# Domestic Waste Water Treatment System (DWWTS) Inspections 2021

## KEY FINDINGS

- Over half of DWWTS inspected failed and more than one quarter were a risk to human health or the environment.
- Three quarters of systems that failed have been fixed.
- The National Inspection Plan 2022-2026 requires increased enforcement by local authorities to resolve failed systems.

## INTRODUCTION

Domestic waste water treatment systems (DWWTS) are used by householders to treat sewage. There are nearly half a million systems in Ireland, mostly septic tanks.

DWWTS can contaminate household wells with harmful bacteria and viruses if not built and operated properly. Excessive releases of nitrogen and phosphorus can cause pollution in rivers and other waters. The draft River Basin Management Plan for Ireland 2022-2027 identifies domestic waste water as a significant pressure on water quality in 188 (4%) rivers and other waters.

The National Inspection Plan is running since mid-2013. Local authorities inspect over 1,000 systems each year under the plan. This report presents the 2021 results.

Inspections under the National Inspection Plan are separate to other DWWTS work by local authorities in relation to grant applications, catchment assessments, complaints and planning/building control

## INSPECTION FINDINGS

Local authorities completed 1,147 inspections under the National Inspection Plan in 2021 (Table 1). Clare, Offaly, Kilkenny and Kerry County Councils did not complete their full 2021 allocation and have reported that they will make this up in 2022.

53% of the systems inspected failed (604). Of concern is the fact that since 2013 the failure rate has remained high, typically between 44% to 57%.

29% of systems inspected in 2021 were a risk to human health or the environment (337). Reasons for failures were in two categories (Figure 1):

- Operational (de-sludging and maintenance);
- Structural defects (illegal discharges to ditches/streams, leaks, ponding and rainwater ingress).

## LOCAL AUTHORITY ENFORCEMENT

Local authorities issue advisory notices requiring householders to fix systems that fail inspection.

75% of systems that failed during 2013–2021 were fixed by the end of 2021 (3,386) (Table 1). Fourteen local authority areas have a higher rate of fixed systems as highlighted in green in Table 1. The resolution of failed systems in counties Roscommon and Leitrim is particularly low as highlighted in red in Table 1 and needs to be addressed urgently.

The failure to resolve older advisory notices has been highlighted in annual reports for some years and is an increasing concern. The number of DWWTS failures open more than two years has accumulated year on year to 533 at the end of 2021 (Figure 2) which must be addressed. Local authorities must increase enforcement to ensure DWWTS are fixed in a timely manner as set out in the National Inspection Plan 2022-2026. Seven local authorities have taken 36 legal actions for failure to fix DWWTS since 2013.

## NATIONAL INSPECTION PLAN REVIEW

Following public consultation, the National Inspection Plan was reviewed in 2021 and a new 5-year plan published for 2022-2026. The 2022-2026 plan focuses inspections on areas near rivers where there is greater risk to water quality and areas with shallow soils where there is greater risk to household wells (Figure 3). It increases the minimum amount of inspections per annum from 1,000 to 1,200 in 2023. Importantly it highlights the need for local authorities to ensure all DWWTS failures are followed up including prosecution where warranted in accordance with the Water Services Act 2007 (as amended). Local authorities are also required to promote broader compliance through public engagement activities.

