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| At a glance | **1** | This document provides additional context around the information requested in the RfI Response Template C. |

CONFIDENCE GRADES

1. This RfI includes a confidence grading system which requires each Local Authority to apply a level of confidence to each request.
2. The confidence grade system has been developed to provide a reasoned basis for Local Authorities to qualify information in respect to reliability and accuracy. It is essential that proper care and a high level of application is given to the assignment of confidence grades to data requiring such annexation.
3. There are two elements to the confidence grades:

* Reliability bands (A to D); and
* Accuracy bands (1 to 6).

1. The reliability bands are assigned according to the source of the information.

| **Reliability Band** | **Description** |
| --- | --- |
| A | Sound textual records, procedures, investigations or analysis properly documented and recognised as the best method of assessment. |
| B | As A but with minor shortcomings. Examples include old assessment, some missing documentation, some reliance on unconfirmed reports, some use of extrapolation. |
| C | Extrapolation from limited sample for which Grade A or B data is available. |
| D | Unconfirmed verbal reports, cursory inspections or analysis. |

1. Accuracy bands provide the margin of error around the central estimate.

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| **Accuracy Band** | **Accuracy to or within +/-** | **but outside +/-** |
| 1 | 1% | - |
| 2 | 5% | 1% |
| 3 | 10% | 5% |
| 4 | 25% | 10% |
| 5 | 50% | 25% |
| 6 | 100% | 50% |
| X | Accuracy outside +/- 100 %, zero or small numbers or otherwise incompatible, see example below. | |

1. The X grade is generally only likely to be appropriate where a zero has been entered.
2. The overall confidence grade is a combination of the reliability and accuracy band. For example:

* A2: Data based on sound records etc. (A, highly reliable) and estimated to be within +/- 5% (accuracy band 2);
* C4: Data based on extrapolation from a limited sample (C, unreliable) and estimated to be within +/- 25% (accuracy band 4);
* AX: Data based on sound records etc. (A, highly reliable) but value too small to calculate any meaningful accuracy percentage.

1. The table below provides a list of compatible confidence grades.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Compatible Confidence Grades** | | | | |
| **Accuracy Band** | **Reliability Band** | | | |
|  | A | B | C | D |
| 1 | A1 |  |  |  |
| 2 | A2 | B2 | C2 |  |
| 3 | A3 | B3 | C3 | D3 |
| 4 | A4 | B4 | C4 | D4 |
| 5 |  |  | C5 | D5 |
| 6 |  |  |  | D6 |
| X | AX | BX | CX | DX |

1. As shown in the table above, certain reliability and accuracy band combinations are considered to be incompatible – for example, D1 or D2.
2. When selecting a confidence grade from the drop-down boxes provided in the template, it would be appreciated if each Local Authority could add explanatory comments for responses with lower confidence levels in the Comments field.

GLOSSARY

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| --- | --- |
| **MAVs** | Maximum allowed values |
| **THMs** | Trihalomethanes |
| **PCV** | Prescribed concentration or value (Maximum level allowed) |
| **BOD** | Biological oxygen demand |
| **CSOs** | Combined sewer overflows (wastewater and stormwater) |

TABLE C: GENERAL GUIDANCE

1. In the United Kingdom, water companies organise their operational activities into smaller sub-areas (i.e. wastewater drainage areas, stormwater areas, metered areas, and water supply areas). These allow water companies to provide more information at a disaggregated level on water quality and environmental factors across the overall company area. The disaggregation methodology is chosen by the water company and could typically be, for example, by district meter area, by treatment plant, by river basin. These areas are known as operational areas. If the Local Authority similarly organises its operations at a more disaggregated level for reporting water quality and environmental information for the following tables, the Local Authorities are requested to report information by operational area. These areas could be different for water, wastewater and stormwater. In the event that the Local Authority does not have such areas, it is requested to provide the information for the whole Local Authority.
2. For example, in Scotland, Scottish Water defines wastewater drainage areas as the extent of the sewered area draining to a particular wastewater treatment works.

TABLE C1: WATER QUALITY OUTPUTS - COMPLIANCE

1. This table covers:
   * **Water quality determinand compliance in water distribution zones:** These lines record the general compliance with the water quality regulations of the water entering the distribution system for the reporting year ending 30 June 2020.
   * **Compliance with bacteriological parameters at water treatment plants and service reservoirs:** These lines give a breakdown of compliance programmes for coliforms at treatment plants and service reservoirs. The quality related information from these information requirements will be used to examine performance with quality standards, the outputs achieved against expenditure and the quality of the water received by customers.
2. Table C1 requests information by water distribution zone. Consistent with the Drinking Water Standards New Zealand Annual Report, water distribution zone is defined as an identifiable part of the water supply network.
3. Please explain in the commentary the number of samples considered as failing due to data loss incidents in the reporting year.

Guidance to the Local Authority

1. On completion of Table C1 the Local Authority should ensure that no input cell is left blank.

BLOCK 1: SUMMARY

|  |  |  |  |
| --- | --- | --- | --- |
| **C1.1** | **Number of determinands taken – unique spot samples (manual monitoring)** | | **Nr.** |
| *Definition:* | | Please provide the number of unique network or distribution zone samples taken. Recognising that each sample will be tested against multiple determinands, Local Authorities should provide the number of unique samples – e.g. a sample tested against six main determinands would be counted as one sample (and not six).  This excludes samples taken through online continuous monitoring. Local Authorities should only report unique spot samples.  In Scotland, samples are taken at the customer tap. Given that no such requirement exists in New Zealand, Local Authorities are required to provide any samples taken for water quality after treatment. These could, for example, be samples taken at dedicated sample points in the distribution network (as was the case for Watercare). | |
| *Processing Rules:* | | Input field | |

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| **C1.1b** | **Number of determinands taken – continuous monitoring** | | **Nr.** |
| *Definition:* | | Please provide the number of unique network or distribution zone samples taken. Recognising that each sample will be tested against multiple determinands, Local Authorities should provide the number of unique samples – e.g. a sample tested against six main determinands would be counted as one sample (and not six).  This excludes unique spot samples taken through manual monitoring. Local Authorities should only report continuous monitoring samples.  In Scotland, samples are taken at the customer tap. Given that no such requirement exists in New Zealand, Local Authorities are required to provide any samples taken for water quality after treatment. These could, for example, be samples taken at dedicated sample points in the distribution network (as was the case for Watercare). | |
| *Processing Rules:* | | Input field | |
| **C1.2** | **Sample determinands failing – unique spot samples (manual monitoring)** | | **Nr.** |
| *Definition:* | | Please provide the number of samples taken (as reported in C1.1) which exceeded the maximum allowable values (MAVs) for determinands as set out in the Drinking Water Standards for New Zealand 2005 (revised 2018) requirements.  This excludes samples taken through online continuous monitoring. Local Authorities should only report unique spot samples.  If a sample fails against 2 determinands sampled, for example, this would still be counted as 1 sample failing. | |
| *Processing Rules:* | | Input field | |

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| **C1.2b** | **Sample determinands failing – continuous monitoring** | | **Nr.** |
| *Definition:* | | Please provide the number of samples taken (as reported in C1.1b) which exceeded the maximum allowable values (MAVs) for determinands as set out in the Drinking Water Standards for New Zealand 2005 (revised 2018) requirements.  This excludes unique spot samples taken through manual monitoring. Local Authorities should only report continuous monitoring samples.  Please provide in the commentary the number of samples considered as a fail due to data loss incidents in the reporting year.  If a sample fails against 2 determinands sampled, for example, this would still be counted as 1 sample failing. | |
| *Processing Rules:* | | Input field | |
| **C1.3** | **Number of water distribution zones in the Local Authority’s supply area** | | **Nr.** |
| *Definition:* | | The total number of water supply zones the authority has. Water distribution zone is defined as an identifiable part of the water supply network. This is in line with the Drinking-water Standards for New Zealand 2005 (Revised 2018). | |
| *Processing Rules:* | | Input field | |
| **C1.4** | **Number of water distribution zones reporting determinand failures** | | **Nr.** |
| *Definition:* | | The total number of water supply zones where determinand failures are reported. Water distribution zone is defined as an identifiable part of the water supply network. This is in line with the Drinking-water Standards for New Zealand 2005 (Revised 2018).  For the avoidance of doubt, a single failure in a distribution zone would mean that the zone would be non-compliant. | |
| *Processing Rules:* | | Input field | |

BLOCK 2: SPECIFIC PARAMETERS WITHIN WATER SUPPLY ZONES

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| --- | --- | --- | --- |
| **C1.5** | **Number of distribution zones that exceed the compliance value for total coliforms** | | **Nr.** |
| *Definition:* | | The total number of zones exceeding the compliance value for total coliforms for reporting year. Water distribution zone is defined as an identifiable part of the water supply network. This is in line with the Drinking-water Standards for New Zealand 2005 (Revised 2018).  For the avoidance of doubt, a single failure in a distribution zone would mean that the zone would be non-compliant. | |
| *Processing rules:* | | Input field | |

