

Appendix C9B.01

Aquatic Ecology Survey Site Descriptions

Field Survey – Detailed Site Descriptions Section 1

Code	EPA Watercourse name (Segment code)	Habitat Description (2024)	Fisheries value	Protected Aquatic Species / Habitat	Biological Water Quality	Evaluation (NRA, 2009)	Class.
W1-01 And W1-02	Un-named (01_1826) Burn Daurnett Trib.	Minor stream. W = 1.0m; D = 0.05m. Drained to follow field boundary, stretches of gravel riffle/run alternating with sluggish, silty glide. No instream vegetation near crossing points; channel largely overgrown and tunnelled (bramble, gorse, rushes, willow), open banks near W1-02 (recent drainage/road improvements). Improved Grassland (IG) beyond riparian strip. New box culvert at W1-02, old triple pipe culvert at W1-01. Some <i>Fontanalis antipyretica</i> growth in 2024.	No fish observed. Limited potential for trout, although cannot be ruled out. Confluences D/S with Burn Daurnett, via new N15 box culvert - a potential fish passage barrier owing to raised culvert apron. Could be expected that juvenile trout forage these reaches, up from the Finn main channel, if passage was not obstructed.	Annex II brook lamprey may occur, utilising silty deposits as nursery habitat. ¹ European eel. Unsuitable for White-clawed crayfish or Freshwater Pearl Mussel.	Q3 (2024 field survey): ² indicative 'poor' status. EPA RWB status 2019-2024 Moderate	Local Importance (higher value)	D
W1-03 and W1-04	Cappry (01_1816) (Burn Daurnett Trib.)	Insignificant field boundary drain at W1-03; dry during summer months. Dry peat-detritus bed material visible, overgrown with grasses, rushes, bramble and ferns. Riparian strip of willow, bramble, grasses. IG and/or Rough Pasture (RP), beyond. Lower reach at W1-04 has some standing water, but essentially a low quality drain.	None	None	N/A – dry.	N/A	E
W1-05	Cappry (01_1816) (Burn Daurnett Trib.)	Minor stream. W = 0.9m width; D = 0.03m. Drains in trickle flow from wet grassland area then piped beneath existing road. Step-pool trickle flow, over large cobble substrates with bryophyte plant community. Strong smell of sewage/septic tank run-off. Sewage fungus and anoxic mud recorded 2024. Site was not sampled	None	None	Q2 (2020 field survey): – indicative 'bad' status. EPA RWB status 2019-2024 Moderate	Local Importance (lower value)	E

¹ Protected under Conservation of Eel Fishing Bye-law No. C.S. 335, 2024.

² Macroinvertebrate status reported as "indicative", since ratings outside of the formal EPA river monitoring programme are not official status under the Water Framework Directive 2000/60/EC. EPA River Water Body (RWB) status is also recorded, i.e., formal WFD status assigned by the EPA for the current (2029-2024) reporting period.

Code	EPA Watercourse name (Segment code)	Habitat Description (2024)	Fisheries value	Protected Aquatic Species / Habitat	Biological Water Quality	Evaluation (NRA, 2009)	Class.
		for Q-value in 2024 owing to obvious pollution with abundant sewage fungus.					
W1-06	Finn (Donegal) (01_7147) (River Finn)	Large, predominantly eroding river; reasonably fast-flowing (width 25-30m; glide depth up to 0.8m in low flow). Dominant flow type glide/run over mixed substrates of mainly large and small boulder cobble and bedrock outcrops, with patches of coarse gravel and interstitial sand. A section of rapid/run in the crossing reach is followed by a lower gradient reach forming a slower glide between outcropped boulders. Moderate cover aquatic mosses, primarily <i>F. squamosa</i> with lesser abundance of <i>F. antipyretica</i> , and liverwort <i>Chiloscyphus sp.</i> Left bank sloping to riparian treeline and IG beyond; right bank vertical, reinforced cut-stone with treeline, then R252 road beyond. Broadly continuous riparian strip of mature trees and shrubs, including Ash, Alder, Willow, Poplar, Birch, Conifer, Birdwood with understorey of mixed tall herb, bramble and ferns. IAPS recorded: Himalayan balsam (<i>Impatiens glandulifera</i>), Montbretia (<i>Crococsmia x crocosmiiflora</i>), and dense stands of Japanese knotweed (<i>Fallopia japonica</i>).	Designated ³ Salmonid Water. Grade 1 and 2 salmonid nursery habitats, with small patches of Grade 2 holding and Grade 3 spawning habitats [Scale:1(excellent) - to - 4 (poor)]. Salmonids: Atlantic salmon; Sea trout migratory) and brown trout (resident). Lamprey (<i>Lampetra</i> spp.) likely to occur, Sea lamprey may occur: spawning (gravels) and nursery (silt deposits) habitats present. Other species: European eel present; Stoneloach present.	⁴ Special Area of Conservation (River Finn SAC: Site Code 002301). Annex II salmon. <i>Margaritifera</i> Sensitive Area (extant population): freshwater pearl mussel surveys negative for mussels in River Finn, at and downstream of crossing point. Pearl mussel considered 'functionally extinct' in River Finn. Instream habitat aligns with Annex I habitat 3260, "bryophyte-dominated rivers", but a poor representation and not considered pertaining to the annexed type. Unsuitable for White-clawed crayfish or Freshwater Pearl Mussel. European eel.	Q4 (2024 field survey): indicative 'good' status. EPA RWB status 2019-2024 Good	International Importance	A
W1-07	Dromboe Lower (01_589) (River Finn Trib.)	A small tributary of the River Finn, entirely piped / culverted for the majority of its course. The open stream in the lower reach is moderately small (0.7 – 1.0m width; 0.08m depth) with quite swift flow forming a riffle/run, glide/pool series over substrates of gravel, pebble and cobble with coarse sand with aquatic mosses.	Numerous juvenile salmonids observed here in the field. Young fish may forage up from the Finn downstream, but also some potential trout spawning habitat up to the point where the stream is piped.	European eel. Unsuitable for White-clawed crayfish or Freshwater Pearl Mussel.	Q3 (2024 field survey): indicative 'poor' status. EPA RWB status 2019-2024 Good	The lower (un-piped) reach has International Importance (within SAC boundary); upper reach (piped) -Local	A/D

