

## 12. SURFACE WATER

### Executive Summary

This chapter considers the potential impacts on the surface water environment associated with the construction, operation and decommissioning of the proposed development.

This assessment has considered the potential for significant effects on surface water quality, fisheries and recreation, flood risk, public water supplies and private water supplies (PWS). The assessment was made with reference to the assessment provided in Chapter 12 of the Tangy III Environmental Statement (ES, 2014) followed by a review of any changes in policy, legislation and guidance and baseline conditions, along with consideration of the significance of effects for the proposed development. Based on this assessment it was concluded that, with the exception of PWS source locations within 250 m of the proposed development, there would be no potential for significant effects. All other non-significant effects have been scoped out.

The assessment of the potential for the proposed development to impact PWS considered 14 PWS source locations within 1 km of the site<sup>1</sup>. Following further baseline characterisation using desk assessment, site survey, questionnaires and local consultations, the potential for impacts on 13 of the 14 PWS source locations was scoped out of further assessment on the basis that they are located out with the 250 m groundwater protection buffer (as per SEPA's Guidance LUPS-GU31).

Due to the presence of dense forestry, PWS source location 2, which serves two properties (Lagaltarve Farm (2A) and Tangytavil (2B)), was subject to further assessment to consider potential impacts associated with Borrow Pit C. Therefore, based on conceptual site modelling, it was concluded that depending on the hydrogeological connection between PWS2 and Borrow Pit C, there is the potential for either 'no effect' or 'adverse effects' on the quality and quantity of supply.

Following a precautionary approach, it is therefore concluded that there could be the potential for effects of high magnitude. However, in order to mitigate the potential for significant effects, the applicant proposes to agree contingency plans that would ensure security of supply to the two properties in the unlikely event that there is a significant effect on the quality or quantity of supply. Security of supply would be provided through the use of either temporary or permanent replacement of groundwater supply. Following the application of these proposed mitigation measures, the effect on the supply of water to the residential receptors would be considered **not significant**.

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<sup>1</sup> The PWS and property IDs are described in Table 12.4 and locations are illustrated in Figure 12.1

## 12.1 Introduction

12.1.1 This chapter considers the potential effects on surface water quality, fisheries and recreation, flood risk, public water supplies and private water supplies (PWS) associated with the construction, operation and decommissioning of the proposed development. The specific objectives of the chapter are to:

- Describe the baseline;
- Describe the assessment methodology and significance criteria used in completing the impact assessment;
- Describe the potential effects, including direct, indirect and cumulative effects;
- Describe the mitigation measures proposed to address likely significant effects; and
- Assess the significance of residual effects remaining following the implementation of mitigation.

12.1.2 The assessment has been carried out by chartered water and environment professionals of WSP in accordance with the Chartered Institution of Water & Environmental Management code of ethics.

12.1.3 Effects on hydrogeology and peat are addressed separately in Chapter 11: Geology, Soil and Hydrogeology and effects on Groundwater Dependent Terrestrial Ecosystems are addressed in Chapter 10: Ecology.

12.1.4 This chapter is supported by:

- Appendix 12.1: SEPA Correspondence;
- Appendix 12.2: Private Water Supplies; and
- Appendix 12.3: Conceptual Site Model.

12.1.5 Figure 12.1 is referenced in the text where relevant.

## 12.2 Scope of Assessment

### *Project Interactions*

12.2.1 The proposed development will introduce physical changes which may alter the hydrological characteristics of the site which may impact on water supplies, watercourse flows and flood risk. During the construction phase and to a lesser extent during the operational phase, potential sources of pollution may be present on site which could impact upon water quality and fisheries.

### *Scoping and Consultation*

12.2.2 As part of the EIA Scoping exercise for the proposed development, it was proposed that the surface water topic be scoped out based on the findings of the Tangy III surface water assessment and the limited nature of the infrastructure changes when compared to Tangy IV. The Tangy III ES (2014) concluded that there were no likely significant effects on the surface water environment in terms of the EIA Regulations. It was also proposed that further information regarding PWS sources and assessment be provided pre-construction. Table 12.1 summarises the responses to the scoping request which were provided within the Scottish Government Scoping Opinion, and which are relevant to the surface water environment.