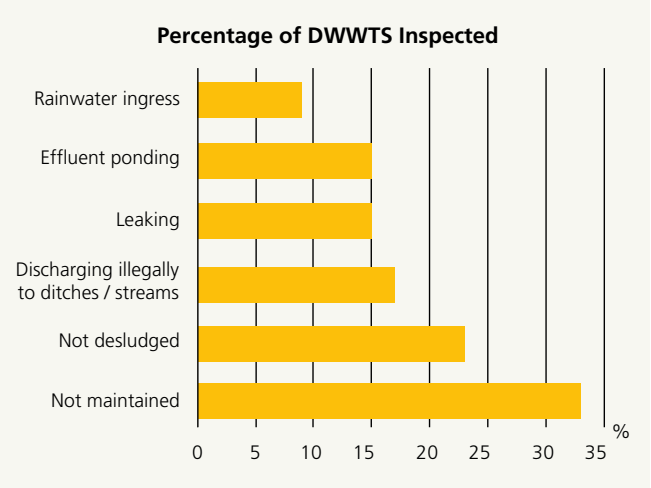


**FIGURE 1:** Reasons for DWWTS failures 2021 (individual DWWTS can fail for multiple reasons)

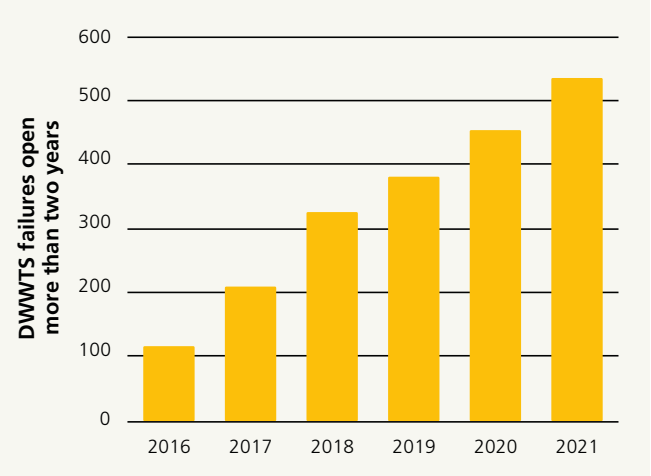


**FIGURE 2:** DWWTS failures open more than two years at the end of each year 2016 to 2021

## WHAT CAN HOUSEHOLDERS DO?

The failure rate shows that there are many systems that are a risk to people's health and the environment. This is especially concerning if DWWTS are near household wells or if effluent is ponding in the garden or being discharged to ditches/streams.

Householders should ensure their DWWTS are properly built and maintained and their wells are tested to protect the health of their family. You can get guidance on the EPA website if you are concerned about your DWWTS or well.

DWWTS grants up to €5,000 are available to fix DWWTS in certain circumstances. Details of the eligibility criteria are available on the Department of Housing, Local Government and Heritage website and from the local authorities who administer the grants. Private well grants may also be available for improvement works to private water supplies.

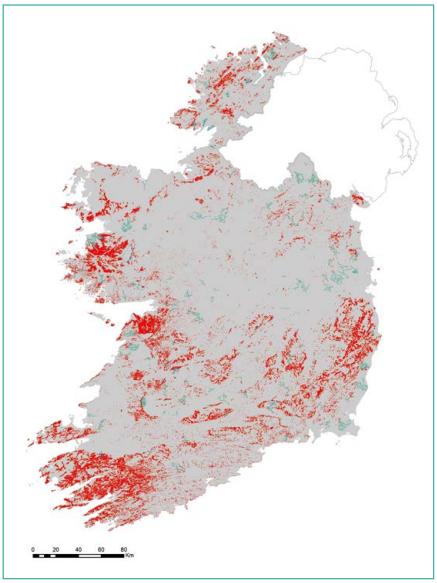

**FIGURE 3:** Allocation of higher percentage of inspections to areas with higher relative risk

**TABLE 1:** Inspection findings by local authority area (ranked by percent of systems fixed)

| LOCAL AUTHORITY | Inspections required 2021* | Inspections done 2021 | Failure rate 2021 | Systems failing 2013-2021 | Percent fixed at end 2021 |
|---|---|---|---|---|---|
| Cork City | 0 | 6 | 33% | 2 | 100% |
| Louth | 8 | 10 | 20% | 45 | 98% |
| Fingal | 6 | 9 | 33% | 35 | 94% |
| Longford | 9 | 11 | 45% | 49 | 94% |
| Wicklow | 31 | 32 | 63% | 108 | 93% |
| Limerick | 33 | 46 | 43% | 214 | 87% |
| Carlow | 15 | 20 | 25% | 29 | 86% |
| Cork County | 60 | 62 | 60% | 389 | 86% |
| South Dublin | 3 | 4 | 75% | 25 | 84% |
| Donegal | 118 | 121 | 36% | 274 | 82% |
| Wexford | 65 | 91 | 74% | 644 | 82% |
| Kerry | 77 | 76 | 54% | 249 | 82% |
| Cavan | 32 | 37 | 32% | 127 | 80% |
| Galway City | 0 | 0 | n/a | 5 | 80% |
| Kilkenny | 27 | 14 | 43% | 131 | 79% |
| Monaghan | 39 | 43 | 44% | 89 | 79% |
| Dun Laoghaire Rathdown | 1 | 1 | 100% | 14 | 79% |
| Clare | 39 | 23 | 57% | 163 | 78% |
| Westmeath | 20 | 23 | 26% | 35 | 77% |
| Sligo | 41 | 41 | 54% | 132 | 76% |
| Laois | 24 | 25 | 24% | 83 | 75% |
| Offaly | 18 | 4 | 50% | 57 | 74% |
| Meath | 63 | 71 | 94% | 299 | 73% |
| Kildare | 34 | 46 | 50% | 107 | 66% |
| Mayo | 70 | 74 | 70% | 422 | 65% |
| Waterford | 20 | 20 | 30% | 36 | 61% |
| Galway County | 101 | 101 | 39% | 282 | 61% |
| Tipperary | 62 | 62 | 34% | 131 | 60% |
| Leitrim | 23 | 27 | 89% | 139 | 47% |
| Roscommon | 35 | 47 | 79% | 200 | 45% |
| **Total** | **1,074** | **1,147** | **53%** | **4,515** | **75%** |

* Includes inspections carried forward from 2020

**TABLE KEY**

High rate of DWWTS failures fixed | Moderate rate of DWWTS failures fixed | Low rate of DWWTS failures fixed