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| --- | --- | --- | --- |
| **C1.6** | **Number of distribution zones that exceed the compliance value for faecal coliforms** | | **Nr.** |
| *Definition:* | | The total number of zones exceeding the compliance value for faecal coliforms (e.g. E-coli, Enterococci) for the reporting year. Water distribution zone is defined as an identifiable part of the water supply network. This is in line with the Drinking-water Standards for New Zealand 2005 (Revised 2018).  In Scotland, the Drinking Water Quality Regulator will only accept manual sampling. In New Zealand, however, we understand that continuous monitoring can be used for some parameters. For the avoidance of doubt, local authorities should report on the same sampling basis that they would use to report as part of the Drinking Water Standards for New Zealand for the relevant parameter.  For the avoidance of doubt, a single failure in a distribution zone would mean that the zone would be non-compliant. | |
| *Processing rules:* | | Input field | |
| **C1.7** | **Number of distribution zones exceeding the guideline value for colour** | | **Nr.** |
| *Definition:* | | The total number of zones exceeding the guideline value for colour during the reporting year. Water distribution zone is defined as an identifiable part of the water supply network. This is in line with the Drinking-water Standards for New Zealand 2005 (Revised 2018). | |
| *Processing rules:* | | Input field | |
| **C1.8** | **Number of distribution zones exceeding the guideline value for turbidity** | | **Nr.** |
| *Definition:* | | The total number of zones exceeding the guideline value for turbidity failures (outside of the treatment plant) during the reporting year. Water distribution zone is defined as an identifiable part of the water supply network. This is in line with the Drinking-water Standards for New Zealand 2005 (Revised 2018). | |
| *Processing rules:* | | Input field | |
| **C1.9** | **Number of distribution zones outside of the guideline range for hydrogen ion (pH)** | | **Nr.** |
| *Definition:* | | The total number of zones outside of the guideline range for hydrogen ion (pH) during the reporting year. Water distribution zone is defined as an identifiable part of the water supply network. This is in line with the Drinking-water Standards for New Zealand 2005 (Revised 2018). | |
| *Processing rules:* | | Input field | |
| **C1.10** | **Number of distribution zones exceeding the guideline value for aluminium** | | **Nr.** |
| *Definition:* | | The total number of zones reporting aluminium exceeding the guideline value for aluminium during the reporting year. Water distribution zone is defined as an identifiable part of the water supply network. This is in line with the Drinking-water Standards for New Zealand 2005 (Revised 2018). | |
| *Processing rules:* | | Input field | |

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| --- | --- | --- | --- |
| **C1.11** | **Number of distribution zones exceeding the guideline value for iron** | | **Nr.** |
| *Definition:* | | The total number of zones exceeding the guideline value for iron failures during the reporting year. Water distribution zone is defined as an identifiable part of the water supply network. This is in line with the Drinking-water Standards for New Zealand 2005 (Revised 2018). | |
| *Processing rules:* | | Input field | |
| **C1.12** | **Number of distribution zones exceeding the guideline value for manganese** | | **Nr.** |
| *Definition:* | | The total number of zones exceeding the guideline value for manganese failures during the reporting year. Water distribution zone is defined as an identifiable part of the water supply network. This is in line with the Drinking-water Standards for New Zealand 2005 (Revised 2018). | |
| *Processing rules:* | | Input field | |
| **C1.13** | **Number of distribution zones exceeding the maximum acceptable value for lead** | | **Nr.** |
| *Definition:* | | The total number of zones exceeding the maximum acceptable value (MAV) for lead during the reporting year. Water distribution zone is defined as an identifiable part of the water supply network. This is in line with the Drinking-water Standards for New Zealand 2005 (Revised 2018). | |
| *Processing rules:* | | Input field | |
| **C1.14** | **Number of distribution zones exceeding the maximum acceptable value for trihalomethanes** | | **Nr.** |
| *Definition:* | | The total number of zones exceeding the maximum acceptable value (MAV) for trihalomethanes during the reporting year. Water distribution zone is defined as an identifiable part of the water supply network. This is in line with the Drinking-water Standards for New Zealand 2005 (Revised 2018). | |
| *Processing rules:* | | Input field | |

|  |  |  |  |
| --- | --- | --- | --- |
| **C1.15** | **Number of distribution zones exceeding another maximum acceptable or guideline value for all other parameters** | | **Nr.** |
| *Definition:* | | The total number of zones reporting failures other than those listed in C1.5 – C1.14 above  The parameters which have failed should be listed per zone in the commentary. This is to show any determinand in maximum acceptable values (MAVs) or guideline values of DWSNZ.  Water distribution zone is defined as an identifiable part of the water supply network. This is in line with the Drinking-water Standards for New Zealand 2005 (Revised 2018). | |
| *Processing rules:* | | Input field | |

BLOCK 3: SAMPLES TAKEN FROM WATER LEAVING THE WATER TREATMENT PLANTS (WTPs)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **C1.16** | **Number of total coliform samples taken** | | | **Nr.** |
| *Definition:* | | | The total number of total coliform samples taken from water leaving the water treatment plants.  In Scotland, the Drinking Water Quality Regulator will only accept manual sampling. In New Zealand, however, we understand that continuous monitoring can be used for some parameters. For the avoidance of doubt, local authorities should report on the same sampling basis that they would use to report as part of the Drinking Water Standards New Zealand for the relevant parameter. | |
| *Processing rules:* | | | Input field | |
| **C1.17** | **Number of samples that exceeded the compliance value for total coliforms** | | | **Nr.** |
| Definition: | | The total number of samples in C1.16 that exceeded the compliance value for total coliforms.  For the avoidance of doubt, this line should include transgressions. | | |
| Processing rules: | | Input field | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **C1.18** | **Number of samples that exceeded the compliance value for faecal coliforms** | | **Nr.** |
| *Definition:* | | The total number of faecal coliform samples taken from water leaving the treatment plants that exceeded the compliance value for faecal coliforms.  In Scotland, the Drinking Water Quality Regulator will only accept manual sampling. In New Zealand, however, we understand that continuous monitoring can be used for some parameters. For the avoidance of doubt, local authorities should report on the same sampling basis that they would use to report as part of the Drinking Water Standards for New Zealand for the relevant parameter.  For the avoidance of doubt, this line should include transgressions. | |
| *Processing rules:* | | Input field | |
| **C1.19** | **Number of WTPs not meeting parasitic protozoa compliance criteria in DWSNZ** | | **Nr.** |
| *Definition:* | | The total number of WTPs not meeting parasitic protozoa compliance criteria in DWSNZ during the reporting year.  For the avoidance of doubt, a single failure in a WTP would mean that the WTP would be non-compliant  This line should include transgressions. | |
| *Processing rules:* | | Input field | |

BLOCK 4: WTPs/SERVICE RESERVOIRS

|  |  |  |  |
| --- | --- | --- | --- |
| **C1.20** | **Number of untreated supplies** | | **Nr.** |
| *Definition:* | | The total number of untreated water supplies. | |
| *Processing rules:* | | Input field | |
| **C1.21** | **Number of WTPs subject to temporary exemptions for non-compliance** | | **Nr.** |
| *Definition:* | | The total number of water treatment plants where one or more water quality parameters is subject to temporary exemptions for non-compliance. | |
| *Processing rules:* | | Input field | |

|  |  |  |  |
| --- | --- | --- | --- |
| **C1.22** | **Number of service reservoirs tested for total coliforms** | | **Nr.** |
| *Definition:* | | The total number of service reservoirs where tests for coliforms have been carried out during the reporting year.  In Scotland, the Drinking Water Quality Regulator will only accept manual sampling. In New Zealand, however, we understand that continuous monitoring can be used for some parameters. For the avoidance of doubt, local authorities should report on the same sampling basis that they would use to report as part of the Drinking Water Standards for New Zealand for the relevant parameter. | |
| *Processing rules:* | | Input field | |
| **C1.23** | **Number of service reservoirs having>5% of total coliform samples exceed the compliance value** | | **Nr.** |
| *Definition:* | | The total number of service reservoirs where more than 5% of coliform samples exceed the compliance value.  In Scotland, the Drinking Water Quality Regulator will only accept manual sampling. In New Zealand, however, we understand that continuous monitoring can be used for some parameters. For the avoidance of doubt, local authorities should report on the same sampling basis that they would use to report as part of the Drinking Water Standards for New Zealand for the relevant parameter. | |
| *Processing rules:* | | Input field | |

TABLE C2: WATER QUALITY OUTPUTS – ASSET PERFORMANCE

1. This table identifies the extent to which water treatment plants are at risk of non-compliance for six key parameters by monitoring the percentage of samples exceeding 50% of the compliance value. This information will assist in the prioritising of capital maintenance expenditure to minimise the risk of non-compliance.
2. The Local Authority should complete report data for the financial year ending 30 June 2020 (the reporting year – 2020) and the financial year ending 30 June 2019 (the previous reporting year – 2019).

BLOCK 1: COLIFORMS

|  |  |  |  |
| --- | --- | --- | --- |
| **C2.1** | **Number of WTPs tested for total coliforms** | | **Nr.** |
| *Definition:* | | The total number of water treatment plants where the water has been tested for total coliforms.  In Scotland, the Drinking Water Quality Regulator will only accept manual sampling. In New Zealand, however, we understand that continuous monitoring can be used for some parameters. For the avoidance of doubt, local authorities should report on the same sampling basis that they would use to report as part of the Drinking Water Standards for New Zealand for the relevant parameter.  This line should include transgressions. | |
| *Processing rules:* | | Input field | |
| **C2.2** | **Number of WTPs where any samples exceed the compliance value** | | **Nr.** |
| *Definition:* | | The total number of water treatment plants that exceed the compliance value for total coliforms.  For the avoidance of doubt, a WTP exceeding the compliance value for one sample would mean that the WTP would be non-compliant. | |
| *Processing rules:* | | Input field | |

BLOCK 2: TRIHALOMETHANES (THMs)

|  |  |  |  |
| --- | --- | --- | --- |
| **C2.3** | **Number of distribution zones tested for THMs** | | **Nr.** |
| *Definition:* | | The total number of distribution zones where the water has been tested for trihalomethanes. | |
| *Processing rules:* | | Input field | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **C2.4** | **Number of distribution zones where>=25% of samples exceed 50% of the maximum acceptable value** | | | **Nr.** |
| Definition: | | The total number of distribution zones where greater than or equal to 25% of the samples taken exceed 50% of the THM maximum acceptable value.  In Scotland, the Drinking Water Quality Regulator will only accept manual sampling. In New Zealand, however, we understand that continuous monitoring can be used for some parameters. For the avoidance of doubt, local authorities should report on the same sampling basis that they would use to report as part of the Drinking Water Standards for New Zealand for the relevant parameter.  This line should include transgressions. | | |
| Processing rules: | | Input field | | |
| **C2.5** | **Number of distribution zones where between 10 to 25% of samples exceed 50% of the maximum acceptable value** | | **Nr.** | |
| *Definition:* | | The total number of distribution zones where between 10 and 25% of samples taken exceed 50% of the THM maximum acceptable value.  In Scotland, the Drinking Water Quality Regulator will only accept manual sampling. In New Zealand, however, we understand that continuous monitoring can be used for some parameters. For the avoidance of doubt, local authorities should report on the same sampling basis that they would use to report as part of the Drinking Water Standards New Zealand for the relevant parameter.  This line should include transgressions. | | |
| *Processing rules:* | | Input field | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **C2.6** | **Number of distribution zones where <10% of samples exceed 50% of the maximum acceptable value** | | **Nr.** |
| *Definition:* | | The total number of distribution zones where less than 10% of the samples taken exceed 50% of the THM maximum acceptable value.  In Scotland, the Drinking Water Quality Regulator will only accept manual sampling. In New Zealand, however, we understand that continuous monitoring can be used for some parameters. For the avoidance of doubt, local authorities should report on the same sampling basis that they would use to report as part of the Drinking Water Standards New Zealand for the relevant parameter.  This line should include transgressions. | |
| *Processing rules:* | | Input field | |

