

Sustainable Water Network (SWAN)

- Response to Public Consultation -

National Inspection Plan 2018-2021 Domestic Waste Water Treatment Systems:



January 2018

Sustainable Water Network (SWAN)

9 Upper Mount Street

Dublin 2

info@swanireland.ie

(01) 642 55 83

Table of Contents

1. Introduction to SWAN	1
2. Introduction to submission & overarching comment	1
3. Better presentation of findings of NIP programme to date & inclusion of supporting information.....	2
4. DWWTS as a pressure on the water environment.....	2
5. Key finding from the 2016 NIP: Householder behaviour has not improved in relation to DWWTS.....	3
6. Inspection regime.....	3
7. Remediation and enforcement:.....	3
8. Engagement:.....	4
9. Resources	5
10. Wider strategic context: Sludge management	5
11. Issues with Proprietary Systems:	5
Figure 1. Flow-chart illustrating SWAN recommendation for clear presentation of most salient findings from, and implications of, the 2016 National Inspection Plan.....	11
<i>APPENDICES</i>	1
Appendix I	I
SWAN Member Organisations	I

1. Introduction to SWAN

The Sustainable Water Network (SWAN) is an umbrella network of 26 of Ireland's leading environmental NGOs, national and regional, working together to protect and enhance Ireland's aquatic resources through coordinated participation in the implementation of the Water Framework Directive (WFD), the Marine Strategy Framework Directive (MSFD) and other water-related policy and legislation. SWAN member groups are listed in Appendix I. SWAN has been actively engaged in Water Framework Directive (WFD) and other water policy implementation at both national and River Basin District (RBD) level since 2004, responding to water-related public consultations and representing the environmental sector on the Irish Water Stakeholder Forum, the National Water Forum and other water policy-related fora. SWAN has been committed to participation in progress towards regulation and control of Domestic Wastewater Treatment Systems (DWWTSs) from the outset, including making the following formal submissions, in addition to bilateral engagement with the EPA:

1. November 2011: *'Consultation regarding the introduction of a system of inspection and monitoring of septic tanks and other on-site wastewater treatment systems'*;
2. March 2012: Public Consultation on *'Proposed Content of Regulations for Operation and Maintenance of Domestic Waste Water Treatment Systems'*;
3. October 2012: Public Consultation on the Proposed National Inspection Plan for Domestic Waste Water Treatment Systems.
4. March 2015: Public Consultation on the National Inspection Plan for Domestic Wastewater Treatment Systems 2015-2017.

2. Introduction to submission & overarching comment

SWAN's welcomes the opportunity to comment on the draft National Inspection Plan (NIP) 2018-2021 for domestic waste water treatment systems (DWWTS). This submission is based on the draft consultation NIP and also the *'National Inspection Plan, Domestic Waste Water Treatment Systems, Fifth Implementation Report, 1st January - 31st December 2016'*, since this presents the background to the proposed NIP.

In terms of procedure/ process, SWAN would like to seek confirmation that the final output of the consultation exercise will be a revised 2018-2021 NIP, based on stakeholder input and the timeline for that. We would also value clarification on the degree to which it is intended that the proposed NIP will be revised in light of ongoing inspection findings and WFD characterisation work. It is unclear the extent to which the proposed Plan as presented is mutable and if it is to be updated and reviewed over its lifetime, as SWAN believes that it should.

While SWAN very much supports a risk-based methodology in principle, this must not result in a resource-constrained regime that only inspects the very highest risk sites. It is important to remember that the legal context for the NIP, in addition to the WFD, is the judgment (C-188/08) against Ireland under the Waste Framework Directive 1975/442/EC regarding the regulation and control of pollution domestic waste water. This requires that domestic waste water involving septic tanks or other individual waste water treatment must be recovered or disposed of without endangering human health or the environment. It does not permit continued pollution from a proportion of DWWTS. The WFD requires that all waters achieve good status by 2021 (or 2027, with the application of exemptions). Therefore to comply with this, the NIP should include measures that will ensure that all DWWTS currently posing a risk to the water environment be detected and fixed by 2021. The NIP as presented falls short of this.