12.2.3 Full details on the consultation responses can be reviewed in Appendix 2.1: Consultation Register.

**Table 12.1: Consultation Responses**

Consultee and Date	Summary of Response	Comment/Action Taken
<p>Scottish Government 16/10/2017</p>	<p><i>Tangy IV Scoping Opinion.</i> The EIA Report should reflect the assessment of all likely significant environmental effects of the proposed Tangy IV. Where assessment areas are scoped out based on conclusions from prior knowledge (such as Tangy III) the following must be considered:</p> <ul style="list-style-type: none"> <li>- Are impacts comparable;</li> <li>- Has policy context changed; and</li> <li>- Has baseline condition changed.</li> </ul>	<p>All likely significant environmental effects have been considered. Where assessment areas have been scoped out based on conclusions from prior knowledge this has taken account of changes in policy, legislation and guidance, and baseline condition; and has only where impacts are comparable. See Section 12.3 Scope of Assessment - Effects scoped out of assessment.</p>
<p>SEPA 26/05/2017</p>	<p><i>Tangy IV Scoping Opinion.</i> Further to SEPAs response to the Tangy III application and subsequent correspondence, the following information is required.</p> <ul style="list-style-type: none"> <li>- Additional site investigation works to locate PWS sources for four properties with recorded supplies for which sources have yet to be located; and to understand the implications to the source and quantity of these supplies.</li> <li>- Further assessment on the potential impacts of the private water supply within 250 m of the 'working area' of Borrow Pit C in line with Land Use Planning System Guidance Notes 4 (Appendix 2) and 31; or relocation of the borrow pit to be at least 250m from the PWS.</li> <li>- For pumping from borrow pits compliance with GBR2 or GBR5 under the Water Environment Controlled Activities (Scotland) Regulations 2011 (as amended) is required. If quantities greater than 10 m<sup>3</sup>/day a CAR permit may be necessary.</li> </ul>	<p>See Section 12.5 Baseline Conditions.  See Section 12.6: Effects Evaluation.  See Outline Construction Environmental Management Plan (CEMP) (Appendix 5.1).</p>
<p>Scottish Water 22/05/2017</p>	<p><i>Tangy IV Scoping Opinion.</i> Requested consideration of potential impacts on Drinking Water Protected Areas and public water supply intakes in the area, notably Glen Lussa Water catchment. A distribution main runs alongside the A83 and the access roads for the site. Protection measures should be implemented to ensure it is protected.</p>	<p>These intakes were assessed in the Tangy III ES (2014). Temporary and permanent infrastructure is not located within the respective drinking water catchments and effects are negligible. The distribution mains location shall be confirmed, and appropriate measures agreed with Scottish Water for crossing the asset or other works in close proximity to avoid damage.</p>

<b>Table 12.1: Consultation Responses</b>		
<b>Consultee and Date</b>	<b>Summary of Response</b>	<b>Comment/Action Taken</b>
Marine Scotland Sciences (MSS) 26/05/2017	<i>Tangy IV Scoping Opinion.</i> MSS advises the developer to carry out up to date site characterisation surveys of the watercourses potentially impacted by the proposed development. Including surveys of hydrochemistry to include turbidity and flow data, and fish populations (the presence and abundance of fish species) to inform the assessment.	As infrastructure and construction compounds are located out with a 50m watercourse buffer (with the exception of watercourse crossings) and robust water protection mitigation measures are included within the Schedule of Mitigation and CEMP, additional surveys are not proposed at this time.  A commitment has been made for pre-construction, construction and post-construction monitoring.  Fish populations are discussed in Chapter 10: Ecology of this EIA Report.
Fisheries Management Scotland 15/05/2017	<i>Tangy IV Scoping Opinion.</i> Consultation with the Argyll District Salmon Fisheries Board and the Argyll Fishery Trust is requested.	The proposed development infrastructure and construction compounds are located out with a 50m watercourse buffer (with the exception of watercourse crossings) and robust water protection mitigation measures are included within CEMP.  Argyll District Salmon Fisheries Board consulted during scoping.  Fish populations are discussed in Chapter 10: Ecology of this EIA Report.
Argyll District Salmon Fisheries Board 16/10/2017	<i>Tangy IV Scoping Opinion.</i> No response.	None applicable.