BLOCK 3: TURBIDITY

|  |  |  |  |
| --- | --- | --- | --- |
| **C2.7** | **Number of WTPs tested for turbidity** | | **Nr.** |
| *Definition:* | | The total number of water treatment plants where the water has been tested for turbidity. | |
| *Processing rules:* | | Input field | |
| **C2.8** | **Number of WTPs where>=25% of samples exceed 50% of the guideline value** | | **Nr.** |
| *Definition:* | | The total number of water treatment plants where the greater than or equal to 25% of the samples taken exceed 50% of the turbidity guideline value.  In Scotland, the Drinking Water Quality Regulator will only accept manual sampling. In New Zealand, however, we understand that continuous monitoring can be used for some parameters. For the avoidance of doubt, local authorities should report on the same sampling basis that they would use to report as part of the Drinking Water Standards for New Zealand for the relevant parameter.  This line should include transgressions. | |
| *Processing rules:* | | Input field | |

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| --- | --- | --- | --- |
| **C2.9** | **Number of WTPs where between 10 to 25% of samples exceed 50% of the guideline value** | | **Nr.** |
| *Definition:* | | The total number of water treatment plants where between 10 and 25% of samples taken exceed 50% of the turbidity guideline value.  In Scotland, the Drinking Water Quality Regulator will only accept manual sampling. In New Zealand, however, we understand that continuous monitoring can be used for some parameters. For the avoidance of doubt, local authorities should report on the same sampling basis that they would use to report as part of the Drinking Water Standards for New Zealand for the relevant parameter.  This line should include transgressions. | |
| *Processing rules:* | | Input field | |
| **C2.10** | **Number of WTPs where <10% of samples exceed 50% of the guideline value** | | **Nr.** |
| *Definition:* | | The total number of water treatment plants where less than 10% of the samples taken exceed 50% of the turbidity guideline value.  In Scotland, the Drinking Water Quality Regulator will only accept manual sampling. In New Zealand, however, we understand that continuous monitoring can be used for some parameters. For the avoidance of doubt, local authorities should report on the same sampling basis that they would use to report as part of the Drinking Water Standards for New Zealand for the relevant parameter.  This line should include transgressions. | |
| *Processing rules:* | | Input field | |

BLOCK 4: ALUMINIUM

|  |  |  |  |
| --- | --- | --- | --- |
| **C2.11** | **Number of WTPs tested for aluminium** | | **Nr.** |
| *Definition:* | | The total number of water treatment plants where the water has been tested for aluminium. | |
| *Processing rules:* | | Input field | |
| **C2.12** | **Number of WTPs where>=25% of samples exceed 50% of the guideline value** | | **Nr.** |
| *Definition:* | | The total number of water treatment plants where greater than or equal to 25% of the samples taken exceed 50% of the aluminium guideline value.  In Scotland, the Drinking Water Quality Regulator will only accept manual sampling. In New Zealand, however, we understand that continuous monitoring can be used for some parameters. For the avoidance of doubt, local authorities should report on the same sampling basis that they would use to report as part of the Drinking Water Standards for New Zealand for the relevant parameter.  This line should include transgressions. | |
| *Processing rules:* | | Input field | |
| **C2.13** | **Number of WTPs where between 10 to 25% of samples exceed 50% of the guideline value** | | **Nr.** |
| *Definition:* | | The total number of water treatment plants where between 10 and 25% of samples taken exceed 50% of the aluminium compliance value.  In Scotland, the Drinking Water Quality Regulator will only accept manual sampling. In New Zealand, however, we understand that continuous monitoring can be used for some parameters. For the avoidance of doubt, local authorities should report on the same sampling basis that they would use to report as part of the Drinking Water Standards for New Zealand for the relevant parameter.  This line should include transgressions. | |
| *Processing rules:* | | Input field | |

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| --- | --- | --- | --- |
| **C2.14** | **Number of WTPs where <10% of samples exceed 50% of the guideline value** | | **Nr.** |
| *Definition:* | | The total number of water treatment plants where less than 10% of the samples taken exceed 50% of the aluminium guideline value.  In Scotland, the Drinking Water Quality Regulator will only accept manual sampling. In New Zealand, however, we understand that continuous monitoring can be used for some parameters. For the avoidance of doubt, local authorities should report on the same sampling basis that they would use to report as part of the Drinking Water Standards for New Zealand for the relevant parameter.  This line should include transgressions. | |
| *Processing rules:* | | Input field | |

BLOCK 5: IRON

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| --- | --- | --- | --- |
| **C2.15** | **Number of WTPs tested for iron** | | **Nr.** |
| *Definition:* | | The total number of water treatment plants where the water has been tested for iron. | |
| *Processing rules:* | | Input field | |

|  |  |  |  |
| --- | --- | --- | --- |
| **C2.16** | **Number of WTPs where>=25% of samples exceed 50% of the DWSNZ guideline value for aesthetic determinands** | | **Nr.** |
| *Definition:* | | The total number of water treatment plants where greater than or equal to 25% of the samples taken exceed 50% of the iron value in the DWSNZ guideline value for aesthetic determinands.  In Scotland, the Drinking Water Quality Regulator will only accept manual sampling. In New Zealand, however, we understand that continuous monitoring can be used for some parameters. For the avoidance of doubt, local authorities should report on the same sampling basis that they would use to report as part of the Drinking Water Standards for New Zealand for the relevant parameter.  This line should include transgressions. | |
| *Processing rules:* | | Input field | |
| **C2.17** | **Number of WTPs where between 10 to 25% of samples exceed 50% of the DWSNZ guideline value for aesthetic determinands** | | **Nr.** |
| *Definition:* | | The total number of water treatment plants where between 10 and 25% of samples taken exceed 50% of the iron value in the DWSNZ guideline value for aesthetic determinands.  In Scotland, the Drinking Water Quality Regulator will only accept manual sampling. In New Zealand, however, we understand that continuous monitoring can be used for some parameters. For the avoidance of doubt, local authorities should report on the same sampling basis that they would use to report as part of the Drinking Water Standards for New Zealand for the relevant parameter.  This line should include transgressions. | |
| *Processing rules:* | | Input field | |
| **C2.18** | **Number of WTPs where <10% of samples exceed 50% of the DWSNZ guideline value for aesthetic determinands** | | **Nr.** |
| *Definition:* | | The total number of water treatment plants where less than 10% of the samples taken exceed 50% of the iron value in the DWSNZ guideline value for aesthetic determinands.  In Scotland, the Drinking Water Quality Regulator will only accept manual sampling. In New Zealand, however, we understand that continuous monitoring can be used for some parameters. For the avoidance of doubt, local authorities should report on the same sampling basis that they would use to report as part of the Drinking Water Standards for New Zealand for the relevant parameter.  This line should include transgressions. | |
| *Processing rules:* | | Input field | |

BLOCK 6: MANGANESE

|  |  |  |  |
| --- | --- | --- | --- |
| **C2.19** | **Number of WTPs tested for manganese** | | **Nr.** |
| *Definition:* | | The total number of water treatment plants where the water has been tested for manganese. | |
| *Processing rules:* | | Input field | |
| **C2.20** | **Number of WTPs where>=25% of samples exceed 50% of the DWSNZ maximum acceptable value** | | **Nr.** |
| *Definition:* | | The total number of water treatment plants where greater than or equal to 25% of the samples taken exceed 50% of the maximum acceptable value for manganese as set out in the Drinking Water Standards New Zealand.  In Scotland, the Drinking Water Quality Regulator will only accept manual sampling. In New Zealand, however, we understand that continuous monitoring can be used for some parameters. For the avoidance of doubt, local authorities should report on the same sampling basis that they would use to report as part of the Drinking Water Standards for New Zealand for the relevant parameter.  This line should include transgressions. | |
| *Processing rules:* | | Input field | |
| **C2.21** | **Number of WTPs where between 10 to 25% of samples exceed 50% of the DWSNZ maximum acceptable value** | | **Nr.** |
| *Definition:* | | The total number of water treatment plants where between 10 and 25% of samples taken exceed 50% of the maximum acceptable value for manganese as set out in the Drinking Water Standards New Zealand.  In Scotland, the Drinking Water Quality Regulator will only accept manual sampling. In New Zealand, however, we understand that continuous monitoring can be used for some parameters. For the avoidance of doubt, local authorities should report on the same sampling basis that they would use to report as part of the Drinking Water Standards for New Zealand for the relevant parameter.  This line should include transgressions. | |
| *Processing rules:* | | Input field | |
| **C2.22** | **Number of WTPs where <10% of samples exceed 50% of the DWSNZ maximum acceptable value** | | **Nr.** |
| *Definition:* | | The total number of water treatment plants where less than 10% of the samples taken exceed 50% of the maximum acceptable value for manganese as set out in the Drinking Water Standards New Zealand.  In Scotland, the Drinking Water Quality Regulator will only accept manual sampling. In New Zealand, however, we understand that continuous monitoring can be used for some parameters. For the avoidance of doubt, local authorities should report on the same sampling basis that they would use to report as part of the Drinking Water Standards for New Zealand for the relevant parameter.  This line should include transgressions. | |
| *Processing rules:* | | Input field | |

TABLE C3: WATER ENHANCEMENT

1. This table identifies the outputs for new water quality obligations in relation to [Drinking Water Standards for New Zealand 2005 (Revised 2018) and 30 abstraction and environmental regulations.](https://www.health.govt.nz/publication/drinking-water-standards-new-zealand-2005-revised-2018)