³ S.I. No. 293 of 1988. EC (Quality of Salmonid Waters) Regulations

⁴ EU Directive on the Conservation of Habitats, Flora and Fauna (92/43/EEC) 'Habitats Directive'

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						Importance (lower value)	
W1-08	Backlees (01B16) (Local name: Drumboe Burn)	Small-to-medium sized (2.0m wet width, 15cm depth), spate driven, mod-fast flowing mountain stream of variable gradient set in agricultural area. Comprised of mainly step/pool, run/glide and riffle/run habitat over cobble / small boulder with limited pockets of deposited gravel and fines. At the crossing point, a steeper section of bedrock forms cascade, rapid and step-pool. Instream plants - mainly aquatic mosses and liverworts (<i>F. antipyretica</i> and <i>Chiloscyphus</i>). Broadly continuous riparian strip of mainly native trees and shrubs, including Ash, Hawthorn, Alder, Willow, Hazel, bracken and ferns, with IG beyond. Slightly turbid during two surveys (2020, 2024). Local water abstraction upstream of crossing location (slurry tanks drawing water).	There was very little suitable salmonid spawning habitat evident in the crossing reach, with limited potential in the next 300m downstream. Good trout nursery habitat. No fish observed during surveys; but electrofishing surveys show trout and salmon present (0+ and 1+) in good-to-excellent numbers annually, 2020-2024, inclusive, at a site c.1km downstream of crossing point (Loughs Agency data). Eel cannot be ruled out. Lamprey unlikely - very little spawning habitat and less in the way of lamprey nursery (no silt deposits) owing to the gradient and spate-driven nature.	European eel. Annex II salmon present a short distance downstream. Unsuitable for White-clawed crayfish or Freshwater Pearl Mussel.	Q3 (2024 field survey): indicative 'poor' status. EPA RWB status 2019-2024 Good	Local Importance (higher value)	D
W1-09	Backlees (01_186) (Local name: Drumboe Burn / Liskeran Burn)	This site is about 650m upstream of W1-08. Description as for W1-08, except the gradient of the stream is less steep. Flows are dominated by step-pool and riffle/run over substrates of cobble and gravel with some finer bed material.	As for W1-08, although trout nursery habitat and spawning potential is better at W1-09 owing to lower gradient compared to W1-08. Loughs Agency electrofishing data annually 2020-2024 showed low numbers (poor-to- fair) of trout fry and parr (0+ and 1+) ranging through to good numbers of trout fry further upstream. No juvenile salmon present in Loughs Agency surveys, likely owing to the waterfall barrier near the proposed crossing point at W1-08.	European eel. Unsuitable for White-clawed crayfish or Freshwater Pearl Mussel.	As for W1-08, above. EPA RWB status 2019-2024 Good	Local Importance (higher value)	D
W1-10	Greenhills 01 (01_70) (Dromboe Upper – River Finn Trib.)	Insignificant field boundary drain at crossing point centreline; almost dry during summer. Peat-detritus bed material visible, overgrown with grasses and rushes. Riparian strip of willow, ash, sycamore, hawthorn and bramble. IG on right bank and garden centre on	None	None	N/A – unsuitable for Q-assessment. EPA RWB status 2019-2024 Good	Local Importance (lower value)	E

Code	EPA Watercourse name (Segment code)	Habitat Description (2024)	Fisheries value	Protected Aquatic Species / Habitat	Biological Water Quality	Evaluation (NRA, 2009)	Class.
		left bank beyond riparian hedgerow. Trickle flow forms about 20m downstream of centreline (0.15m width; 0.01m depth), with visible substrates of pebble and fine gravel with exposed clay and silty detritus.					
W1-11 And W1-13	Magheracorran (01_1024) (01_1530) (Cloghroe River Trib.)	Moderately small (2.0m bank width, 1.0m wet width, 0.05m depth) stony bottomed stream forming a low-to-moderate gradient riffle/run sequence. Substrates mainly gravel, pebble and small cobble with occasional small boulders and pockets of coarse sand and finer sediments. Riparian hedgerow on True Right (TR) bank at and downstream of W1-13: Hawthorn, Willow, Alder, Ash and Birch. At W1-11, riparian vegetation was cut-back and banks were eroded leaving the channel very open. The stream is already contained in a long culvert (>50m) under the existing N13 road.	Trout parr captured at W1-13. The stream has some salmonid spawning potential and reasonable nursery habitat, although it was suffering from stock trampling in places. Overall, considered a reasonable trout habitat, with Eel and brook lamprey also likely.	Potential for Annex II brook lamprey. European eel. Unsuitable for White-clawed crayfish or Freshwater Pearl Mussel.	Q4 (2024 field survey): indicative 'good' status. EPA RWB status 2019-2024 Poor	Local Importance (higher value)	D
W1-12	Lisnaree (01_928)	Minor watercourse – forms a deepened drain with a low volume of stagnant water (0.2m width; 0.03m depth). Iron-stained, soft muddy substrates. Overgrown with grasses and rushes. Steep banks, covered by rosebay willowherb and bramble.	None	None	N/A – unsuitable for Q-assessment. EPA RWB status 2019-2024 Poor	Local Importance (lower value)	E
W1-14	Cloghroe (01_1796) (Cloghroe River at existing N13 Callan Bridge)	Medium sized river 4.5m bank width; 3.2m wet width; 0.3m depth). Historically drained, but with recovered in-channel riffle/run and pool/glide habitats over stony substrates of embedded cobble, small boulder, with pebble, gravel and sand. Aquatic moss and liverwort plant community. Riparian strip of semi-mature Ash, Alder, Willow forming dappled shade. Pollution tolerant FGA, <i>Cladophora</i> , common (>30%).	Good salmonid nursery habitat with some spawning potential and holding capability in deeper pool/glide downstream of crossing. Cloghroe River was classed as mainly Grade 2 and 3 nursery habitats for salmonids, with small patches of Grade 3 holding and one tiny reach Grade 3 spawning habitat (Niven <i>et al</i> , 2011a). Lamprey and eel almost certainly present.	Annex II salmon and likely lamprey (<i>Lampetra</i> spp.) European eel. Unsuitable for White-clawed crayfish or Freshwater Pearl Mussel.	Q3 (2024 field survey): indicative 'poor' status. EPA RWB status 2019-2024 Good.	County Importance	C