12.2.4 Correspondence between SEPA and the applicant in 2015 concluded the following; the final letter from SEPA dated 22<sup>nd</sup> June 2015 is provided in Appendix 12.1:

- that the PWS in the vicinity of Borrow Pit A were not at risk as they were not located within 250 m of the borrow pit ‘working area’, but instead within the borrow pit ‘search area’. SEPA were satisfied that borrow pit A was out with the buffer zone and did not require further assessment.; and
- Additional quantitative hydrogeological assessment should be carried out to demonstrate that the risk to the PWS from Borrow Pit C is not significant.

### ***Effects to be Assessed***

12.2.5 The potential effects of the proposed development on PWS in relation to the following have been assessed / reported:

- Impacts from Borrow Pit C on PWS; and
- PWS source information relating to four properties with groundwater-fed PWS registered with Argyll & Bute Council for which sources had not previously been located.

### ***Effects Scoped Out of Assessment***

12.2.6 The Tangy III ES (2014) Chapter 12: Surface Water assessed the impact of the proposed development on surface water quality, fisheries and recreation, flood risk, public water supplies and PWS. The assessment took into account mitigation measures in terms of both ‘mitigation by design’ and best practice construction management outlined in an accompanying Construction

Environmental Management Plan. It concluded that there were no potentially significant effects on the surface water environment in terms of the EIA Regulations.

- 12.2.7 Table 12.2 presents a summary of the assessment of predicted construction effects from the Tangy III ES (2014) study. Temporary minor adverse effects were identified in relation to construction impacts on surface water quality at Tangy Loch SSSI; due to its high sensitivity. Temporary minor adverse effects were also identified for specific PWS in proximity to borrow pits during the construction phase.
- 12.2.8 The significance of operational residual effects within the Tangy III ES (2014) was the same as illustrated in Table 12.2 for all receptors with the exception of PWS for which all were predicted to have negligible residual effects.
- 12.2.9 The changes to the design for the proposed development are very limited and do not impinge on waterbody or PWS protection or assessment buffers. As such it is considered that these design changes do not materially affect the conclusions of the Tangy III ES (2014).
- 12.2.10 A review of current baseline conditions and relevant policy, legislation and guidance has also been undertaken to ensure that the findings of the Tangy III ES (2014) remain valid, the documents which were considered are listed below Table 12.2. There have been no relevant legislative or guidance changes in the interim which materially change the findings; nor has the baseline materially changed, with the exception of the PWS in the vicinity of Borrow Pit C, as discussed in paragraph 12.2.5.
- 12.2.11 Effects of the proposed development on water quality, fisheries and recreation, flood risk, public water supplies and PWS in general (other than those being assessed) have therefore been scoped out as not having the potential for significant effects. The construction management measures to protect the water environment are outlined in the Construction Environmental Management Plan (CEMP) which accompanies this EIA Report (see Appendix 5.1).

Potential Effects	Identified Receptor <sup>1</sup>	Significance of Residual Effect <sup>2</sup>			
		Water Quality	Fisheries and Recreation	Flooding	Water Supplies
Leakages and Spillages	Allt na Creamh	Negligible	Negligible	Negligible	
Sediment Entrained Runoff	Allt na Ceardaich	Negligible	Negligible	Negligible	
Increase in Runoff	Tangy Burn	Negligible	Negligible	Negligible	
Modifications to Surface Drainage Patterns	Allt a Ghoirtein	Negligible	Negligible	Negligible	
Impediments to Surface Water Flow	Allt Harvie	Negligible	Negligible	Negligible	
Modifications to Groundwater Flow and Levels	Tangy Loch SSSI	Minor Adverse	Negligible	Negligible	
	Scottish Water Peninver WTW				Negligible
	PWS Sources PWS1, PWS10, PWS11 and PWS9				Negligible
	PWS Sources PWS2, PWS4, PWS5, PWS6, PWS7, PWS12, PWS13				Minor Adverse

<sup>1</sup> private water supply IDs have been updated in line with the IDs used within this chapter and accompanying appendices. The list is provided in Table 12.4.

<sup>2</sup> terminology for residual effects revised to be in line with that used within this EIA Report.