BLOCK 1: DRINKING WATER COMPLIANCE

Lead pcv (maximum level) = 0.025 mg/l

|  |  |  |  |
| --- | --- | --- | --- |
| **C3.1** | **Total number of water distribution zones subject to a lead requirement of 0.025 mg/l (maximum level)** | | **Nr.** |
| *Definition:* | | The total number of distribution zones subject to a lead requirement to ensure that the water into the supply does not contain lead at a concentration level greater than 0.025 mg/l.  Imported bulk supplies covered by such requirements should be included in this figure.  Water distribution zone is defined as an identifiable part of the water supply network. This is in line with the Drinking-water Standards for New Zealand 2005 (Revised 2018). | |
| *Processing rules:* | | Input field | |
| **C3.2** | **Volume of water delivered subject to a lead requirement of 0.025 mg/l (maximum level)** | | **Ml/d** |
| *Definition:* | | The annual average daily flow rate of water entering distribution, which is subject to a lead requirement, to reduce the lead concentration in the water supply to a maximum of 0.025 mg/l.  Imported bulk supplies covered by such requirements should be included in this figure. | |
| *Processing rules:* | | Input field | |
| **C3.3** | **% of water delivered subject to a lead requirement of 0.025 mg/l (maximum level)** | | **%** |
| **Definition:** | | The volume of water reported in line C3.2 as a percentage of the total water delivered. | |
| **Processing rules:** | | Calculated field (C3.2/A2.25)\*100 | |

Lead pcv (maximum level) = 0.01 mg/l

|  |  |  |  |
| --- | --- | --- | --- |
| **C3.4** | **Total number of water distribution zones subject to a lead requirement of 0.01 mg/l (maximum level)** | | **Nr.** |
| *Definition:* | | The total number of distribution zones subject to a lead requirement to ensure that the water into the supply does not contain lead at a concentration level greater than 0.01 mg/l.  Imported bulk supplies covered by such requirements should be included in this figure.  Water distribution zone is defined as an identifiable part of the water supply network. This is in line with the Drinking-water Standards for New Zealand 2005 (Revised 2018). | |
| *Processing rules:* | | Input field | |
| **C3.5** | **Volume of water delivered subject to a lead requirement of 0.01 mg/l (maximum level)** | | **Ml/d** |
| *Definition:* | | The annual average daily flow rate of water entering distribution, which is subject to a lead requirement to reduce the lead concentration in the water supply to a maximum of 0.01 mg/l.  Imported bulk supplies covered by such requirements should be included in this figure. | |
| *Processing rules:* | | Input field | |
| **C3.6** | **% of water delivered subject to a lead requirement of 0.01 mg/l (maximum level)** | | **%** |
| *Definition:* | | The volume of water reported in line C3.5 as a percentage of the total water delivered. | |
| *Processing rules:* | | Calculated field (C3.5/A2.25)\*100 | |

Trihalomethane priority 2 determinand (maximum level) = final

|  |  |  |  |
| --- | --- | --- | --- |
| **C3.10** | **Total number of water distribution zones that exceed the DWSNZ maximum acceptable value for THM** | | **Nr.** |
| *Definition:* | | The total number of distribution zones that exceed the DWSNZ maximum acceptable value for THM.  Imported bulk supplies covered by such requirements should be included in this figure.  Water distribution zone is defined as an identifiable part of the water supply network. This is in line with the Drinking-water Standards for New Zealand 2005 (Revised 2018). | |
| *Processing rules:* | | Input field | |
| **C3.11** | **Volume of water delivered that exceeds the DWSNZ maximum acceptable value for THM** | | **Ml/d** |
| *Definition:* | | Volume of water delivered that exceeds the DWSNZ maximum acceptable value for THM.  Imported bulk supplies covered by such requirements should be included in this figure. | |
| *Processing rules:* | | Input field | |
| **C3.12** | **% of water delivered that exceed the DWSNZ maximum acceptable value for THM** | | **%** |
| *Definition:* | | The volume of water reported in line C3.11 as a percentage of the total water delivered. | |
| *Processing rules:* | | Calculated field (C3.11/A2.25)\*100 | |

Other parameters

|  |  |  |  |
| --- | --- | --- | --- |
| **C3.13** | **Total number of water distribution zones that exceed any DWSNZ maximum acceptable value for any other parameters** | | **Nr.** |
| *Definition:* | | The total number of distribution zones that exceed any DWSNZ maximum acceptable value for any other parameters.  Imported bulk supplies covered by such requirements should be included in this figure.  Water distribution zone is defined as an identifiable part of the water supply network. This is in line with the Drinking-water Standards for New Zealand 2005 (Revised 2018). | |
| *Processing rules:* | | Input field | |
| **C3.14** | **Volume of water delivered subject to a requirement to ensure that the water supply does not exceed the maximum level for other parameters** | | **Ml/d** |
| Definition: | | The annual average daily flow rate of water entering distribution, which is subject to a requirement to ensure that the water supply does not contain other parameters at a concentration level greater than the maximum level.  Imported bulk supplies covered by such requirements should be included in this figure. | |
| Processing rules: | | Input field | |
| **C3.15** | **% of water delivered subject to a requirement to ensure that the water supply does not exceed the maximum level for other parameters** | | **%** |
| *Definition:* | | The volume of water reported in line C3.14 as a percentage of the total water delivered. | |
| *Processing rules:* | | Calculated field (C3.14/A2.25)\*100 | |

BLOCK 2: ABSTRACTION

|  |  |  |  |
| --- | --- | --- | --- |
| **C3.16** | **Total number of river abstractions** | | **Nr.** |
| *Definition:* | | The total number of river abstractions in the Local Authority’s area. | |
| *Processing rules:* | | Input field | |

TABLE C4: WASTEWATER QUALITY OUTPUTS - COMPLIANCE

1. This table covers wastewater quality compliance for wastewater treatment plants discharges and for bathing waters. This table should be completed using Ministry for the Environment statutory data only.
2. The quality related information from these Information Requirements will be used to examine performance with quality standards, the outputs achieved against expenditure and the quality of the water received by customers.
3. **Consent types** are usually split into two distinct categories:
   * **Sanitary consents** represent those determinands that are specific to the wastewater treatment process. For example, these can include the biological oxygen demand (BOD), suspended solids (SS), ammonia, colour and chemical oxygen demand (COD).
   * **Non-sanitary consents** usually represent those determinands that are not specific to the wastewater treatment process. For example, these can include agricultural related nutrients or any other industrial related substances and metals. Trade effluent discharges into the wastewater network can usually be regarded as the source of non-sanitary determinands. In the context of New Zealand, this would include consents that cover chemicals used in agriculture or industry.
4. **Consent limits** are also usually split into several distinct categories:
   * **Numeric consents** represent those consents in which a numeric based limit is set either as an absolute limit or a percentile-based limit relating to the concentration, load or quality for a specific parameter.
     1. **Absolute limit** – represents a numeric standard that Local Authorities should never exceed; or
     2. **Percentile-based limit** – represents a numeric standard that Local Authorities must achieve or exceed for a minimum duration of a clearly specified period of time. For example, a 95 percentile limit would be required to be achieved by a Local Authority for at least 80% of a clearly defined period of time.
   * **Non-numeric consents** represent those consents without a numeric based limit on the quality of wastewater discharges. These however can rely on a process related numeric based parameter such as flow. These consents are usually applied to Emergency Overflows and Combined Sewer Overflows (CSOs).
   * **Descriptive consents** represent qualitative driven consents rather than numerical limits. These consents can relate to the required type of treatment or effects of pollution which should be avoided or reduced, such as odour at a wastewater treatment plant.
   * **Single tier consents** apply where each sample of the discharge is viewed independent of any other and compliance with the consent is assessed on a sample by sample basis. Therefore, a sample will either comply with or fail to comply with the numeric consent conditions.
5. **Absolute non-sanitary consents** represent those determinands that are not specific to the wastewater treatment process. For example, these can include agricultural related nutrients or any other industrial related substances and metals. These consent standards are almost always expressed as absolute limits. Absolute limits represent a numeric standard that Local Authorities should never exceed. Trade effluent discharges into the wastewater network can usually be regarded as the source of non-sanitary determinands.

BLOCK 1: WASTEWATER TREATMENT PLANTS

All discharges

|  |  |  |  |
| --- | --- | --- | --- |
| **C4.1** | **Total consented discharges at year end** | | **Nr.** |
| *Definition:* | | The total number of wastewater treatment plants with numeric consent discharges at the end of year. | |
| *Processing rules:* | | Input field | |
| **C4.2** | **Total discharges sampled in year** | | **Nr.** |
| *Definition:* | | Total number of discharges sampled for the reporting year ending 30 June. | |
| *Processing rules:* | | Input field | |
| **C4.3** | **Number of discharges compliant** | | **Nr.** |
| *Definition:* | | Total number of discharges compliant with consent conditions (i.e. with reference to the level within a consent condition) for the reporting year ending 30 June. | |
| *Processing rules:* | | Input field | |

Single tier consents

|  |  |  |  |
| --- | --- | --- | --- |
| **C4.10** | **Total consented discharges at year end** | | **Nr.** |
| *Definition:* | | The total number of wastewater treatment plants with numeric consent discharges at the end of the reporting year. For the avoidance of doubt, wastewater treatment plants operating under an expired consent are included. If this applies, please provide further explanation in the commentary. | |
| *Processing rules:* | | Input field | |
| **C4.11** | **Total discharges sampled in year** | | **Nr.** |
| Definition: | | Total number of discharges sampled for the reporting year ending 30 June. | |
| Processing rules: | | Input field | |
| **C4.12** | **Number of discharges compliant** | | **Nr.** |
| Definition: | | Total number of discharges compliant with consent conditions (i.e. with reference to the level within a consent condition) for the reporting year ending 30 June. | |
| Processing rules: | | Input field | |