3. Better presentation of findings of NIP programme to date & inclusion of supporting information

Because it is important that the 2018-2021 NIP should be based on the findings of the NIP to date, in particular the 2016 NIP, it is important that the findings of the 2016 NIP, in addition to being in a separate 'implementation report', are also presented in a summary introductory/contextual section and in more detail in an appendix in the final 2018 NIP. The 'Review of National Inspection Plan 2015-2017' needs to be lengthened to include more important detail. This should include:

1. *How many systems are still non-compliant, including as a percentage?*
By SWAN's calculation, based on figures on pg. 3 of the 2016 NIP Implementation Report, of the 488 that failed in 2015, 362 were closed at time of writing, meaning that **126 (26%) of inspected systems are still non-compliant** up to 2-3 years later. This figure – and that for all inspected sites since the inception of the NIP programme, should be stated clearly and prominently in an expanded 'Review of National Inspection Plan 2015-2017' section.
2. *What is the cause of these more persistent non-compliant sites (26%) and for the delay in addressing them?*
For example, what percentage of these was due to lack of de-sludging, operation and maintenance and how many were due to more challenging issues related to unsuitable soil conditions?
3. *What are the key findings and management implications from the answers to questions 1. & 2. above and how has this informed the proposed 2018-2021 NIP?*
4. *For the more challenging sites found non-compliant, with unsuitable soil conditions and discharges to surface water, how many have not been resolved and what is the timeline for doing so?*

Please see Figure 1. where SWAN sets out our recommendation for clear presentation of most salient findings from, and implications of, the 2016 National Inspection Plan for the 2018-2021 NIP.

SUPPORTING INFORMATION

More information on what is involved in an inspection and the indicators measured (in an Appendix) and also the content of an Advisory Notice would also be extremely useful and informative and SWAN recommends the inclusion of these as Appendices. It would also serve to address issues of transparency and assuage the fears of stakeholders who fear inspections will be either too onerous or not onerous enough.

4. DWWTS as a pressure on the water environment

While it is true that pressures from DWWTS are "relatively low in comparison to other sources such as agricultural activities", (pg. 11, draft NIP), it is important to emphasise that DWWTS can pose a significant risk locally, especially to vulnerable high status waterbodies. The draft River Basin Management Plan (RBMP) reports that DWWTS are a significant pressure in 8% of High Ecological Status River and Lake Water Bodies.

5. Key finding from the 2016 NIP: Householder behaviour has not improved in relation to DWWTS

It is of significant concern to note in the draft document (pg. 6) that *"The results of the inspections to date [in 2016] indicate that **there has been no change in home owner behaviour in relation to the operation and maintenance of DWWTS**".* (SWAN's emphasis). In fact, according to the National Inspection Plan Implementation Report for 2016 *"Failures rates of DWWTS were up, with 49% of sites failing inspection in 2016, compared with 45% in 2015"* (pg. 1). Since the development of the draft NIP should be based on an evaluation of the efficacy of past NIPs against stated objectives, the draft NIP should contain a significantly enhanced and expanded engagement programme, led by experts in the field, to address this failing and it does not. Nor does it indicate any increased resourcing.

6. Inspection regime

SWAN continues to support the risk based methodology for selecting sites for inspection and the enhanced integration of this process with the WFD Characterisation results. However, there is one very significant weakness in the proposed methodology and that is that waterbodies that are designated as being at risk and for which DWWTS have been identified as a significant pressure are designated a lower priority for DWWTS inspections than at risk waterbodies in Areas for Action. This is explained on pg. 21 of the draft NIP, *"It should be noted that while DWWTS have been identified as a significant pressure in Category 3 these areas are not targeted as areas for action under the River Basin Management Plan. This results in Category 3 being a lower priority in terms of the river basin management plan than Category 2"*. The prioritisation of 'Areas for Action', where DWWTS have not be identified as a pressure, and which have been selected based on a whole suite of factors including for policy and resource reasons, over areas for which DWWTSs have been clearly identified as a pressure on the water environment does not constitute a 'risk-based' approach to detecting DWWTS that pose a threat to the environment. This proposal represents the introduction of a serious flaw into the site selection process and SWAN strongly recommends that this prioritisation be reversed in the final NIP.

