega</i>. In the more sheltered areas the intertidal flats are colonised by mats of green algae (mostly <i>Enteromorpha</i> spp) with brown seaweeds occurring on the rocky shores of the shingle spits. Common Cord-grass (<i>Spartina anglica</i>) has spread within the estuary since the 1970's</p> <p>The main channel is flanked by salt marshes and wet fields, much of the latter being improved for agriculture. The salt marshes are mainly classified as Atlantic salt meadows, with such species as Sea Purslane (<i>Halimione portulacoides</i>), Sea Lavender (<i>Limonium humile</i>) and Sea Milkworth (<i>Glaux maritime</i>) Glassworth (<i>Salicornia</i> spp) and Sea Blite (<i>Suaeda maritima</i>) can also be found on the lower levels of the marshes</p> <p>SPA The main interests of the site are waterfowl with up to 20,000 regularly present during winter. Golden Plover, Bar-tailed Godwit, Teal, Ringed Plover, Grey Plover, Lapwing, Sanderling, Dunlin, Curlew, Knot, Redshank, Black-tailed Godwit and Turnstone</p>
Other Notable Features of site	Ballymacoda is one of the most important bird sites in the country and supports a higher number of waders than any other Cork estuary of its size.

¹ Natura 2000 sites within the potential impact zone of the proposed development have been identified in accordance with guidance provided in the NPWS circular L8/08.

	<p>The salt marshes at the site are of particular note as they are of the scarce “lagoon” type. They are also of good quality and parts of them are in active growth.</p> <p>See appendix 4 for bird count data for Ballymacoda</p>
Conservation Objectives	<p>To avoid deterioration of the habitats of the qualifying species and species of special conservation interest, or significant disturbance to these species, thus ensuring that the integrity of the site is maintained.</p> <p>To ensure for the qualifying species and species of special conservation interest that the following are maintained in the long-term.</p> <ul style="list-style-type: none"> ○ the population of the species as a viable component of the site; ○ the distribution and extent of habitats supporting the species; ○ the structure, function and supporting processes of habitats supporting the species; <p><i>Source – National Parks and Wildlife Service</i></p>

2.3 Assessment Criteria	
<p>Describe the individual elements of the project (either alone or in combination with other plans or projects) likely to give rise to impacts on the Natura 2000 site.</p>	<p>Discharge from Ballymacoda Septic Tank : Treated effluent from the Ballymacoda septic tank discharges to Womanagh Estuary. The discharge consists primarily of primary treated effluent from the Ballymacoda Septic</p> <p>Other Discharges in the catchment</p> <p>Ladysbridge WWTP, Mogeely WWTP Killeagh WWTP, Dairygold WWTP at Mogeely</p> <p>The two Mogeely plants along with Castlemartyr WWTP discharge to the Kiltha river (a tributary of the Womanagh). Ladysbridge WWTP discharges directly into the Womanagh Killeagh discharges into the Dissour river (Tributary of Womanagh). All discharges are upstream of Ballymacoda and all are approx 10km upstream of Ballymacoda.</p>

<p>Describe any likely direct, indirect or secondary impacts of the project (either alone or in combination with other plans or projects) on the Natura 2000 site taking into account the following:</p> <ul style="list-style-type: none"> ○ Size and scale ○ Land-take ○ Distance from the Natura 2000 site or key features of the site: ○ Resource requirements (water abstraction etc.) ○ Emissions (disposal to land, water or air) ○ Excavation Requirements ○ Transportation Requirements ○ Duration of construction, operation, decommissioning ○ Other. 	<p>Discharges could give rise to elevated nutrients entering the SPA.</p> <p style="color: red; text-align: center; transform: rotate(-45deg); font-style: italic;">Consent of copyright owner required for any other use. For inspection purposes only.</p>
<p>Describe any likely changes to the site arising as a result of:</p> <ul style="list-style-type: none"> ○ Reduction in habitat area ○ Disturbance to key species ○ Habitat or species fragmentation ○ Reduction in species density ○ Changes in 	<p>Reduction in habitat area: <i>No significant impacts are evident or predicted on habitats within the Ballymacoda/Clonpriest SPA/SAC arising from the operation of this facility.</i></p> <p>Disturbance to key species: <i>There is no evidence to suggest any disturbance to species within the SPA.</i></p> <p>Habitat or species fragmentation: <i>No habitat fragmentation has been caused as a result of the operation of this facility.</i></p> <p>Reduction in species density: <i>No significant impacts are evident or predicted on species for which the</i></p>