Code	EPA Watercourse name (Segment code)	Habitat Description (2024)	Fisheries value	Protected Aquatic Species / Habitat	Biological Water Quality	Evaluation (NRA, 2009)	Class.
W1-15	Kilross (01_543) (Lough Alaán Trib.)	Recently dredged, channelised farm drain (bank-width 1.5m). Mainly, dry with wet patches. Insignificant watercourse in these upper reaches. Plants include rushes, forget-me-not, grasses and bog pondweed.	None	None	N/A – dry.	Local Importance (lower value)	E
W1-16	Tircallan (01_3) (Upper tributary of Mullaghagarry)	Small-medium sized stony stream (1.5-2.0m wet width; 0.05 to 0.15m depth), moderately fast flowing with variable gradient. Reasonably natural hydromorphology; well recovered from historical and more recent) drainage. Flows were mainly step/pool and run/glide habitat over cobble and small boulder, but a nice reach of cobble, pebble and gravel, u/s of the crossing point. Aquatic bryophyte community. Riparian treeline of hazel, ash, alder, beech.	Potential for trout spawning and certainly potential trout nursery habitat. Brook lamprey also likely to be present.	Potential for Annex II brook lamprey (<i>Lampetra</i> spp.) European eel. Unsuitable for White-clawed crayfish or Freshwater Pearl Mussel.	Q3-4 (2025 field survey): indicative 'moderate' status. Bordering on Q4 'good' status. EPA RWB status 2019-2024 Moderate	Local Importance (higher value)	D
W1-17 And W1-18	Mullaghagarry (01_69) (01_68)	Small-medium sized stony stream (wet width 2.0-2.5m; depth 0.15m). Flows mainly step/pool and run/glide habitat over cobble and small boulder; limited pockets and reaches of deposited gravels or fines. Sections of bedrock formed steeper cascades and rapids. Aquatic bryophyte plant community. Broadly continuous riparian strip of mainly native trees and shrubs, including ash, hawthorn, alder, willow, birch, holly.	Potential trout nursery habitats. Existing culvert at W1-17 is a major fish passage barrier - the stream flows subterranean under culvert. Brook lamprey likely present, with nursery habitat plentiful around W1-17.	Potential for Annex II brook lamprey (<i>Lampetra</i> spp.) European eel. Unsuitable for White-clawed crayfish or Freshwater Pearl Mussel.	Q4 (2024 field survey at W1-20 downstream): indicative 'good' status. EPA RWB status 2019-2024 Moderate	Local Importance (higher value)	D
W1-19	Treanamullin (01_66)	Insignificant field drainage channel (wet width 0.30m); trickle flow and/or small stagnant pools over peaty silt substrates. Overgrown with bramble and densely shaded by hedgerow.	None	None	N/A – unsuitable for kick sampling	Local Importance (lower value)	E
W1-20	Mullaghagarry (01_776)	Small-medium sized stony stream (wet width 2.0-3.2m; depth 0.15m). Flows mainly step/pool and run/glide habitat over cobble and small boulder; limited pockets and reaches of deposited	Trout nursery habitat US and DS of existing bridge. Too small for salmon. Brook lamprey likely present, with nursery	Potential for brook lamprey (<i>Lampetra</i> spp.) European eel. Unsuitable for White-clawed crayfish	Q4 (2024 field survey): indicative 'good' status.		D

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		gravels or fines. Aquatic bryophyte plant community. Broadly continuous riparian strip of trees and shrubs, including ash, alder, willow, beech, sycamore on True Right (TR) and True Left (TL) bank.	habitat plentiful in low gradient areas closer to River Finn main channel.	or Freshwater Pearl Mussel.	EPA RWB status 2019-2024 Moderate		
W1-21	Finn (Donegal) (01_1446) River Finn	Large (40 m width), lowland, meandering river with mainly laminar glide flow for the 500m downstream of confluence with Mullaghagarry (W1-20). Historically drained. Deep soft sediment at left bank margin, but main channel substrates mainly cobble, small boulder with patches of coarse gravel/sand, and few outcropping large boulders. All substrates coated in fine sediment /algal detritus. Devoid of instream aquatic macrophytes. Broadly continuous riparian hedgerow on true left bank - mature alder, ash, hawthorn, sycamore, blackthorn. Right bank open with stock grazing to water's edge, and poaching of banks.	Poor salmonid habitat owing to sedimentation and algal detritus smothering substrates. Limited salmonid nursery habitat. Salmonids ought to be abundant, but none were observed in 3hrs of snorkelling over 500m of channel. Potential for lamprey nursery, but spawning habitat limited. Eel likely present.	Salmon (migration mainly, some nursery). Potential for river/brook lamprey (<i>Lampetra</i> spp.) and sea lamprey (depending on DS barriers). European eel Freshwater pearl mussel are not present in 500m reach surveyed downstream of Mullaghagarry confluence. Habitat largely unsuitable for mussels. Pearl mussel considered 'functionally extinct' in River Finn. Unsuitable for White-clawed crayfish.	EPA Station: 01F010800 (Br S of Stranorlar) 2025 – Q3-4 – 'moderate' status. EPA RWB status 2019-2024 Moderate	International Importance	A
W1-22	Burn Daurnett (01_1828)	Moderate sized (wet width 4.0-5.0m), moderate-to fast flowing, predominantly eroding river. Historically drained, but recovered reasonably natural instream morphology. Mainly riffle/run and glide sequences over substrates of gravel, cobble and coarse sand with reaches of bedrock. Peat slit common. Aquatic bryophyte plant community (<i>Rhynchostegium riparioides</i> , <i>Leptodictyum riparium</i> , <i>F. Antipyretica</i>), plus mats of <i>Phormidium</i> . Riparian corridor of broadleaf trees and shrubs, mainly willow; ash; sycamore; some conifer, with IG and RP beyond.	Good salmonid (salmon and trout) nursery habitat with reasonable patches of salmonid spawning habitat and a few deeper holding areas for larger fish. It would support spawning lampreys most likely brook lamprey, although silt deposition is limited in the channel, meaning juvenile lamprey habitat is sub-optimal.	Annex II salmon – although impaired water quality may limit numbers. Potential for Annex II river/brook lamprey (<i>Lampetra</i> spp.). European eel. Unsuitable for White-clawed crayfish or Freshwater Pearl Mussel.	Q3-4 (2024 field survey): indicative 'moderate' status. EPA RWB status 2019-2024 Moderate	County Importance	C