Absolute non-sanitary consents

|  |  |  |  |
| --- | --- | --- | --- |
| **C4.13** | **Total consented discharges at year end** | | **Nr.** |
| *Definition:* | | The total number of wastewater treatment plants with numeric consent discharges at the end of the reporting year.  In the context of New Zealand, non-sanitary consents should include consents that cover chemicals used in agriculture or industry. | |
| *Processing rules:* | | Input field | |
| **C4.14** | **Total discharges sampled in year** | | **Nr.** |
| *Definition:* | | Total number of discharges sampled for the reporting year ending 30 June.  In the context of New Zealand, non-sanitary consents should include consents that cover chemicals used in agriculture or industry. | |
| *Processing rules:* | | Input field | |

|  |  |  |  |
| --- | --- | --- | --- |
| **C4.15** | **Number of discharges compliant** | | **Nr.** |
| *Definition:* | | Total number of discharges compliant with consent conditions (i.e. with reference to the level within a consent condition) for the reporting year ending 30 June.  In the context of New Zealand, non-sanitary consents should include consents that cover chemicals used in agriculture or industry. | |
| *Processing rules:* | | Input field | |

Discharges confirmed as failing

|  |  |  |  |
| --- | --- | --- | --- |
| **C4.19** | **Number of discharges confirmed as failing** | | **Nr.** |
| *Definition:* | | The total number of wastewater treatment plants with discharges failing consent conditions (i.e. exceeding the level within a consent condition) for the reporting year ending 30 June. | |
| *Processing rules:* | | Input field | |
| **C4.20** | **Total population equivalent confirmed as failing** | | **000** |
| *Definition:* | | The total population equivalent for all works confirmed as failing their consents (i.e. exceeding the level within a consent condition) of the wastewater treatment plants for the reporting year ending 30 June. | |
| *Processing rules:* | | Input field | |
| **C4.21** | **Percentage population equivalent confirmed as failing** | | **%** |
| *Definition:* | | The percentage of the population equivalent for the Authority’s area confirmed as failing the discharge consents (i.e. exceeding the level within a consent condition) of the wastewater treatment plants for the reporting year ending 30 June. | |
| *Processing rules:* | | Input field | |

TABLE C5: WASTEWATER QUALITY OUTPUTS – ASSET PERFORMANCE

1. This table identifies the extent to which wastewater treatment plants are at risk of non-compliance for five key parameters by monitoring the ratio of the relevant sample means to the 95%ile compliance value.
2. If Local Authorities have an asset that is not captured by the line references in Table C5, please report the asset in the line with the closest definition and provide an explanation in the commentary.

BLOCK 1: BIOLOGICAL OXYGEN DEMAND (BOD)

|  |  |  |  |
| --- | --- | --- | --- |
| **C5.1** | **Number of wastewater treatment plants with a numeric BOD consent** | | **Nr.** |
| *Definition:* | | Number of wastewater treatment plants with a numeric BOD consent. | |
| *Processing rules:* | | Calculated field: sum of C5.3 and C5.4 | |
| **C5.2** | **Number of wastewater treatment plants where >=12 samples taken for BOD** | | **Nr.** |
| *Definition:* | | Number of wastewater treatment plants where >=12 samples taken for BOD. | |
| *Processing rules:* | | Input field | |
| **C5.3** | **Number of wastewater plants where the sample mean >62.5% of the compliance value based on the summer seasonal limit** | | **Nr.** |
| *Definition:* | | Number of wastewater treatment plants where the sample mean for BOD, taken over the reporting period, exceeds 62.5% of the 95%ile compliance value based on the summer seasonal limit. | |
| *Processing rules:* | | Input field | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **C5.3b** | | **Number of wastewater plants where the sample mean >62.5% of the compliance value based on the winter seasonal limit (if different)** | | **Nr.** |
| *Definition:* | | | Number of wastewater treatment plants where the sample mean for BOD, taken over the reporting period, exceeds 62.5% of the 95%ile compliance value based on the winter seasonal limit (if different).  If the same consent limit applies all year, then report this line as 0 and provide an explanation in the commentary. | |
| *Processing rules:* | | | Input field | |
| **C5.4** | | **Number of wastewater plants where the sample mean <=62.5% of the compliance value based on the summer seasonal limit** | | **Nr.** | |
| *Definition:* | Number of wastewater treatment plants where the sample mean for BOD, taken over the reporting period, is less than or equal to 62.5% of the 95%ile compliance value based on the summer seasonal limit. | | | | |
| *Processing rules:* | Input field | | | | |
| **C5.4b** | **Number of wastewater plants where the sample mean <=62.5% of the compliance value based on the winter seasonal limit (if different)** | | | | | **Nr.** |
| *Definition:* | Number of wastewater treatment plants where the sample mean for BOD, taken over the reporting period, is less than or equal to 62.5% of the 95%ile compliance value based on the winter seasonal limit. This corresponds to a Green risk.  If the same consent limit applies all year, then report this line as 0 and provide an explanation in the commentary. | | | | |
| *Processing rules:* | Input field | | | | |

BLOCK 2: SUSPENDED SOLIDS

|  |  |  |  |
| --- | --- | --- | --- |
| **C5.5** | **Number of wastewater treatment plants with a numeric Suspended Solids consent** | | **Nr.** |
| *Definition:* | | Number of wastewater treatment plants with a numeric Suspended Solids consent. | |
| *Processing rules:* | | Calculated field: the sum of C5.7 and C5.8 | |

|  |  |  |  |
| --- | --- | --- | --- |
| **C5.6** | **Number of wastewater treatment plants where >=12 samples taken for Suspended Solids** | | **Nr.** |
| *Definition:* | | Number of wastewater treatment plants where >=12 samples taken for Suspended Solids. | |
| *Processing rules:* | | Input field | |
| **C5.7** | **Number of wastewater treatment plants where the sample mean >62.5% of the compliance value based on the summer seasonal limit** | | **Nr.** |
| *Definition:* | | Number of wastewater treatment plants where the sample mean for Suspended Solids, taken over the reporting period, exceeds 62.5% of the 95%ile compliance value based on the summer seasonal limit. | |
| *Processing rules:* | | Input field | |
| **C5.7b** | **Number of wastewater treatment plants where the sample mean >62.5% of the compliance value based on the winter seasonal limit (if different)** | | **Nr.** |
| *Definition:* | | Number of wastewater treatment plants where the sample mean for Suspended Solids, taken over the reporting period, exceeds 62.5% of the 95%ile compliance value based on the winter seasonal limit (if different).  If the same consent limit applies all year, then report this line as 0 and provide an explanation in the commentary. | |
| *Processing rules:* | | Input field | |

|  |  |  |  |
| --- | --- | --- | --- |
| **C5.8** | **Number of wastewater treatment plants where the sample mean <=62.5% of the compliance value based on the summer seasonal limit** | | **Nr.** |
| *Definition:* | | Number of wastewater treatment plants where the sample mean for Suspended Solids, taken over the reporting period, is less than or equal to 62.5% of the 95%ile compliance value. | |
| *Processing rules:* | | Input field | |

|  |  |  |
| --- | --- | --- |
| **C5.8b** | **Number of wastewater treatment plants where the sample mean <=62.5% of the compliance value based on the winter seasonal limit (if different)** | **Nr.** |
| *Definition:* | Number of wastewater treatment plants where the sample mean for Suspended Solids, taken over the reporting period, is less than or equal to 62.5% of the 95%ile compliance value based on the winter seasonal limit (if different).  If the same consent limit applies all year, then report this line as 0 and provide an explanation in the commentary. |
| *Processing rules:* | Input field |

BLOCK 3: AMMONIA

|  |  |  |  |
| --- | --- | --- | --- |
| **C5.9** | **Number of wastewater treatment plants with a numeric Ammonia consent** | | **Nr.** |
| *Definition:* | | Number of wastewater treatment plants with a numeric Ammonia consent. | |
| *Processing rules:* | | Calculated field: the sum of C5.11 and C5.12 | |
| **C5.10** | **Number of wastewater treatment plants where >=12 samples taken for Ammonia** | | **Nr.** |
| *Definition:* | | Number of wastewater treatment plants where >=12 samples taken for Ammonia. | |
| *Processing rules:* | | Input field | |
| **C5.11** | **Number of wastewater treatment plants where the sample mean >62.5% of the compliance value** | | **Nr.** |
| *Definition:* | | Number of wastewater treatment plants where the sample mean for Ammonia, taken over the reporting period, exceeds 62.5% of the 95%ile compliance value. | |
| *Processing rules:* | | Input field | |
| **C5.12** | **Number of wastewater treatment plants where the sample mean <=62.5% of the compliance value** | | **Nr.** |
| *Definition:* | | Number of wastewater treatment plants where the sample mean for Ammonia, taken over the reporting period, is less than or equal to 62.5% of the 95%ile compliance value. | |
| *Processing rules:* | | Input field | |

BLOCK 4: PHOSPHATE

|  |  |  |  |
| --- | --- | --- | --- |
| **C5.13** | **Number of wastewater treatment plants with a numeric Phosphate consent** | | **Nr.** |
| *Definition:* | | Number of wastewater treatment plants with a numeric Phosphate consent. | |
| *Processing rules:* | | Calculated field: the sum of C5.15 and C5.16. | |
| **C5.14** | **Number of wastewater treatment plants where >=12 samples taken for Phosphate** | | **Nr.** |
| *Definition:* | | Number of wastewater treatment plants where >=12 samples taken for Phosphate. | |
| *Processing rules:* | | Input field | |
| **C5.15** | **Number of wastewater treatment plants where the sample mean >62.5% of the compliance value** | | **Nr.** |
| *Definition:* | | Number of wastewater treatment plants where the sample mean for Phosphate, taken over the reporting period, exceeds 62.5% of the 95%ile compliance value. | |
| *Processing rules:* | | Input field | |
| **C5.16** | **Number of wastewater treatment plants where the sample mean <=62.5% of the compliance value** | | **Nr.** |
| *Definition:* | | Number of wastewater treatment plants where the sample mean for Phosphate, taken over the reporting period, is less than or equal to 62.5% of the 95%ile compliance value. | |
| *Processing rules:* | | Input field | |