12.2.12 Relevant legislation, policy and guidelines updated or published since the Tangy III ES (2014) comprise:

- Argyll and Bute Local Development Plan 2015 March 2015 (Ref. 12.1);
- Water Environment (Miscellaneous) (Scotland) Regulations 2017 (Ref. 12.2);
- The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended) (CAR): A Practical Guide (February 2018) (Ref. 12.2);
- SEPA Guidance on Assessing the Impacts of Development Proposals on Groundwater Abstractions and Groundwater Dependent Terrestrial Ecosystems (2017) (LUPS-GU31) (Ref. 12.4);
- The UK Forestry Standard (2017); Forestry Commission (Ref. 12.5);
- SEPA's Engineering in the water environment: good practice guide for River crossings (2010) (Ref. 12.6);
- Culverting of Watercourses – Position Statement and Supporting Guidance (2015) (Ref. 12.7); and
- SEPA Guidance for Pollution Prevention (GPP) 5: Works and maintenance in or near water (2018) (Ref 12.8).

12.2.13 None of the updates to the above documents or new documents materially affect the findings of the Tangy III ES (2014) with regard to surface water. However, some construction guidance has changed in the intervening period and is addressed as follows:

- The guidance for CAR has been changed regarding the licencing requirements for surface water run-off from a construction site. Considering the size of the construction footprint, there is the potential for a CAR licence to be required, subject to consultation with SEPA; and
- The UK Forestry Standard 2017 recommends a minimum width for buffer areas around private water supply abstraction points of 50 m. This will be adhered to and is included within the outline CEMP/forestry chapter.

## 12.3 Methodology

### *Overview*

12.3.1 The methodology for this chapter has been tailored to focus on the following:

- Acquisition of data relating to private water supplies within the vicinity of the site; notably the four sources which were not previously located; and
- Potential impacts of Borrow Pit C on one private water supply.

### *Method of Baseline Characterisation*

12.3.2 Private water supply data was gathered using the following methods:

- Consultation with Argyll & Bute Council Environmental Health Department to obtain data on recorded PWS within 2 km of the site;
- Questionnaires posted to properties within 1 km of the site which had PWS recorded with the local authority and properties with no record of PWS, but which were unlikely to be on mains supply due to their location; and
- Targeted interviews with property owners and a site walkover survey of PWS sources conducted between 12<sup>th</sup> – 15<sup>th</sup> March 2018.

12.3.3 Data to inform the conceptual site model was gathered as follows:

- An overview of the local catchments to Borrow Pit C;
- Collation of data provided through PWS consultations;
- Compilation of soils, geological and hydrogeological information;
- Ordnance Survey Map data at 1:10,000, 1: 25,000 and 1: 50,000 scales;
- The British Geological Survey (BGS) Digital Mapping; and
- Information gathered from the site walkover survey.

12.3.4 Full details of the survey methodology are detailed in Appendix 12.2: Tangy IV Private Water Supply Survey.

### ***Effects Evaluation Methodology***

12.3.5 The assessment of likely effects as a result of the proposed development has taken into account both the construction and operation phases. The significance level attributed to each effect has been assessed based on the magnitude of change due to the proposed development and the sensitivity of the affected receptor/receiving environment to change, as well as a number of other factors that are outlined in more detail in Chapter 2: Environmental Impact Assessment. Magnitude of change and the sensitivity of the affected receptor/receiving environment are both assessed on a scale of high, medium, low and negligible.

12.3.6 The sensitivity of local water supply sources, including private water supplies, where there is no alternative to private supplies and it is used for drinking water, is considered to be ‘High’ locally.

12.3.7 Magnitude has been assigned using the criteria detailed in Table 12.3 with respect of this topic.

<b>Table 12.3: Effect Magnitude Criteria</b>	
<b>Sensitivity</b>	<b>Surface Water Definition</b>
High	Fundamental change to hydrological conditions (including deterioration in water quality and hydromorphological quality) resulting in temporary or permanent consequential changes such as altering water body’s existing Water Framework Directive (WFD) ecological status and increasing pressure to meet WFD targets.
Medium	Detectable change to hydrological conditions resulting in non-fundamental or partial, temporary or permanent consequential changes. Some deterioration in water quality likely to temporarily impact to most sensitive receptor.
Low	Detectable but minor change to hydrological conditions. Drinking water or Water Framework Directive Standards are not exceeded and level of change is unlikely to affect the most sensitive receptor.
Negligible	Non-detected, unquantifiable or unqualifiable change in hydrological conditions (including water quality).