Field Survey – Detailed Site Descriptions Section 2

Code	EPA Watercourse name (Segment code)	Habitat Description (2024)	Fisheries value	Protected Aquatic Species / Habitat	Biological Water Quality	Evaluation (NRA, 2009)	Class.
W2-01	<i>Un-named</i> (39_1545) Trib. of Swilly at Drumany	Small, dry, field boundary drain. Bank-width = 0.30m) in the upper reach of trib. Stony clay substrates. Regularly runs dry in spring/summer. Rushy pasture on left and hedgerow on right bank. Foul-smelling, turbid discharge to the channel 100m d/s is an obvious source of pollution.	None	None	Kick-sampling N/A – dry at W2-01. EPA RWB status 2019-2024 Good	Local Importance (lower value)	E
W2-02	<i>Un-named</i> (39_1021) Trib. of Swilly at Drumany	Minor, dry field drain. Bank-width = 0.8m. Intermittent flow through culvert under disused railway. Substrates of silty, fine gravel. Overgrown along banks with hawthorn, alder, gorse, bramble and tall herb.	None	None	Kick-sampling N/A – dry at W2-02. EPA RWB status 2019-2024 Good	Local Importance (lower value)	E
W2-03 And W2-04	<i>Un-named</i> (39_1544) Trib. of Lough Swilly at Drumany	Minor field boundary drain. W = 0.25m, D = 0.01m. No flow at W2-03, but trickle flow downstream near W2-04. Foul smelling, polluted from obvious input upstream near W2-01. Piped under road network down towards W2-05.	None	None	Kick-sampling N/A – trickle flow of polluted water from W2-01. EPA RWB status 2019-2024 Good	Local Importance (lower value)	E
W2 -05	<i>Un-named</i> (39_1544) (Trib. Of Lough Swilly at Dromore)	Minor field boundary drain. W=0.25m; D = 0.01m. Substrates of silty fine gravel, sand and pebble. Patches of instream Fools watercress. Strip of riparian vegetation on True Left (TL): hawthorn, bramble, ivy. True Right (TR) - open bank to RP and excavated land.	Not considered significant, but cannot rule out eel downstream in lower reaches near the estuary confluence.	European eel possible	Q3 (2024 field survey): indicative 'poor' status. EPA RWB status 2019-2024 Good	Local Importance (lower value)	E
W2-06	Bunnagee (39_1288) (Trib. of Lough Swilly)	Minor, virtually dry field drain. Bank-width = 0.6m. Deeply drained. Substrates of soft sediment. Mainly overgrown with bramble, grasses, nettles. TL hedgerow of hawthorn, TR overgrown bramble, tall herb, occasional willow.	None	None	N/A – dry. EPA RWB status 2019-2024 Good	Local Importance (lower value)	E
W2-07	<i>Un-named</i> (39_2934) Trib. of Swilly at Bunnagee	Deeply drained, widened field boundary drain. W = 0.6m; D = 0,04m. Mainly stagnant water over substrates of silty clay and angular cobble. Overgrown banks with hawthorn, bramble, ivy, nettle thistle.	Not considered significant, but cannot rule out eel d/s in lower reaches.	European eel possible	N/A – stagnant. EPA RWB status 2019-2024 Good	Local Importance (lower value)	E

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W2-08	Un-named (39_225) (Trib. of Lough Swilly)	Small, deeply drained field boundary drain. W = 0.5m; D = 0.02m. Piped at head (crossing point). Trickle flow d/s, mainly step/pool to run over substrates of silty cobble, gravel and sand. Obvious pollution from heavy stock access d/s and smell of sewage.	None at crossing point, but cannot rule out eel downstream in lower reaches near the estuary confluence.	European eel possible	Q3 (2024 field survey): indicative 'poor' status. EPA RWB status 2019-2024 Good	Local Importance (lower value)	E
W2-09	Drumreggan (39_1268) (Trib. of Lough Swilly)	Minor, deepened drain. W = 0.5m; D = 0.02m. Piped at head along road past housing (at crossing point). Trickle flow d/s of pipe, mainly step/pool to run over substrates of silty cobble. Obvious pollution from heavy stock access d/s.	None at crossing point, but cannot rule out eel downstream in lower reaches near the estuary confluence.	European eel possible	N/A – insufficient flow, unsuitable for kick-sampling. EPA RWB status 2019-2024 Good	Local Importance (lower value)	E
W2-10 W2-11 W2-12	Farsetmore (39_2476) (Trib. of Lough Swilly)	Small gully stream in fairly natural condition upstream of existing N13, flowing through wooded valley. W = 0.4m; D = 0.04m. Substrates mainly pebble and gravel, some cobble and patches of silt. Quite embedded. Culverted under existing N13 road. Dense riparian cover of fern, ivy, bramble and woodland ash, willow, hawthorn, alder. Highly polluted by heavy stock access u/s of W2-12. There is a significant drop from the existing culvert at W2-10 and low flows above, which likely precludes fish upstream of that point.	Unlikely to be salmonid habitat u/s of W2-12 owing to combination of migration barriers and very low flows u/s of W2-10. Fish passage is currently hindered through existing N13 pipe/culvert owing to raised concrete apron on d/s side with no low flow channel. Eel may occur in lower reaches d/s. Trout and brook lamprey cannot be ruled out in the Zol d/s of W2-12.	Annex II Brook lamprey (<i>Lampetra</i> spp.) cannot be ruled out d/s of W2-12. European eel possible. Unsuitable for White-clawed crayfish or Freshwater Pearl Mussel.	Q3-4 (2024 field survey): indicative 'moderate' status. EPA RWB status 2019-2024 Good	Local Importance (higher value)	D
W2-13 W2-14	Trimragh (39_412) Maghera_Mor 39 (39_413)	W2-13 joins W2-14 to form a single channel that discharges to tidal reach of Isle Burn within Lough Swilly SAC. W2-13 is a minor watercourse W=0.30m; D = 0.01m, deeply drained and modified. Piped beneath N13. W2-14 is also a minor field boundary drain with virtually no flow in summer, comprising silty gravel, cobble substrates. Both merge d/s of the N13 to form a deepened, low gradient channel with stagnant standing water. Grasses, willow herb, bramble, nettle and rushes have overgrown the entire channel.	None at crossing point, but cannot rule out eel downstream in lower reaches near the estuary confluence.	European eel possible	N/A – flows unsuitable for kick-sampling. EPA RWB status 2019-2024 Moderate	Local Importance (lower value)	E
W2-15	Leslie Hill stream (39_741) (Local name: Isle Burn)	Existing N13 crossing consists of double culverts. The channel is entirely tidal with mud substrates and subject to saline intrusion upstream of the crossing. Intertidal soft sediment consists primarily of soft, liquid muds, sloping into the river from dry, compact mud located at the top of the shore adjacent to the	Important route for migrating fish species in and out of the Leslie Hill stream / Corkey River catchment, e.g., salmon, sea trout, lampreys, eel. No freshwater spawning or nursery habitat present. Potential	At Lough Swilly SAC boundary. Migration route for Annex II salmon and sea/river lampreys into non-SAC waters of the Lesliehill stream.	2025 EPA Station 39L050600 – Leslie Hill Stream: Q4 - Good status.	County Importance	C