BLOCK 5: NITRATE

|  |  |  |  |
| --- | --- | --- | --- |
| **C5.17** | **Number of wastewater treatment plants with a numeric Nitrate consent** | | **Nr.** |
| *Definition:* | | Number of wastewater treatment plants with a numeric Nitrate consent. | |
| *Processing rules:* | | Calculated field: the sum of C5.19 to C5.20 | |
| **C5.18** | **Number of wastewater treatment plants where >=12 samples taken for Nitrate** | | **Nr.** |
| *Definition:* | | Number of wastewater treatment plants where >=12 samples taken for Nitrate. | |
| *Processing rules:* | | Input field | |
| **C5.19** | **Number of wastewater treatment plants where the sample mean >62.5% of the compliance value** | | **Nr.** |
| *Definition:* | | Number of wastewater treatment plants where the sample mean for Nitrate, taken over the reporting period, exceeds 62.5% of the 95%ile compliance value. | |
| *Processing rules:* | | Input field | |

|  |  |  |  |
| --- | --- | --- | --- |
| **C5.20** | **Number of wastewater treatment plants where the sample mean <=62.5% of the compliance value** | | **Nr.** |
| *Definition:* | | Number of wastewater treatment plants where the sample mean for Nitrate, taken over the reporting period, is less than or equal to 62.5% of the 95%ile compliance value. | |
| *Processing rules:* | | Input field | |

TABLE C6: WASTEWATER QUALITY OUTPUTS – ENHANCEMENT INVESTMENT

1. This table identifies the outputs for key investment drivers relating wastewater new quality obligations. These cover the following drivers:
   1. Driver: Service resilience
   2. Driver: Improvements to poor or seriously polluted waters (swimmable waters)
   3. Driver: Sludge (use in agriculture)
   4. Driver: Dangerous substances

Guidance

1. On completion of Table C6 the Local Authority should ensure that no input cell is left blank.

Definitions

1. The water environment refers to all surface water, groundwater and wetlands.
2. Surface water means inland water (other than groundwater), transitional water and coastal water.
3. Groundwater refers to water which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.
4. Wetland means an area of ground the ecological, chemical and hydrological characteristics of which are attributable to frequent inundation or saturation by water and which is directly dependent, with regard to its water needs, on a body of groundwater or a body of surface water.
5. Inland water relates to:
   1. all standing or flowing water on the surface of the land (other than transitional water), and
   2. all groundwater.
6. Coastal water refers to water (other than groundwater) within the area extending landward from the 3 mile limit up to the limit of the highest tide or, where appropriate, the seaward limits of any bodies of transitional water, but does not include any water beyond the seaward limits of the territorial sea of New Zealand.

“The 3 mile limit” means the limit consisting of a line every point of which is at a distance of 3 miles on the seaward side from the nearest point of the baseline from which the breadth of the territorial sea of New Zealand is measured.

“Miles” refers to international nautical miles of 1,852 metres.

1. Estuarial or transitional waters relates to water (other than groundwater) in the vicinity of river mouths which is partly saline in character as a result of its proximity to coastal water but which is substantially influenced by freshwater flows.
2. Poor or bad (seriously) polluted waters:
   * Pollution, in relation to the water environment, refers to the direct or indirect introduction, as a result of human activity, of substances or heat into the water environment, or any part of it, which may give rise to any harm.
   * As an example, in Europe, waterbodies are classified under the Water Framework Directive (WFD) according to their ecological quality using environmental standards.
   * The WFD requires each surface water body to be classified in terms of its ecological and chemical quality. For those water bodies not designated as heavily modified or artificial, this ecological quality is described in terms of ' ecological status'. This is an expression of the quality of the structure and functioning of surface water ecosystems as indicated by the condition of a number of 'quality elements'. The WFD uses the term 'quality elements' to refer to the different indicators of ecological quality making up its ecological status classification schemes. The quality elements used to assess ecological status are:
     1. biological quality elements (water plants and animals);
     2. chemical and physicochemical elements (eg oxygen and nutrient levels); and
     3. hydromorphological quality elements (water flows and levels; the condition of beds, banks and shores; and the continuity of rivers for fish migration).
   * There are five classes of ecological status, defined in terms of how much the ecological quality deviates from natural conditions. These are high, good, moderate, poor or bad.
     1. High status means that the water body is unaffected or virtually unaffected by human activity.
     2. A good status water body shows some signs of human pressures, such as slight alterations in the composition or abundance of water plant or animal communities (biological quality elements) compared with what would be expected in a water body at high status. For good status, the chemical, physicochemical and hydromorphological quality of the water body must achieve the standards and conditions necessary for the biological quality elements to be in good condition. The ecological status of a water body is determined by the lowest-classed quality element. This is called the ' one-out, all-out principle'.
     3. Moderate relates to waters showing evidence of moderate alterations to the values of the biological quality elements for the surface water body type and in which the relevant biological communities deviate substantially from those normally associated with the surface water body type under undisturbed conditions.
     4. Poor relates to waters showing evidence of major alterations to the values of the biological quality elements for the surface water body type and in which the relevant biological communities deviate substantially from those normally associated with the surface water body type under undisturbed conditions.
     5. Bad relates to waters showing evidence of severe alterations to the values of the biological quality elements for the surface water body type and in which large portions of the relevant biological communities normally associated with the surface water body type under undisturbed conditions are absent, shall be classified as bad.
3. Local Authorities should seek to apply these definitions for poor or seriously polluted waters.

BLOCK 1: DRIVER: SERVICE RESILIENCE

Wastewater treatment plants upgrading

|  |  |  |  |
| --- | --- | --- | --- |
| **C6.1** | **Total number of wastewater treatment plants subject to improvement works in the Long Term Plan (annual average)** | | **Nr.** |
| *Definition:* | | The total number of wastewater treatment plants subject to improvement works for levels of service or compliance as set out in the Long Term Plan. Please provide the annual average across all years. | |
| *Processing rules:* | | Input field | |
| **C6.2** | **Population equivalent subject to improvement works in the Long Term Plan (annual average)** | | **000** |
| *Definition:* | | Population equivalent subject to improvement wastewater treatment plants for levels of service or compliance as set out in the Long Term Plan. Please provide the annual average across all years. | |
| *Processing rules:* | | Input field | |
| **C6.3** | **% of total population equivalent subject to improvement works** | | **%** |
| *Definition:* | | The population equivalent served by wastewater treatment plants subject to improvement works for levels of service or compliance, as a percentage of the total population equivalent. | |
| *Processing rules:* | | Input field | |

Wastewater system upgrading

|  |  |  |  |
| --- | --- | --- | --- |
| **C6.4** | **Total number of wastewater schemes subject to improvement works** | | **Nr.** |
| *Definition:* | | Total number of wastewater schemes subject to improvement works for levels of service or compliance. | |
| *Processing rules:* | | Input field | |
| **C6.5** | **Population equivalent subject to improvement works** | | **000** |
| *Definition:* | | Population equivalent subject to improvement of wastewater schemes works for levels of service or compliance. | |
| *Processing rules:* | | Input field | |
| **C6.6** | **% of total population equivalent subject to improvement works** | | **%** |
| *Definition:* | | The population equivalent served by wastewater schemes subject to improvement works for levels of service or compliance, as a percentage of the total population equivalent. | |
| *Processing rules:* | | Input field | |

BLOCK 2: DRIVER: IMPROVEMENTS TO POOR OR SERIOUSLY POLLUTED WATERS (SWIMMABLE WATERS)

Wastewater treatment plants discharge improvements

|  |  |  |  |
| --- | --- | --- | --- |
| **C6.7** | **Total number of wastewater treatment plants subject to improvement works** | | **Nr.** |
| *Definition:* | | The total number of wastewater treatment plants subject to improvement works for poor or seriously polluted waters. | |
| *Processing rules:* | | Input field | |
| **C6.8** | **Population equivalent subject to improvement works** | | **000** |
| *Definition:* | | Population equivalent subject to improvement of wastewater treatment plants for poor or seriously polluted waters. | |
| *Processing rules:* | | Input field | |

|  |  |  |  |
| --- | --- | --- | --- |
| **C6.9** | **% of total population equivalent subject to improvement works** | | **%** |
| *Definition:* | | The population equivalent sorted by wastewater treatment plants subject to improvement as a percentage of the total population equivalent. | |
| *Processing rules:* | | Input field | |

Discharges from Combined Sewer Overflow (CSO) and Stormwater Systems Improvements

|  |  |  |  |
| --- | --- | --- | --- |
| **C6.10** | **Total number of CSOs and stormwater systems subject to improvement works** | | **Nr.** |
| *Definition:* | | The total number of CSOs and stormwater systems subject to improvement works for poor or seriously polluted waters. For the avoidance of doubt, these include discharges from engineered combined sewers (wastewater and stormwater). | |
| *Processing rules:* | | Input field | |

CSO and Stormwater discharges/industrial zones

|  |  |  |  |
| --- | --- | --- | --- |
| **C6.11** | **Total number of discharges subject to improvement works** | | **Nr.** |
| *Definition:* | | The total number of CSO and stormwater discharges/industrial estates subject to improvement works for poor or seriously polluted waters. For the avoidance of doubt, these cover Tradewaste industrial discharges that are directly to a receiving environment and industrial/environmental stormwater discharge. | |
| *Processing rules:* | | Input field | |
| **C6.12** | **Population equivalent subject to improvement works** | | **000** |
| *Definition:* | | Population equivalent subject to improvement of CSO and stormwater discharges/industrial zones for poor or seriously polluted waters. For the avoidance of doubt, these cover Tradewaste industrial discharges that are directly to a receiving environment and industrial/environmental stormwater discharge. | |
| *Processing rules:* | | Input field | |

|  |  |  |  |
| --- | --- | --- | --- |
| **C6.13** | **% of total population equivalent subject to improvement works** | | **%** |
| *Definition:* | | The population equivalent served by CSO and stormwater discharges/industrial zones subject to improvement as a percentage of the total population equivalent. For the avoidance of doubt, these cover Tradewaste industrial discharges that are directly to a receiving environment and industrial/environmental stormwater discharge. | |
| *Processing rules:* | | Input field | |