12.3.8 A Conceptual Site Model was prepared to help understand the relationship between Borrow Pit C and PWS 2 (previously PWS B in the Tangy III ES (2014)) and to aid in the identification of likely significant effects. This is provided in Appendix 12.3: Conceptual Site Model.

## **12.4 Baseline Conditions**

12.4.1 Table 12.4 presents a summary of the private water supplies within 1 km of the site. Figure 12.1 illustrates the location of the PWS sources, the properties supplied and proximity to proposed development infrastructure, and more detail and photography is provided in Appendix 12.2. PWS shaded grey are located within 250 m of excavations.

<b>Table 12.4: Private Water Supplies</b>				
<b>PWS Source ID</b>	<b>Properties supplied</b>	<b>Source Type</b>	<b>Approximate distance to nearest source to excavations (m)</b>	<b>Use</b>
1	Killocrow Farm (1A) Tighavullin Farm (1B)	Well	592 to Turbine 8	Domestic & livestock
2	Lagaltarve Farm (2A) Tangytavil (2B*)	Unknown but likely to be either a spring or shallow groundwater collector system. The source is believed to incorporate collector pipes but their presence and extent have not been verified.	244 from source collection point to borrow pit working area	Domestic, livestock & commercial
3	Am Fasgadh (3A)	Spring	1134 to Borrow Pit C working area	Domestic
4	Tighnamoile (4A) Tangymoil Farm (4B)	Spring	792 to Borrow Pit C working area	Domestic & livestock
5	Killarow Cottage (5A) Tangy Glen Cottages (5 properties) (5B) Maleen (5C)	Spring	779 to Turbine 1	Domestic
6	Killarow Farm (6A) Tigh-Na-Mara (6B)	Spring	779 to Turbine 1	Domestic & livestock
7	Tangy Mill (7A)	Spring	576 to Turbine 1	Commercial
8	High Balevain Farmhouse (8A)	Spring	1642 to Turbine 1	Domestic & dairy cattle
9	Breakachy Farmhouse (9A)	Borehole	1365 to Turbine 1	Domestic
10	Drumalea Farm (10A) Drumalea Farm Cottage (10B)	Dammed stream	634 to Borrow Pit B working area	Domestic & livestock (CAR/R/1014147)
11	Breakachy Cottages (3 properties) (11A) High Balevain Farm (8A)	Spring(s)	610 to Borrow Pit B working area	Domestic & livestock
12	Tangy Wind Farm (12A)	Groundwater Collector	255 to Turbine 2*	Commercial
13	Tangy Farm (13A) Dalnaspidal (13B) TangyLea (13C)	Spring	254 to Turbine 4*	Domestic, commercial & livestock
14	Gobagrennan (14A)	Spring	1603 to Turbine 11	Domestic & livestock



\*The turbine location will be microsituated to ensure that the turbine foundation is not located within 250 m of the private water supply.

- 12.4.2 Table 12.4 confirms that 13 of the 14 PWS sources identified within 1 km of the site are out with the 250 m groundwater protection buffer for excavations greater than 1m (as per SEPA's Guidance LUPS-GU31). PWS source locations for PWS5, PWS9 and PWS11 were located as part of the baseline characterisation and are either spring or borehole supply and are located at distances greater than 500 m from proposed development infrastructure (see Figure 12.1). Additionally, PWS9 and PWS11 are separated from proposed development excavations by a watercourse. PWS5 is not located down-gradient from the nearest infrastructure; the nearest up-gradient infrastructure being located at a distance of approximately 900 m. Considering these distances and intervening hydrological environment, the impacts on these private water supplies are not considered further.
- 12.4.3 PWS2 is located within 250 m of proposed development infrastructure (see Figure 12.1) requiring excavations greater than 1 m (as per SEPA's Guidance LUPS-GU31) and is subject to further assessment in section 12.5.
- 12.4.4 Private water supplies for potable use, where no alternative supply is available are considered to be high sensitivity receptors.