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		terrestrial area. Steepened, mud/clay banks with grassy bank-tops, sloped by drainage maintenance to embankment on TR and set back embankment on TL. The proposed active travel bridge is located 30m upstream of Lough Swilly SAC boundary. Hydromorphology altered/ impaired as a result of OPW Swilly Embankments Scheme.	foraging area for a number of types of estuarine fish.	European eel	EPA RWB status 2019-2024 Moderate		
W2-16 W2-17	Milk Isle Drains Non-EPA	Series of connected, deepened drains, low gradient, uniform sloping banks of 1.5m bank-width. Discharge via embankment toe drain to River Swilly tidal reach. Patches of stagnant shallow standing water, but mainly dry. Channel overgrown with grasses, willow herb, nettle, reed canary grass, bulrush, and floating duckweed. Substrates were of soft mud and silt.	No salmonid value. Eel cannot be ruled out.	European eel	N/A – unsuitable for kick-sampling.	Local Importance (lower value)	E
W2-18	Swilly 39 Transitional Water (39S02) (Estuarine River Swilly)	Bank-width = 50m. Tidal river with flood embankment on TR (i.e., eastern bank), backed by toe drain that discharges via non-return sluice gates downstream. Intertidal soft sediment consists primarily of soft, liquid muds, sloping into the river from dry, compact mud located at the top of the shore adjacent to the terrestrial area. Steepened, mud/clay banks with grassy bank-tops, sloped by drainage maintenance. No embankment on TL (i.e., western bank). Large range in depth over tide cycle. Scattered, brown algae, <i>Fucus</i> sp. present across the shore line in low abundance. Site classified as typical of the Polychaete / Oligochaete-dominated upper estuarine mud shores habitat – LS.LMu.UEst (JNCC, 2022). Hydromorphology altered/ impaired as a result of OPW Swilly Embankments Scheme.	Important route for migrating fish species in and out of the Swilly River catchment, e.g., salmon, sea trout, lampreys, eel. No freshwater spawning or nursery habitat present. Potential foraging area for a number of types of estuarine fish.	The crossing area is within the Annex I Habitat, Estuaries [1130], and the community complex present is typical of the Mud Community Complex identified in the Lough Swilly SAC Conservation Objectives supporting document (NPWS, 2011) although the faunal diversity and abundances are low. European eel.	2025 EPA Station 39S020190 – Swilly -Br at Newmills: Q4 - Good status. EPA Transitional WB status 2019-2024 Poor	International Importance	A
W2-19	Coaghmill (39_2151) (Trib. of Corranagh Burn: see W2-24)	Small, dry, field boundary drain. Bank-width = 0.5m) in the upper reach of tributary. Stony clay substrates. Clearly runs dry in spring/summer. IG on both banks beyond overgrown riparian borders of gorse, bramble, willow, holly, hawthorn.	None	None	N/A – dry EPA RWB status 2019-2024 Good	Local Importance (lower value)	E