BLOCK 3: DRIVER: WASTEWATER STANDARDS

Inland waters – discharges from CSOs and stormwater systems (intermittent)

|  |  |  |  |
| --- | --- | --- | --- |
| **C6.23** | **Total number of combined wastewater overflows subject to improvement works** | | **Nr.** |
| *Definition:* | | The total number of Inland discharges from CSOs and stormwater systems (intermittent) subject to improvement works for consent compliance (i.e. with reference to the level within a consent condition).  These include engineered combined sewer overflows (wastewater and stormwater) which have intermittent discharges to the freshwater receiving environment. Please report discharges from the network that are not compliant with the consent. | |
| *Processing rules:* | | Input field | |

Inland waters –wastewater treatment (continuous discharges)

|  |  |  |  |
| --- | --- | --- | --- |
| **C6.24** | **Total number of wastewater treatment plants subject to improvement works** | | **Nr.** |
| *Definition:* | | The total number of Inland Water Wastewater Treatment Plants (continuous discharges) subject to improvement works for consent compliance (i.e. with reference to the level within a consent condition).  These cover continuous discharges to the freshwater receiving environment from the wastewater treatment plant that are not compliant with the consent. | |
| *Processing rules:* | | Input field | |

|  |  |  |  |
| --- | --- | --- | --- |
| **C6.25** | **Population equivalent subject to improvement works** | | **000** |
| *Definition:* | | Population equivalent subject to improvement of Inland Wastewater Treatment Plants (continuous discharges) for consent compliance (i.e. with reference to the level within a consent condition).  These cover continuous discharges to the freshwater receiving environment from the wastewater treatment plant that are not compliant with the consent. | |
| *Processing rules:* | | Input field | |

|  |  |  |  |
| --- | --- | --- | --- |
| **C6.26** | **% of total population equivalent subject to improvement works** | | **%** |
| *Definition:* | | The population equivalent served by Inland Water Wastewater Treatment Plants (continuous discharges) subject to improvement works for consent compliance (i.e. with reference to the level within a consent condition) as a percentage of the total population equivalent.  These cover continuous discharges to the freshwater receiving environment from the wastewater treatment plant that are not compliant with the consent. | |
| *Processing rules:* | | Input field | |

Coastal waters – discharges from CSOs and stormwater systems (intermittent)

|  |  |  |  |
| --- | --- | --- | --- |
| **C6.27** | **Total number of discharges from CSOs and stormwater systems subject to improvement works** | | **Nr.** |
| *Definition:* | | The total number of Coastal Waters discharges from CSOs and stormwater systems (intermittent) subject to improvement works for consent compliance (i.e. with reference to the level within a consent condition).  These include engineered combined sewer overflows (wastewater and stormwater) which have intermittent discharges to coastal waters. Please report discharges from the network that are not compliant with the consent. | |
| *Processing rules:* | | Input field | |

Coastal waters – wastewater treatment (continuous discharges)

|  |  |  |  |
| --- | --- | --- | --- |
| **C6.28** | **Total number of wastewater treatment plants subject to improvement works** | | **Nr.** |
| *Definition:* | | The total number of Coastal Waters Wastewater Treatment Plants (continuous discharges) subject to improvement works for Driver: Wastewater Standards.  These cover continuous discharges to coastal waters from the wastewater treatment plant that are not compliant with the consent. | |
| *Processing rules:* | | Input field | |
| **C6.29** | **Population equivalent subject to improvement works** | | **000** |
| *Definition:* | | Population equivalent served by Coastal Waters Wastewater Treatment Plants subject to improvement works for consent compliance (i.e. with reference to the level within a consent condition). | |
| *Processing rules:* | | Input field | |
| **C6.30** | **% of total population equivalent subject to improvement works** | | **%** |
| *Definition:* | | The population equivalent served by Coastal Waters Wastewater Treatment Plants (continuous discharges) subject to improvement works for consent compliance (i.e. with reference to the level within a consent condition) as a percentage of the total population equivalent. | |
| *Processing rules:* | | Input field | |

Estuarial waters – discharges from CSOs and stormwater systems (intermittent)

|  |  |  |  |
| --- | --- | --- | --- |
| **C6.31** | **Total number of discharges from CSOs and stormwater systems subject to improvement works** | | **Nr.** |
| *Definition:* | | The total number of Estuarial Waters discharges from CSOs and stormwater systems (intermittent) subject to improvement works for consent compliance (i.e. with reference to the level within a consent condition).  These include engineered combined sewer overflows (wastewater and stormwater) which have intermittent discharges to estuarial waters. Please report discharges from the network that are not compliant with the consent. | |
| *Processing rules:* | | Input field | |

Estuarial waters –wastewater treatment (continuous discharges)

|  |  |  |  |
| --- | --- | --- | --- |
| **C6.32** | **Total number of wastewater treatment plants subject to improvement works** | | **Nr.** |
| *Definition:* | | The total number of Estuarial Waters Wastewater Treatment Plants (continuous discharges) subject to improvement works for consent compliance (i.e. with reference to the level within a consent condition).  These cover continuous discharges to the estuarial waters from the wastewater treatment plant that are not compliant with the consent. | |
| *Processing rules:* | | Input field | |
| **C6.33** | **Population equivalent subject to improvement works** | | **000** |
| *Definition:* | | Population equivalent served by Estuarial Waters Wastewater Treatment Plants subject to improvement works for consent compliance (i.e. with reference to the level within a consent condition). | |
| *Processing rules:* | | Input field | |

|  |  |  |  |
| --- | --- | --- | --- |
| **C6.34** | **% of total population equivalent subject to improvement works** | | **%** |
| *Definition:* | | The population equivalent served by Estuarial Waters wastewater treatment plants (continuous discharges) subject to improvement works for consent compliance (i.e. with reference to the level within a consent condition) as a percentage of the total population equivalent. | |
| *Processing rules:* | | Input field | |

BLOCK 4: DRIVER: SLUDGE (USE IN AGRICULTURE)

|  |  |  |  |
| --- | --- | --- | --- |
| **C6.47** | **Total number of new or enlarged sludge treatment facilities in improvement programme** | | **Nr.** |
| *Definition:* | | The total number of New or Enlarged Sludge Treatment Works subject to improvement works for Driver: Sludge (Use in Agriculture).  “Use in Agriculture” refers to spreading of treated sewage sludge (can be in cake, granular/pellet or liquid forms) on the soil or any other application on or in the soil for agricultural purposes.  For the avoidance of doubt, this includes sludge treatment processes at wastewater treatment plants and stand-alone sludge plants. | |
| *Processing rules:* | | Input field | |
| **C6.48** | **Total capacity of new or enlarged sludge treatment facilities in improvement programme** | | **thousand tonnes dry solids** |
| *Definition:* | | Total annual capacity of sludge treatment works subject to improvement of New or Enlarged Sludge Treatment Works for Driver: Sludge (Use in Agriculture).  “Use in Agriculture” refers to spreading of treated sewage sludge (can be in cake, granular/pellet or liquid forms) on the soil or any other application on or in the soil for agricultural purposes.  For the avoidance of doubt, this includes sludge treatment processes at wastewater treatment plants and stand-alone sludge plants. | |
| *Processing rules:* | | Input field | |

|  |  |  |  |
| --- | --- | --- | --- |
| **C6.49** | **% of total sludge treatment capacity in improvement works** | | **%** |
| *Definition:* | | The capacity of new or enlarged sludge Treatment facilities for Driver: Sludge (Use in Agriculture) subject to improvement as a percentage of the total capacity.  “Use in Agriculture” refers to spreading of treated sewage sludge (can be in cake, granular/pellet or liquid forms) on the soil or any other application on or in the soil for agricultural purposes.  For the avoidance of doubt, this includes sludge treatment processes at wastewater treatment plants and stand-alone sludge plants. | |
| *Processing rules:* | | Input field | |

BLOCK 5: DRIVER: DANGEROUS SUBSTANCES (E.G. PLASTICS, CHEMICALS, METALDEHYDE, OESTROGEN)

|  |  |  |
| --- | --- | --- |
| **C6.53** | **Total number of wastewater treatment plants subject to improvement works** | **Nr.** |

*Definition:* The total number of wastewater treatment plants subject to improvement works for Driver: Dangerous Substances in order to mitigate the presence of dangerous substances

*Processing rules:* Input field

TABLE C7: WATER QUALITY OUTPUTS – WATER MAINS ACTIVITIES

1. This table relates to water mains rehabilitation work undertaken and work carried out on gathering effective information needed for good practice water resource planning during the report year.

BLOCK 1: WATER MAINS REHABILITATION UNDER AGREED PROGRAMME OF WORKS

|  |  |  |  |
| --- | --- | --- | --- |
| **C7.1** | **Number of water distribution zones** | | **Nr.** |
| *Definition:* | | The total number of water distribution zones within the Local Authorities area. Water distribution zone is defined as an identifiable part of the water supply network. This is in line with the Drinking-water Standards for New Zealand 2005 (Revised 2018). | |
| *Processing rules:* | | Brought forward field: Line C1.3 | |
| **C7.2** | **Number of water distribution zones identified for a programme of works in the Long Term Plan (annual average)** | | **Nr.** |
| *Definition:* | | The total number of water distribution zones which are identified for a programme of works in the Long Term Plan. Please use the annual average across all years in the Long Term Plan. Water distribution zone is defined as an identifiable part of the water supply network. This is in line with the Drinking-water Standards for New Zealand 2005 (Revised 2018). | |
| *Processing rules:* | | Input field | |
| **C7.3** | **Length of mains for replacement as set out in the Long Term Plan (annual average)** | | **Km** |
| *Definition:* | | The total length of mains which is to be replaced as set out in the Long Term Plan. Please use the annual average across all years in the Long Term Plan. | |
| *Processing rules:* | | Input field | |

|  |  |  |  |
| --- | --- | --- | --- |
| **C7.4** | **Length of mains for relining as set out in the Long Term Plan (annual average)** | | **Km** |
| *Definition:* | | The total length of mains which is to be relined as set out in the Long Term Plan. Please use the annual average across all years in the Long Term Plan. | |
| *Processing rules:* | | Input field | |

|  |  |  |  |
| --- | --- | --- | --- |
| **C7.5** | **Length of mains replaced in report year** | | **Km** |
| *Definition:* | | The total length of mains replaced during the report year. | |
| *Processing rules:* | | Input field | |
| **C7.6** | **Length of mains relined in report year** | | **Km** |
| *Definition:* | | The total length of mains relined during the report year. | |
| *Processing rules:* | | Input field | |
| **C7.7** | **Length of mains with completed and acceptable post-surveys** | | **Km** |
| *Definition:* | | The total length of mains where a post-work survey has been undertaken and the results have been acceptable. | |
| *Processing rules:* | | Input field | |
| **C7.8** | **Number of water distribution zones where a programme of works has been completed** | | **Nr.** |
| *Definition:* | | The total number of water distribution zones where programmes of work identified in the Long Term Plan have been completed. | |
| *Processing rules:* | | Input field | |