<p>key indicators of conservation value (water quality etc)</p> <ul style="list-style-type: none"> ○ Climate Change 	<p><i>SPA is designated.</i></p> <p>Changes in key indicators of conservation value eg water quality:</p> <p>EPA have no monitoring station downstream of the Ballymacoda discharge point. The discharge is into estuarine waters and as such only preliminary tests were submitted with original certificate application (due to saline interference in samples). However there is no evidence from this preliminary sampling of any deterioration in water quality.</p> <p>No changes evident in numbers of water dependent species at SPA.</p>
<p>Describe any likely impacts on the Natura 2000 site as a whole in terms of:</p> <ul style="list-style-type: none"> ○ Interference with the key relationships that define the structure of the site ○ Interference with key relationships that define the function of the site 	<p>Interference with the key relationships that define the structure of the site: <i>The structure of the SPA is not impacted by the operation of this facility.</i></p> <p>Interference with key relationships that define the function of the site: <i>The function of the SPA is not impacted by the operation of this facility.</i></p> <p style="color: red; text-align: center; font-size: small;">For inspection purposes only. Consent of copyright owner required for any other use.</p>
<p>Describe from the above those elements of the project of plan, or combination of elements, where the above impacts are likely to be significant or where the scale or magnitude of impacts is not known.</p>	<p>No significant impacts are predicted.</p>

3. Finding of No Significant Effects Report Matrix

3.1 Report	
Name of project or plan	Ballymacoda septic tank discharge
Name and location of Natura 2000 site	Ballymacoda Special protection Area
Description of the project or plan	
Is the project or plan directly connected with or necessary to the management of the site (provide details)?	No

3.2 The assessment of significance of effects	
Describe how the project or plan (alone or in combination) is likely to affect the Natura 2000 Site.	<p>Discharges from Ballymacoda Septic Tank either alone or in combination with discharges from other sources could give rise to elevated nutrients entering the designated site. Increased nutrient levels may impact on the ecology of an area by changing the composition of floral communities and reducing the ability of less robust plants to survive. Increased nutrient levels may also result in increasing the invertebrate populations in the estuary, thereby increasing bird population levels.</p> <p>Effluent from the Ballymacoda septic tank receives primary treatment only. This is in conjunction with poor assimilative capacity in rivers upstream of Ballymacoda could lead to high nutrients levels within SPA which could affect the</p>

	invertebrate population .
Explain why these effects are not considered significant.	Records from Birdwatch Ireland indicate no reduction in numbers of designated species.
List of agencies consulted: provide contact name and telephone or email address	Birdwatch Ireland – Data request.
Response to consultation	Birdwatch Ireland sent on Bird count data.

Data collected to carry out the assessment			
Who carried out the assessment	Sources of data	Level of assessment completed	Where can the full results of the assessment be accessed and viewed
Madeleine Healy & Mahmoud Shaladan	IWebs Bird Data supplied by BirdWatch Ireland; Water Quality Monitoring Data CCC; Womanagh catchment Assessment – Dixon Brosnan 2006	Desktop review of cited data.	This report.

Question 2 Confirm the design capacity of the waste water treatment plant and the current population

equivalent (PE) being treated at the plant. Confirm current PE includes the maximum average weekly loading for the agglomeration having taken into account local festivals , peak holiday seasons ,etc.

There is no waste water treatment plant at present .The village is currently served by a septic tank which discharges into the Womanagh Estury . The sewerage network in Ballymacoda comprises of one catchment area serving approximately 65 houses equivalent to 200PE .