Code	EPA Watercourse name (Segment code)	Habitat Description (2024)	Fisheries value	Protected Aquatic Species / Habitat	Biological Water Quality	Evaluation (NRA, 2009)	Class.
W2-20 W2-21	Bunnagee drains <i>Non-EPA</i>	Series of connected, deepened drains, low gradient, uniform sloping banks of bank-width ca.1.3m. Discharge via embankment toe drain to River Swilly tidal reach. W2-20: patches of stagnant shallow standing water, with water starwort and reed sweet grass, but mainly dry. W2-21 stagnant standing water W = 1.0m; D = 0.04m. Riparian hedgerow on TL banks of mainly hawthorn, with IG beyond. Substrates were of soft muds and silt.	No salmonid value, but eel cannot be ruled out.	European eel	N/A – unsuitable for kick-sampling.	Local Importance (lower value)	E
W2-22	River Swilly embankment toe-drain <i>Non-EPA</i>	Deeply drained, modified channel with soft mud and clay substrates. W = 0.30m; D = 0.01m. Possibly tidally influenced. Marginal and bankside reed canary grass, dock, thistle, nettle, vetch and mares-tail. Scattered bushes of alder, hawthorn.	No salmonid value, but eel cannot be ruled out.	European eel	N/A – unsuitable for kick-sampling.	Local Importance (lower value)	E
W2-23	Dromore 39 (39_2954)	Deepened, ephemeral, drain (W=0.3m). Almost dry during survey of 2024.	None at interaction point	None	N/A – unsuitable for kick-sampling. EPA RWB status 2019-2024 Good	Local Importance (lower value)	E
W2-24	Lurgybrack (39_2153) (Local name: Corranagh Burn)	Main channel of the Corranagh Burn river flowing north towards the Swilly. W = 2m, D = 0.15m. No crossing proposed at this point, but receives drainage from upstream works (W2-25). Moderately steep, wooded gully stream. Step-pool over bedrock to patches of gravelly riffle-run.	Occasional waterfalls are likely to be natural fish migration barriers in this gully. At W2-24 there is potential for trout and eel. Brook lamprey are less likely as there is very little nursery habitat (lack of silt deposits).	Annex II Brook lamprey (<i>Lampetra</i> spp.) cannot be ruled out d/s of W2-24. European eel	Q3-4 (2024 field survey): indicative 'moderate' status. EPA RWB status 2019-2024 Good	Local Importance (higher value)	D
W2-25	Drain in Corranagh <i>Non-EPA</i>	Small (W = 0.75m) channelised deepened drain with trickle flow. Likely ephemeral. Moderately steep with substrates of bedrock and cobble. Iron bacterial coating on substrates.	None	None	Q-value N/A – unsuitable substrates	Local Importance (lower value)	E
W2-26	Drain in Listellian <i>Non-EPA</i>	Deepened, low gradient boundary drain (W=0.5-1.0m) lining a wet rush covered field. Riparian hedgerow of willow and hazel. Stagnant pools and damp patches over silty substrates.	None	None	Q-value N/A – unsuitable silty substrates	Local Importance (lower value)	E
W2-27	Magheraboy 39 (39_471)	Small stony stream 3.7km downstream of the proposed development at W2-26 (above). Wet width was 1.8m in Sept. 2024, but bank width is 3.0m, therefore subject to greater flows.	Good trout and brook lamprey spawning and nursery habitat.	Annex II Brook lamprey (<i>Lampetra</i> spp.) cannot be ruled out at this point in the catchment. European eel.	Q3-4 (2024 field survey) indicative 'moderate' status.	Local Importance (higher value)	D

Code	EPA Watercourse name (Segment code)	Habitat Description (2024)	Fisheries value	Protected Aquatic Species / Habitat	Biological Water Quality	Evaluation (NRA, 2009)	Class.
		Cobble, gravel and coarse sand substrates with some silt deposits. Sheep have access to the stream.		Unsuitable for White-clawed crayfish or Freshwater Pearl Mussel.	EPA RWB status 2019-2024 Good		
W2-28	Dooballagh (Burn) (39_240)	Small wooded gully stream (W=2.8m, D=0.25m), at has recovered fairly natural instream hydromorphology despite historical modifications (drained, old mill). Gravel, pebble, cobble substrates with stable banks and broadleaved riparian corridor: willow, ash, sycamore, ivy. Himalayan balsam noted.	Trout spawning and nursery. 1 x juvenile trout (8cm) captured. Spawning and patchy nursery for brook lamprey	Annex II Brook lamprey (<i>Lampetra</i> spp.) cannot be ruled out. Unsuitable for White-clawed crayfish or Freshwater Pearl Mussel. European eel.	Q4 (2024 field survey): indicative 'good' status. EPA RWB status 2019-2024 Good	Local Importance (higher value)	D

Field Survey – Detailed Site Descriptions Section 3

Code	EPA watercourse name (Segment code)	Habitat Description (2025)	Fisheries value	Protected Aquatic Species / Habitat	Water Quality	Evaluation (NRA, 2009)	Class.
W3-01	Churchland 39 (39_2497)	Linear field drain. Drainage ditch tributary to W3-02.	No fisheries potential though may support some eel activity.	None.	N/A – unsuitable for Q assessment	Local Importance (Lower value)	E
W3-02	Pluck (39_2506) (Lesliehill Stream Tributary)	W=4-5m. D=15-40cm. Canalised channel. Rifle and glide on gravel, small cobble with floc on substrate and silt in glides. No macrophytes, fine algae frequent. Banks vertical 1-2m height. Flood berms along both banks. Rank grassland along banks with occasional alder and hawthorn. Adjacent improved grassland.	No evidence of fish observed and very little cover. Potential salmonid spawning habitat but doubtful water quality evidenced by floc and algae. Potential for movement upstream. Likely to support eel and potential for lamprey. No ammocoetes evident in silts.	Unsuitable for salmon, White-clawed crayfish or Freshwater Pearl Mussel. Eel likely. Annex II Brook lamprey (<i>Lampetra</i> spp.) cannot be ruled out.	EPA status 2019-2024 Moderate.	Local Importance (Higher Value)	D
W3-03	Pluck (39_431) (Lesliehill Stream Tributary)	W=4-5m. D=15-40cm. Canalised channel. Rifle and glide on cobble with floc on substrate and silt in glides. Banks vertical 1m height. Rank grassland & briar scrub along banks with frequent alder, willow and	No evidence of fish observed and very little cover. Potential salmonid spawning habitat but doubtful water quality evidenced by floc and algae. Potential for movement upstream.	Salmon possible, if water quality improved. Unsuitable for salmon, White-clawed crayfish or Freshwater Pearl Mussel. Eel possible. Annex	Q3-4 at crossing point (2025 field survey).	Local Importance (Higher Value)	D