## 12.5 Effects Evaluation

### *Potential Effect*

- 12.5.1 This evaluation of effects specifically investigates the potential for likely significant effects on PWS2 from Borrow Pit C, the working area for which is located within 250m of the PWS.
- According to the information gathered during the field survey through interview with the resident who uses PWS2, the mapped PWS2 source location is understood to comprise a collection tank for groundwater outflow from a system of collector pipes buried below ground. The tank has been located as part of the PWS survey and is approximately 244 m from the proposed borrow pit working area. However, the location (and presence) of an underground pipe network has not been verified due to the dense forestry surrounding the tank. The zone of contribution for PWS2 therefore has the potential to be located less than 250 m from Borrow Pit C and potentially within the same surface water catchment. It was not possible to definitively confirm the extent of the zone of contribution/pipe network without felling the forest, and then completing intrusive investigations which would carry the risk of inadvertently damaging any pipes.
- 12.5.2 A Conceptual Site Model (CSM) has been prepared to investigate the potential interaction between PWS2 and Borrow Pit C, which is provided in Appendix 12.3. The model considered a number of different scenarios for which the zone of contribution from Borrow Pit C ranged from 0% to 8% of the total area of contribution to PWS2. It concluded that, depending on the hydrogeological connection between PWS2 and Borrow Pit C, there is the potential for either 'no effect' or 'adverse effects' on quality and quantity of supply to this receptor.
- 12.5.3 Following a precautionary approach, it is therefore concluded that there is the potential for effects of high magnitude as follows:
- Adverse construction effects on both quality and quantity of private water supply during the use of the borrow pit related to the creation of preferential pathways for groundwater away from the water supply zone of contribution; or introduction of contaminants into the groundwater supply; and
  - Adverse operational phase effects relating to quantity of private water supply should the direction of groundwater flow be altered.
- 12.5.4 As this receptor is considered to be of high sensitivity the effect has the potential to be significant.

## 12.6 Mitigation Measures

- 12.6.1 The following measures would be put in place to maintain quality and quantity of a potable supply for the users of PWS2. These are in addition to the good practice water quality protection measures included within the CEMP:
- The applicant intends to identify a long-term sustainable solution for the PWS2 water supply and will seek to establish the PWS users' current needs regarding water use and quantities, post-consent. The applicant will seek the PWS users' input and support for any protection or mitigation measures relating to the PWS' infrastructure and will strive to maintain, if not improve, the current PWS water quality and quantity. The applicant accepts that the protection of the PWS to the satisfaction of SEPA and the PWS users will be required as part of the consent/pre-commencement Planning Condition.
- 12.6.2 As part of good practice within the CEMP and in line with LUPS-31 on-going monitoring of the PWS2 groundwater supply will be undertaken to demonstrate whether the quality of groundwater and/or hydrological connectivity is being maintained taking cognizance of SEPA Technical Guidance Note 1: The Monitoring of Infrastructure with Excavations Less than 1m Deep within 100m of Sensitive Receptors (Groundwater Abstractions and Groundwater Dependent Terrestrial Ecosystem). Monitoring will take place before, during and after construction; with timescales to be agreed with SEPA. If required and as agreed with the PWS user, temporary water supply will be made available for use from the outset and throughout the construction period, should PWS2 be temporarily adversely affected.

## 12.7 Residual Effect

- 12.7.1 Following the application of the mitigation measures above, no likely significant effects are anticipated.

## 12.8 Monitoring

- 12.8.1 The minimum water quality monitoring programme requirements are outlined in the CEMP (v1.0 July 2018) and described in Section 12.7.

## 12.9 References

- Argyll and Bute Council (2015), *Argyll and Bute Local Development Plan March 2015*. Lochgilphead: Argyll and Bute Council
- Scottish Government (2017), *Water Environment (Miscellaneous) (Scotland) Regulations 2017*. Edinburgh: Scottish Government
- SEPA (2018), *The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended) (CAR): A Practical Guide, February 2018*. Stirling: SEPA
- SEPA (2017), *Guidance on Assessing the Impacts of Development Proposals on Groundwater Abstractions and Groundwater Dependent Terrestrial Ecosystems*. Stirling: SEPA
- Forestry Commission (2017), *The UK Forestry Standard (2017)*. Edinburgh: Forestry Commission
- SEPA (2010), *Engineering in the water environment: good practice guide for River crossings*. Stirling: SEPA
- SEPA (2015), *Culverting of Watercourses – Position Statement and Supporting Guidance*. Stirling: SEPA
- SEPA, Natural Resources Wales (NRW), the Northern Ireland Environment Agency (NIEA) (2018), *SEPA Guidance for Pollution Prevention 5: Works and maintenance in or near water*. Stirling: SEPA, NRW, NIEA