Question 3 Provide a revised drawing clearly detailing the boundary of the agglomeration to which this application relates. Please note that the agglomeration boundary shall include all areas serviced by the sewer network and shall include the waste treatment plant. All areas of the agglomeration shall be connected by the agglomeration body.

Please Refer to revised drawing B1_Map3

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The Gearagh

Species	1% National	1% International	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	Mean (04/05- 08/09)	Peak (04/05- 08/09)
Mute Swan	110		43	40	60	130	82	80	78	130
Whooper Swan	130	210	67	46	38	72	70	64	58	72
Pink-footed Goose		2,250						2	0	2
Greenland White-fronted Goose	110	270		1					0	1
Greylag Goose	50	870		63	143	143	143	26	104	143
Barnacle Goose	90	560						1	0	1
Shelduck	150	3,000				1			0	1
Wigeon	820	15,000	550	760	270	750	830	1,100	742	1,100
Gadwall	20	600	4	14	5	5	3	20	9	20
Teal	450	5,000	650	2,000	425	1,000	1,000	1,400	1,165	2,000
Mallard	380	20,000	350	300	140	480	700	800	484	800
Pintail	20	600	2	20	2	2	2	6	6	20
Shoveler	25	400	12	50	35	75	130	130	84	130
Pochard	380	3,500	65	40	1	2	2	2	9	40
Ring-necked Duck				1				1	0	1
Tufted Duck	370	12,000	240	600	233	400	320	410	393	600
Scaup	45	3,100		5		3	2	8	4	8
Goldeneye	95	11,500	30	15	27	25	30	37	27	37
Goosander							3	1	1	3
Ruddy Duck			5	1					0	1
Great Crested Grebe	55	3,600		3	1	5	2	4	3	5
Cormorant	140	1,200	12	7		14	4	5	6	14
Little Egret		1,300				5	3	4	2	5
Grey Heron	30	2,700	4	4	2	11	3	3	5	11
Water Rail								1	0	1
Moorhen	20			2		1		4	1	4
Coot	330	17,500	7	276	135	450	80	400	268	450
Golden Plover	1,700	9,300	5,000	3,000	3,000	6,000	2,500	2,000	3,300	6,000
Lapwing	2,100	20,000	750	1,500	2,000	2,000	1,000	2,500	1,800	2,500
Dunlin	880	13,300	4	120	150	200	1	120	118	200
Snipe		20,000	3	10		3	1	2	3	10
Black-tailed Godwit	140	470		54		4			12	54
Curlew	550	8,500	150	250	2	150	92	140	127	250
Common Sandpiper				1					0	1
Green Sandpiper				2		1		2	1	2
Greenshank	20	2,300		1				1	0	1
Redshank	310	3,900		7		2		1	2	7
Little Gull				1					0	1
Black-headed Gull		20,000	8	10		30	10	35	17	35
Common Gull		16,000						2	0	2
Lesser Black-backed Gull		4,500	14	70	10	300	32	280	138	300
Kingfisher				1		1	2	1	1	2

The counts presented in the table refer to the peak counts of species in each I-WeBS season. Site peak and mean are calculated as the peak and mean of peak counts respectively over the seasons specified. Blank cells within columns which contain positive values for one or more species constitute zero for those species.