SWAN holds by the position it has held since the begin of the NIP process that sufficient evidence has not been presented to support the adequacy of 1000 inspections nationwide and we do not support the proposal in the draft NIP to maintain this number of inspections. This represents only approximately 0.2% of all the domestic treatment systems in the country and we believe that economic considerations have led to a system which may be excessively pared-down in terms of temporal and spatial frequency. The Plan states (pg. 22) that *"the aim is that the existence of the programme will increase awareness among home owners in a particular area because of inspections taking place in their community."* However, given that the 2018 NIP indicates that there has been no change in home owner behaviour and the rate of non-compliant sites inspected has slightly increased, it seems clear that this objective has not been achieved and this approach is not successful. This is maybe not surprising given that, for example, only 40 inspections are proposed for Co. Tipperary in 2018. For a county this large, home-owners may well be safe in assuming that if one of the 40 inspections takes place in their community, the likelihood of them also being inspected is quite low.

7. Remediation and enforcement:

According to pg. 9 of the draft NIP, only 294 of 544 Advisory Notices issued in 2016 were closed by September 2017. This means close to half - 46% - of DWWTS were still non-compliant between 9 and 21 months after the inspection. It is of even more serious concern that *"473 advisory notices issued between 2013 -2016 are still*

open; 18 of which are open since 2013" with "451 advisory notices .. open beyond their proposed resolution date". (pg. 1, NIP 2016 Implementation Report). It is SWAN's position that remediating faulty sites so that they no longer cause a threat to human health and the environment is the most important step in the NIP process and we do not believe that this low level of compliance and enforcement is acceptable because it means that a significant proportion of inspected sites remain in breach and potentially posing a risk to the environment well after they have been detected. SWAN recommends much more rigorous enforcement action for those that have been issued with Advisory Notices and have not complied after 3 months. For those below a certain threshold or who demonstrate lack of ability to pay e.g. unemployed, those on the state pension, the remedial work should be grant-aided.

MORE CHALLENGING DWWTS

The NIP 2016 implementation report places emphasis on the fact that *"Operation, maintenance and desludging issues continue to be the main reasons for failures. In most cases, homeowners can easily rectify these issues once they are made aware of how to solve them"*. The 2018-2021 draft NIP also states that *"Sites generally fail inspection due to operation and maintenance issues"*. However, it is very important to note that the DWWTS failing for these reasons constitute 53% (see pg. 1: *"29% of inspected systems failed due to operation and maintenance issues. • 24% of inspected systems failed due to lack of desludging"* and that a significant proportion, 39%, fail for reasons which may pose a more immediate threat to the environment and, indeed not be so "easily" rectified. (The graph on pg. 5 identifies "unlicensed discharge"; "surface ponding" and "leakage" from the system as reasons for failure.) Indeed, the 2016 implementation report states that *"29% of inspected sites failed due to risk to human health or the environment"*. In addition, the 2016 EPA State of the Environment Report highlights the very significant challenge of poorly sited DWWTS: *"Of relevance to water protection is that 16% of all systems inspected failed because either they were unlicensed discharges to surface water or because they had inadequate soil thickness for attenuating pollutants. These types of situations are difficult and/or expensive to correct"*.

While neither the 2016 Implementation Report nor the draft 2018-2021 NIP, provides clarity on this, it is of concern that a proportion of the failed sites, which have not yet been remediated, (i.e. Advisory Notices still open) constitute sites which pose a risk to human health and the environment and continue to pollute months later. The challenge posed by these sites should be more clearly highlighted in the Plan along with a strategy to address them.

8. Engagement:

As was made clear in the earlier 2015-2017 NIP consultation document, the NIP is *"a two-strand approach of education and awareness strategies linked with a risk-based inspection process"* and in stakeholder engagement during that consultation, the EPA defended the inspection number of 1,000 on the basis that it is supported by the twin-track engagement process. While this engagement is to be very much welcomed, and the EPA has indeed worked very closely with some stakeholder groups such as the NFGWS, the lack of improvement in terms of behaviour reported in the NIP again suggests that this engagement process has not been successful. It is also relevant to note that many of activities listed as engagement activities in 2016 were more education and awareness-raising e.g. leaflet publication; website material; school packs, and that much of the work of the engagement working group was with statutory stakeholders rather than with householders (e.g. webinar for Local Authority staff; inspectors' workshops). The proposed development of an engagement strategy by the engagement working group in 2018 is to be welcomed and it is important that this includes face-to-face engagement with householders and their relevant stakeholder groups in order to achieve the

necessary behaviour change. This need to be complemented also however with increased inspections and more rigorous enforcement as outlined above in order to successfully influence householder behaviour.