BLOCK 2: WATER RESOURCE PLANNING

|  |  |  |  |
| --- | --- | --- | --- |
| **C7.9** | **Total number of metered areas in Local Authority supply area** | | **Nr.** |
| *Definition:* | | Total number of areas that are metered contained within the total water supply area of the Local Authority. In the UK, for example, water company sub-areas are metered in order to monitor water flows at an aggregate level (e.g. for monitoring leakage). | |
| *Processing rules:* | | Input field | |
| **C7.10** | **Number of areas metered in the report year** | | **Nr.** |
| *Definition:* | | Number of areas that are metered during the report year. | |
| *Processing rules:* | | Input field | |
| **C7.11** | **Number of areas currently being metered** | | **Nr.** |
| *Definition:* | | Number of areas being metered at Report Year end. | |
| *Processing rules:* | | Input field | |
| **C7.12** | **Percentage of population in the areas metered in the report year** | | **%** |
| *Definition:* | | Total percentage of the population served by the Local Authority residing within areas metered in the report year as reported in Line C7.10.  Formula to be used:  (Total number of population residing within areas metered in the report year/Total population served by authority) x100 | |
| *Processing rules:* | | Input field | |
| **C7.13** | **Percentage of total network in the areas metered in the report year** | | **%** |
| *Definition:* | | Percentage of the total network covered areas metered in the report year as reported in Line C7.10.  Formula to be used:  (Total length of mains covered by areas metered in the report year/Total length of mains in Authority area) x100 | |
| *Processing rules:* | | Input field | |

TABLE C8: WASTEWATER QUALITY OUTPUTS – SEWER ACTIVITIES

1. This table relates to sewer rehabilitation work undertaken and work carried out on gathering effective information needed for good practice wastewater resource planning, during the report year.
2. Drainage areas are defined based on the extent of the wastewater area draining to a particular wastewater treatment works.

Guidance to the Local Authority

1. On completion of Table C8 the company should ensure that no input cell is left blank.

BLOCK 1: SEWER REHABILITATION PROGRAMME

|  |  |  |  |
| --- | --- | --- | --- |
| **C8.1** | **Number of wastewater drainage areas** | | **Nr.** |
| *Definition:* | | The total number of wastewater drainage areas within the Local Authority’s area. | |
| *Processing rules:* | | Input field | |
| **C8.2** | **Number of wastewater drainage areas identified for a programme of works in the Long Term Plan (annual average)** | | **Nr.** |
| *Definition:* | | The total number of wastewater drainage areas identified for a programme of works in the Long Term Plan. Please use the annual average across all years in the Long Term Plan. | |
| *Processing rules:* | | Input field | |
| **C8.3** | **Length of sewers for replacement as identified for a programme of works in the Long Term Plan (annual average) (excluding combined sewers)** | | **Km** |
| *Definition:* | | The total length of sewers (excluding combined sewers) which is to be replaced as part of the agreed programme of works in the Long Term Plan. Please use the annual average across all years in the Long Term Plan. | |
| *Processing rules:* | | Input field | |

|  |  |  |  |
| --- | --- | --- | --- |
| **C8.3b** | **Length of combined sewers for replacement as identified for a programme of works in the Long Term Plan (annual average)** | | **Km** |
| *Definition:* | | The total length of sewers which is to be replaced as part of the agreed programme of works in the Long Term Plan. Please use the annual average across all years in the Long Term Plan. | |
| *Processing rules:* | | Input field | |

|  |  |  |  |
| --- | --- | --- | --- |
| **C8.4** | **Length of sewers for rehabilitation (excluding combined sewers)** | | **Km** |
| *Definition:* | | The total length of sewers (excluding combined sewers) which is to be rehabilitated in the Long Term Plan. Please use the annual average across all years in the Long Term Plan. | |
| *Processing rules:* | | Input field | |
| **C8.4b** | **Length of combined sewers for rehabilitation** | | **Km** |
| *Definition:* | | The total length of sewers which is to be rehabilitated in the Long Term Plan. Please use the annual average across all years in the Long Term Plan. | |
| *Processing rules:* | | Input field | |
| **C8.5** | **Length of sewers replaced in report year (excluding combined sewers)** | | **Km** |
| *Definition:* | | The total length of sewers (excluding combined sewers) replaced during the report year. | |
| *Processing rules:* | | Input field | |
| **C8.5b** | **Length of combined sewers replaced in report year** | | **Km** |
| *Definition:* | | The total length of sewers replaced during the report year. | |
| *Processing rules:* | | Input field | |

|  |  |  |  |
| --- | --- | --- | --- |
| **C8.6** | **Length of sewers rehabilitated in report year (excluding combined sewers)** | | **Km** |
| *Definition:* | | The total length of sewers (excluding combined sewers) rehabilitated during the report year. | |
| *Processing rules:* | | Input field | |
| **C8.6b** | **Length of combined sewers rehabilitated in the report year** | | **Km** |
| *Definition:* | | The total length of combined sewers rehabilitated during the report year. | |
| *Processing rules:* | | Input field | |

|  |  |  |  |
| --- | --- | --- | --- |
| **C8.7** | **Length of sewers with completed and acceptable post-surveys (excluding combined sewers)** | | **Km** |
| *Definition:* | | The total length of sewers (excluding combined sewers) where a post-work survey has been undertaken and the results have been acceptable. | |
| *Processing rules:* | | Input field | |
| **C8.7b** | **Length of combined sewers with completed and acceptable post-surveys** | | **Km** |
| *Definition:* | | The total length of sewers where a post-work survey has been undertaken and the results have been acceptable. | |
| *Processing rules:* | | Input field | |
| **C8.8** | **Number of wastewater drainage areas where programmes of works have been completed** | | **Nr** |
| *Definition:* | | The total number of wastewater drainage areas where programmes of work identified in the Long Term Plan have been completed. | |
| *Processing rules:* | | Input field | |

BLOCK 2: DRAINAGE AREA PLANS

|  |  |  |  |
| --- | --- | --- | --- |
| **C8.12** | **Drainage area plans in place** | | **Nr.** |
| *Definition:* | | Number of drainage area plans in place at the end of the report year. Abbreviated investigations may be substituted where it is clear that there are no hydraulic problems with the sewers in the relevant drainage are. Where separate models cover several drainage areas (such as for modelling interceptor sewers) then these can be included as part of the total number of plans. | |
| *Processing rules:* | | Input field | |
| **C8.14** | **Percentage of drainage areas with a plan in place** | | **%** |
| *Definition:* | | Percentage of drainage areas covered by a drainage area plan. | |
| *Processing rules:* | | Calculated field: C8.12/C8.1 multiplied by 100 | |
| **C8.15** | **Percentage of the population covered by a drainage area plan** | | **%** |
| *Definition:* | | Percentage of population in the Local Authority’s area covered by a drainage area plan. | |
| *Processing rules:* | | Input field | |

TABLE C8b: STORMWATER QUALITY OUTPUTS – STORMWATER ONLY SEWER ACTIVITIES

1. This table relates to stormwater only sewer rehabilitation work undertaken, and work carried out on gathering effective information needed for good practice stormwater resource planning, during the report year.
2. Drainage areas are defined based on the extent of the wastewater area draining to a particular wastewater treatment works.

Guidance

1. On completion of Table C8b the Local Authority should ensure that no input cell is left blank.

BLOCK 1: STORMWATER SEWER REHABILITATION PROGRAMME

|  |  |  |  |
| --- | --- | --- | --- |
| **C8b.1** | **Number of stormwater areas** | | **Nr.** |
| *Definition:* | | The total number of stormwater areas within the Local Authority’s area. | |
| *Processing rules:* | | Input field | |
| **C8b.2** | **Number of stormwater areas subject to a programme of work as identified in the Long Term Plan (annual average)** | | **Nr.** |
| *Definition:* | | The total number of stormwater areas which are subject to a programme of work as identified in the Long Term Plan. Please use the annual average across all years in the Long Term Plan. | |
| *Processing rules:* | | Input field | |
| **C8b.3** | **Length of stormwater only sewers for replacement** | | **Km** |
| *Definition:* | | The total length of stormwater only sewers which is to be replaced as part of the agreed programme of works as identified in the Long Term Plan. Please use the annual average across all years in the Long Term Plan. | |
| *Processing rules:* | | Input field | |

|  |  |  |  |
| --- | --- | --- | --- |
| **C8b.4** | **Length of stormwater only sewers for rehabilitation** | | **Km** |
| *Definition:* | | The total length of stormwater only sewers which is to be rehabilitated as part of the agreed programme of works as identified in the Long Term Plan. Please use the annual average across all years in the Long Term Plan. | |
| *Processing rules:* | | Input field | |
| **C8b.5** | **Length of stormwater only sewers replaced in report year** | | **Km** |
| *Definition:* | | The total length of stormwater only sewers replaced during the report year. | |
| *Processing rules:* | | Input field | |
| **C8b.6** | **Length of stormwater only sewers rehabilitated in report year** | | **Km** |
| *Definition:* | | The total length of stormwater only sewers rehabilitated during the report year. | |
| *Processing rules:* | | Input field | |
| **C8b.7** | **Length of stormwater only sewers with completed and acceptable post-surveys** | | **Km** |
| *Definition:* | | The total length of stormwater only sewers where a post-work survey has been undertaken and the results have been acceptable. | |
| *Processing rules:* | | Input field | |
| **C8b.8** | **Number of stormwater areas where programmes of work have been completed** | | **Nr.** |
| *Definition:* | | The total number of stormwater areas where programmes of work identified in the Long Term Plan have been completed. | |
| *Processing rules:* | | Input field | |