Ballymacoda

Species	1% National	1% International	2003/04	2004/05	2005/06	2006/07	2007/08	Mean (03/04-07/08)	Peak (03/04-07/08)
Kittiwake							20	4	20
Mute Swan	110		8	5	5	6	3	5	8
Bewick's Swan	20	200	6					1	6
Whooper Swan	130	210	4	5	1		4	3	5
Pink-footed Goose		2,250				2	1	1	2
Greenland White-fronted Goose	110	270	6					1	6
Greylag Goose	50	870	6			4		2	6
Barnacle Goose	90	560				1		0	1
Light-bellied Brent Goose		260	94	176	183	124	248	165	248
Black Brant						1		0	1
Shelduck	150	3,000	131	146	57	46	70	90	146
Wigeon	820	15,000	1,376	1,040	1,303	910	834	1,093	1,376
Gadwall	20	600	5		6		2	3	6
Green-winged Teal			1	1				0	1
Teal	450	5,000	953	976	1,082	826	376	843	1,082
Mallard	380	20,000	70	467	17	39	29	124	467
Pintail	20	600	8	12	15	5	1	8	15
Shoveler	25	400	14	24	23	44	27	26	44
Goldeneye	95	11,500			1	1		0	1
Red-breasted Merganser	35	1,700	4	2		1	1	2	4
Red-throated Diver	20	3,000		15			1	3	15
Great Northern Diver		50		1			1	0	1
Little Grebe	25	4,000	3	2	2		3	2	3
Great Crested Grebe	55	3,600	8	9	4	2	13	7	13
Cormorant	140	1,200	38	27	34	23	24	29	38
Little Egret		1,300	9	28	26	28	32	25	32
Grey Heron	30	2,700	7	13	11	11	14	11	14
Water Rail				1			2	1	2
Moorhen	20		5				2	1	5
Oystercatcher	680	10,200	742	440	657	405	396	528	742
Little Ringed Plover					1			0	1
Ringed Plover	150	730	57	84	138	146	97	104	146
Golden Plover	1,700	9,300	8,400	8,780	9,800	8,150	8,500	8,726	9,800
Grey Plover	65	2,500	524	337	396	474	482	443	524
Lapwing	2,100	20,000	2,600	2,610	1,520	2,230	1,603	2,113	2,610
Knot	190	4,500	211	334	125	130	305	221	334
Sanderling	65	1,200	133	164	132	151	122	140	164
Little Stint						1	1	0	1
Pectoral Sandpiper						1	1	0	1
Curlew Sandpiper					7	2	4	3	7
Dunlin	880	13,300	2,640	1,865	1,085	825	1,882	1,659	2,640
Ruff		12,500			1	7	13	4	13
Snipe		20,000	125	25	100	100	105	91	125
Black-tailed Godwit	140	470	820	1,480	801	827	535	893	1,480
Bar-tailed Godwit	160	1,200	592	458	468	436	445	480	592
Whimbrel		2,000		1	1	1	1	1	1
Curlew	550	8,500	1,033	486	770	726	545	712	1,033
Common Sandpiper					6	1		1	6
Green Sandpiper						2		0	2
Greenshank	20	2,300	16	17	9	23	14	16	23
Redshank	310	3,900	251	318	251	257	167	249	318
Turnstone	120	1,500	133	86	85	68	76	90	133
Mediterranean Gull			1	2			1	1	2
Black-headed Gull		20,000	3,325					665	3,325
Common Gull		16,000	361					72	361

The counts presented in the table refer to the peak counts of species in each I-WeBS season.