9. Resources

SWAN believes that the NIP will only be successful if the necessary substantial resources are made available to the EPA and local authorities to ensure:

- adequate temporal and spatial frequency of inspections;
- a meaningful long-term citizen engagement strategy and
- a well-funded grant-aided remediation programme to fix systems which are posing a risk to human health and the environment.

SWAN fully supports the provision of such funding to ensure the delivery of an effective national programme to address the risks posed by DWWTS to human health and the environment. We do not believe that this is currently being provided, nor is such resourcing reflected in the proposed NIP

10. Wider strategic context: Sludge management

The wider strategic context for the NIP is only touched on, in particular in relation to the issue of national capacity to treat sludge. It would be extremely useful for decision-makers and the public if the 50% volume deficit in current urban wastewater treatment (UWWT) infrastructure to treat sludge from DWWTSs was emphasised and the serious attendant sludge management issue identified. This should include reference to the consideration of 'connection to municipal systems' for certain clusters, as recommended in the WFD 2008 Programmes of Measures Study on Unsewered Wastewater Treatment Systems¹. Furthermore there should be a commitment and recommendation that the EPA and DHPCLG liaise closely with Irish Water on this matter, as such an integrated and strategic approach is crucial to finding a solution.

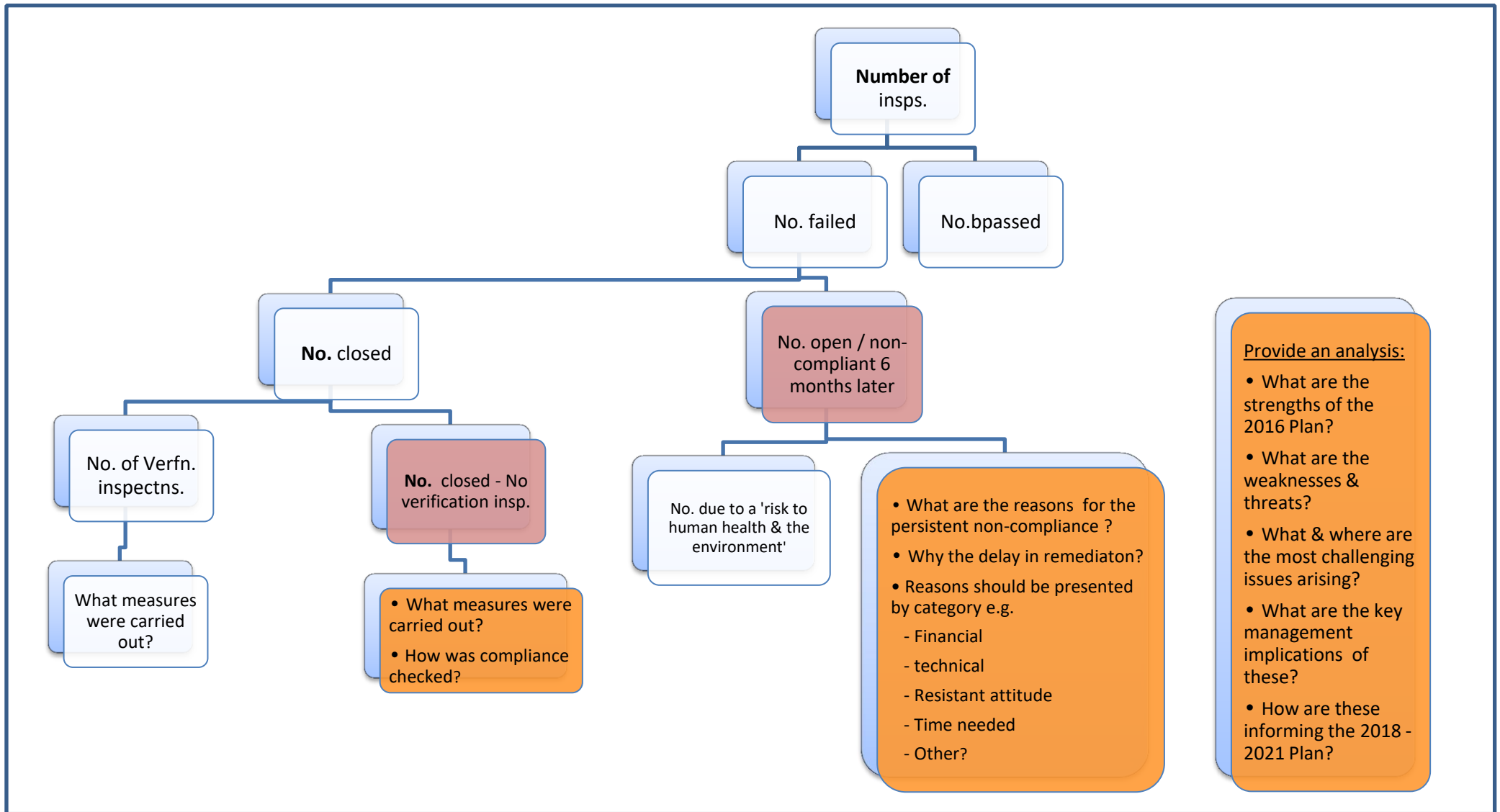
11. Issues with Proprietary Systems:

Difficulties with biocycle units, which are now commonly installed at the instigation of planners and engineers, are not addressed in the NIP or draft Plan. Biological wastewater treatment systems are completely unsuited to use in irregular habitation situations (i.e. holiday homes), as they are subject to "shock loading" when suddenly used, and then don't function correctly. As holiday homes are often on lakeshore margins or other sensitive sites, this is a particularly significant problem for fisheries, lakes and coastal eutrophication. Moreover, many modern wastewater treatment systems for individual dwellings need an electric pump to operate effectively. There is anecdotal evidence that these are often only switched on for building inspections (of new properties) and thereafter switched off to save money, or in some cases because homeowners did not realise they needed to be switched on. This type of problem needs to be acknowledged and addressed. Research in Monaghan and Armagh² found that 43% of proprietary systems were not operating correctly at the time of inspection and had either malfunctioned in some way or were not switched on.

¹ [Western RBD / ESBI, WYG \(2008\) Programme of Measures: Unsewered Wastewater Treatment Systems. National Study. Final Report](#)

² Linnane S., Jordan S., McCarthy V., Jennings E., Carson, A., Sweeney, N., Wynne, C. and McDonald B. (2011) National source protection pilot project final report 2005-2010. Centre for Freshwater Studies Department of Applied Sciences Dundalk Institute of Technology.

Figure 1. Flow-chart illustrating SWAN recommendation for clear presentation of most salient findings from, and implications of, the 2016 National Inspection Plan.



APPENDICES

Appendix I

SWAN Member Organisations

SWAN National Groups		SWAN Regional & Local Groups	
1.	An Taisce	16.	Carra Mask Corrib Water Protection Group
2.	Bat Conservation Ireland		
3.	Birdwatch Ireland	17.	Cavan Leitrim Environmental Awareness Network
4.	Coastwatch Europe Network		
5.	Coomhola Salmon Trust Ltd.	18.	Celebrate Water
6.	Eco-UNESCO	19.	Cork Environmental Forum
		20.	Dodder Action
7.	Friends of the Earth	21	Longford Environmental Alliance
8.	Friends of the Irish Environment	22.	River Shannon Protection Alliance
9.		23.	Macroom District Environmental Group
10.	Irish Peatland Conservation Council	24.	Save Our Lough Derg
11.	Irish Seal Sanctuary	25.	Save Our Lough Ree
12.	Irish Water and Fish Preservation Society	26.	Save The Swilly
13.	Irish Whale and Dolphin Group		
14.	Irish Wildlife Trust	27.	Shannon Whale & Dolphin Foundation
15.	Voice Of Irish Concern for the Environment (VOICE)	28.	Slaney River Trust

SWAN Board of Directors:	
Mark Boyden, Chair	Coomhola Salmon Trust
Mindy O'Brien, Company Secretary	Voice of Irish Concern for the Environment (VOICE)
Karin Dubsy, Director	Coastwatch Europe
David Healy, Director	Friends of the Irish Environment
David Lee, Director	Cork Environmental Forum