Code	EPA watercourse name (Segment code)	Habitat Description (2025)	Fisheries value	Protected Aquatic Species / Habitat	Water Quality	Evaluation (NRA, 2009)	Class.
		hawthorn. Adjacent improved grassland and tillage land.	Likely to support eel and potential for lamprey. No ammocoetes evident in silts.	II Brook lamprey (<i>Lampetra</i> spp.) cannot be ruled out.	EPA status 2019-2024 Moderate.		
W3-04	Pluck (39_458) (Lesliehill Stream Tributary)	W=2-4m. D=10-50cm. Natural meandering channel with boulder, cobble, gravel and sand substrate. Occasional bedrock exposure with small cascades. Riffle, glide and pool. Fontinalis occasional with slight floc on substrate. Banks wooded with well-developed herbaceous and bryophyte layer.	No evidence of fish observed but habitat highly suited for trout with potential spawning habitat available. Doubtful water quality evidenced by floc and slight grey colour. Potential for movement upstream. Likely to support eel and potential for lamprey. No ammocoetes evident in silts.	Unsuitable for Salmon, White-clawed crayfish or Freshwater Pearl Mussel. Eel possible. Annex II Brook lamprey (<i>Lampetra</i> spp.) cannot be ruled out.	Q3-4 at crossing point (2025 field survey). EPA status 2019-2024 Moderate.	Local Importance (Higher Value)	D
W3-05	Drumoghill (39_2535) (Lesliehill Stream Tributary)	W-1.2m. D=5-15cm. Minor flow in meandering channel with gentle to steep banks. Substrate gravel, sand, cobble and silt with occasional bedrock exposure. Glide, pool and occasional riffle. Banks with rank grassland and ferns, and frequent willow-alder-hazel thicket. No instream macrophytes.	No evidence of fish observed and habitat marginal for trout due to limited flows and doubtful water quality. May support eel and minnow and stickleback.	Unsuitable for Salmon, White-clawed crayfish or Freshwater Pearl Mussel. Eel possible.	Q3-4 at crossing point (2025 field survey). EPA status 2019-2024 Moderate.	Local Importance (Higher Value)	D
W3-06	Drumoghill (39_208)	Linear field drain. Drainage ditch - upper reaches W3-05.	No fisheries potential though may support some eel activity.	None.	N/A – unsuitable for Q assessment	Local Importance (Lower value)	E
W3-07	Doorabble (39_925)	Linear field drain. Drainage ditch Tributary to W3-08.	No fisheries potential though may support some eel activity.	None.	N/A – unsuitable for Q assessment	Local Importance (Lower value)	E
W3-08	Pluck (39_926) (Lesliehill Stream Tributary)	W-1.2m. D=5-15cm. Riffle – gentle glide flow in meandering channel with large gravel and small cobble substrate. Banks c1m steep to vertical well vegetated with rank grassland, gorse and briar scrub, and scattered haw, alder and sycamore. No instream macrophytes. Iron floc and silt in calm sections.	No evidence of fish observed though potential for trout, eel, minnow and stickleback.	Unsuitable for Salmon, White-clawed crayfish or Freshwater Pearl Mussel. Eel possible.	Q4 at crossing point (2025 field survey). EPA status 2019-2024 Moderate.	Local Importance (Higher Value)	D

Code	EPA watercourse name (Segment code)	Habitat Description (2025)	Fisheries value	Protected Aquatic Species / Habitat	Water Quality	Evaluation (NRA, 2009)	Class.
W3-09	Galdonagh Glebe (39_2109)	Linear field drain; minor drainage ditch.	No fisheries potential.	None.	N/A – unsuitable for Q assessment	Local Importance (Lower value)	E
W3-10	Sheskinapoll (01_384) (Upper reaches of Swilly Burn Tributary W3-11)	W=1.5-2.0m. D=15-30cm. Sandy silt and gravel substrate with slack flow. Abundant algae. Heavily overhung herbaceous and woody vegetation including occasional Himalayan Balsam. Existing corrugated 2m pipe culvert under N14.	No fisheries potential.	None.	N/A – unsuitable for Q assessment. EPA status 2019-2024 Moderate.	Local Importance (Higher value)	D
W3-11	Sheskinapoll (01_385) Swilly Burn Tributary	W=1.5-2.0m. D=5-15cm. Straightened channel with cobble dominated substrate. Riffle – gentle glide flow. Heavy algal mat on substrate. Banks 1m steep with rank grassland and thickets of willow, alder and hawthorn.	Minnow present. Conditions potentially suited for trout but water quality unsuited.	Unsuitable for Salmon, White-clawed crayfish or Freshwater Pearl Mussel. Eel possible.	Q3-4 at crossing point (2025 field survey). EPA status 2019-2024 Poor	Local Importance (Higher Value)	D
W3-12	Drumbeg (01_292) (Swilly Burn Tributary)	W=3m. D=10-20cm. Vertical 1m banks with boulder clay over bedrock. Riffle, glide and pool with occasional mini cascade. Substrate cobble and boulder. Green algae present in moderate quantities. Banks with rank grassland and scattered trees, well-developed linear woodland at downstream side of alignment consisting of hazel, alder, willow and sycamore with good herb and bryophyte layer. Some Himalayan balsam and Japanese knotweed stand downstream of minor road.	No evidence of fish. Conditions potentially suited for trout but water quality marginal.	Unsuitable for Salmon, White-clawed crayfish or Freshwater Pearl Mussel. Eel possible. Annex II Brook lamprey (<i>Lampetra</i> spp.) cannot be ruled out.	Q3-4 at d/s crossing point W3-13 (2025 field survey). EPA status 2019-2024 Poor.	Local Importance (Higher Value)	D
W3-13	Drumbeg (01_1332) (Swilly Burn Tributary)	W=3m. D=5-15cm. Meandering channel with glide and occasional riffle upstream of N14. Ranks grassland and briars on steep to vertical 1m high banks with occasional Himalayan balsam. Channel bifurcated downstream of N14 Bridge with occasional small cascade amongst boulders. Mosaic wet willow-alder-ash woodland and scrub along	No evidence of fish at crossing point. Conditions potentially suited for trout but water quality poor and limiting. c.800m downstream of W3-13: 1 no. 0+ trout in 2024 and 5 no. 1+ trout in 2020; no fish in 2022 (Loughs Agency data)	Unsuitable for White-clawed crayfish or Freshwater Pearl Mussel. Eel possible. Annex II Brook lamprey (<i>Lampetra</i> spp.) cannot be ruled out.	Q3-4 at crossing point (2025 field survey). EPA status 2019-2024 Poor.	Local Importance (Higher Value)	D