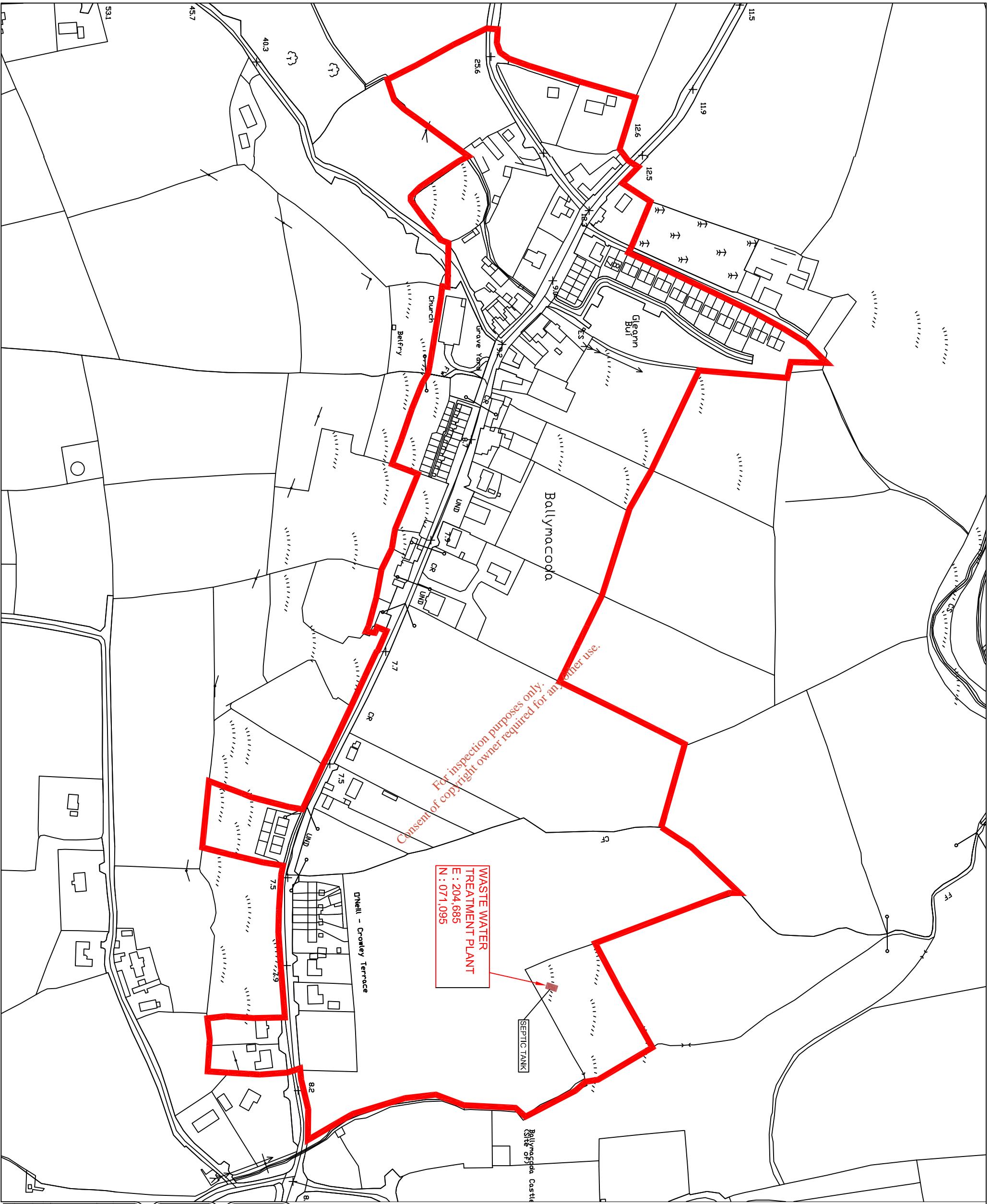
Site peak and mean are calculated as the peak and mean of peak counts respectively over the seasons specified. Blank cells within columns which contain positive values for one or more species constitute zero for those species.



Lesser Black-backed Gull	4,500	6,500	445	434	233	460	1,614	6,500
Herring Gull	13,000	31	22	41	64	24	36	64
Yellow-legged Gull				1			0	1
Glaucous Gull					1		0	1
Great Black-backed Gull	4,800	140	31	141	79	62	91	141
Sandwich Tern		28	82				22	82
Common Tern		2					0	2
Kingfisher			2	1	2	1	1	2

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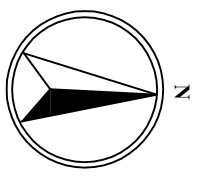
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AGGLOMERATION BOUNDARY



Rev	Date	By	Description
A	21.02.11	NMI	Location of WWTP included, agglomeration body revised



CORK COUNTY COUNCIL
SOUTHERN DIVISION

Niall O Keefe, B.E. Chief Executive
County Hall, Cork.

Patricia Power,
Director of Services,
Aer Operations South

Project: **BALLYMACODA WWTP WASTE WATER DISCHARGE LICENCE APPLICATION**

Title: Application Form
Attachment B1_Map3
Agglomeration Boundary Served By
Waste Water Treatment Works

Designed: ERMS	Checked: MH	Scale: 1:3,000 @ A3	Drawing No: B1_Map3
Drawn: MM	Approved: MH	Date: Nov 09	Status: A