Code	EPA watercourse name (Segment code)	Habitat Description (2025)	Fisheries value	Protected Aquatic Species / Habitat	Water Quality	Evaluation (NRA, 2009)	Class.
		river, with mature mixed broadleaved fringe along N14. Heavy algal mats and water discoloured.					
W3-14	Swilly Burn River (01_1852)	W=7-8m. D=>50cm. Canalised channel with large flood embankments. Uniform gentle glide flow. Banks with rank grassland and narrow fringe reed canary-grass along base and scattered willow. <i>Potamogeton perfoliatus</i> and <i>Callitriche</i> sp. occasional upstream near R264, where shallower. Hydromorphology impaired as a result of OPW Deelee and Swillyburn Drainage Scheme.	Conditions unsuited for spawning by salmonids and water quality very poor, rendering unsuitable for adult or nursery habitat. Potential for eel and juvenile lamprey but again, limited by poor water quality. Population of Asian Clam in lower reaches (listed IAS).	Annex II lamprey nursery habitat (brook, sea, river), but outside SAC. Migration route for salmon. Unsuitable for White-clawed crayfish or Freshwater Pearl Mussel. Eel likely.	Unsuitable for Q assessment at crossing point. Q3 (EPA data 2025) u/s at R264 Bridge. EPA status 2019-2024 Poor.	Local Importance (Higher Value)	D
W3-15	Tullyrap (01_907)	W=2-3m. D=c50cm. Drainage ditch tributary of Swilly Burn. Canalised channel with steep banks with rank grassland and narrow fringe reed canary-grass along base. Flap valve connection to Swilly Burn. No evident flow and water turbid. <i>Callitriche</i> occasional.	Connectivity to Swilly Burn impassable for fish. May have some eel activity.	Eel possible.	N/A – unsuitable for Q assessment.	Local Importance (Higher Value)	D
W3-16	Tullyrap (01_907)	W=1.0m. D=15-20cm. Drainage ditch tributary of Swilly Burn. Silty sand with glide flow and occasional riffle. Canalised channel with uniform banks of rank grassland and briar scrub adjacent forestry. <i>Glyceria</i> and <i>Callitriche</i> occasional with some algae.	Potentially suitable for trout but unlikely to support any due to impassable connection to Swilly Burn main channel.	Eel possible.	EPA status 2019-2024 Poor. EPA status 2019-2024 Poor.	Local Importance (Higher Value)	D
W3-17	River Deelee (01_1541)	W=12m. D=20-50cm. Canalised channel with large flood embankments. Appears subject to tidal effect. Substrate dominated muds and algal mat with extensive beds of <i>Potamogeton perfoliatus</i> and <i>Callitriche</i> , with occasional <i>Ranunculus</i> sp. and <i>Glyceria fluitans</i> . Banks with rank grassland and lower half with reed canary-grass, nettle, and Himalayan balsam along base.	Conditions unsuited for spawning by salmonids but certainly a migration route for passage of salmonids, lamprey and eels. Potential for lamprey ammocoetes in marginal silt substrate.	Annex II lamprey nursery habitat (brook, sea, river), but outside SAC. Unsuitable for White-clawed crayfish or Freshwater Pearl Mussel. Eel likely. Modified, enriched version of Annex I Habitat 3260	Unsuitable for Q assessment at crossing point. EPA status 2019-2024 Moderate.	County Importance	C

Code	EPA watercourse name (Segment code)	Habitat Description (2025)	Fisheries value	Protected Aquatic Species / Habitat	Water Quality	Evaluation (NRA, 2009)	Class.
		Hydromorphology impaired as a result of OPW Deel and Swillyburn Drainage Scheme.		"floating river vegetation" but not within a site designated for this habitat.			
W3-18	Cavanacor (01_1786) (Trib. Of River Deele)	W=1-1.5m. D=5-20cm. Meandering stream channel in steep sided valley with steep banks with riffle, pool and small cascades. Substrate cobble, gravel and boulders with some silts in pools. No aquatic vegetation. Banks wooded and over-hanging ash, hawthorn, willow. Lower section of channel downstream towards R264 straightened.	Limited potential for trout and access from River Deele doubtful.	Unsuitable for White-clawed crayfish or Freshwater Pearl Mussel. Eel possible.	Q4 at crossing point (2025 field survey). EPA status 2019-2024 Moderate.	Local Importance (Higher Value)	D
W3-19	Murlough 01 (01_1558)	Drainage ditch flowing to River Deele. Minor, drained watercourse. Trickle flow in ditch with heavily over-shadowing treeline.	No fisheries potential.	No suitability for protected species.	N/A – unsuitable for Q assessment. EPA status 2019-2024 Moderate.	Local Importance (Lower Value)	E
W3-20	Ballynabreen (01_1519) (Trib. Of River Deele)	W=0.5-1.0m. D=10cm. Minor stream with steep gradient in scrub covered deep cut. Numerous small cascades with silt and cobbles. High sediment load from adjacent tillage lands.	No fisheries potential.	None.	N/A – unsuitable for Q assessment. EPA status 2019-2024 Moderate.	Local Importance (Higher Value)	D
W3-21	River Finn	W=40m. D=1-2m. Lower slow flowing reaches of river with slack gentle glide flow and steep banks showing evidence of modification. No macrophyte growth in-channel. Strip of marginal reed swamp with fringe of riparian woodland / scrub along southern bank. Designated as River Finn SAC in Republic and River Foyle and Tributaries SAC in Northern Ireland. Designated Salmonid Water under the E.U. Freshwater Fish Directive.	High value as a holding area and migration route for anadromous and catadromous fish. The river in the vicinity of the proposed crossing point and downstream unsuited for salmon spawning and nursery owing to tidal influence and unsuitable habitat (glide, soft substrates). All three lamprey species recorded (Sea Lamprey, River Lamprey and Brook Lamprey). While there is no suitable spawning habitat for lamprey in the vicinity of the proposed crossing, soft substrates along	Q1 species of SAC: Annex II salmon (migration, holding). Lamprey migration and nursery habitat (brook, sea, river) but not QIs of SAC. Annex I habitat 3260 'floating river vegetation' not present. Tidally influenced habitat at crossing location (and	Unsuitable for Q assessment at crossing point. Q3-4 (EPA data 2025) u/s at Castlefinn Bridge. EPA status 2019-2024 Moderate.	International Importance	A

Code	EPA watercourse name (Segment code)	Habitat Description (2025)	Fisheries value	Protected Aquatic Species / Habitat	Water Quality	Evaluation (NRA, 2009)	Class.
			the river banks may support ammocoete larvae.	downstream) is completely unsuitable for pearl mussel.			