

Appendix 28A Scoping tables for surface waters

Completed Scoping Tables for Activity: C1 Demolition of timber wharf and jetties

The following tables summarise the information relevant to the consideration of the requirements of the Water Framework Directive (tables taken from Clearing the Waters for All, Environment Agency 2016). Note that although the answer to the question is sometimes yes, the evidence provided in the notes column allows the issue to be scoped out.

Table A1 Output of WFD scoping for activity C1

Consider if the footprint of your activity;	Scoped in (yes/no)	Risk Issue
Hydromorphology		
Could impact on the hydromorphology (for example morphology or tidal patterns) of a water body at high status	No	No, the water body is not at high status (neither are the adjoining water bodies)
Could significantly impact the hydromorphology of any water body	No	Whilst the spud legs of the jack-up barge, anchors of the vessels and bow thrusters of the vessels as well as the pile removal activities themselves will result in some disturbance to the existing estuary bed, this will be minor and highly localised. Alterations to hydromorphological parameters are not predicted. The works also will be temporary in duration and the baseline conditions will be restored once the vessels have been demobilised from site. See Section 6.5.1
Is in a water body that is heavily modified for the same use as your activity	No	Whilst the water bodies are all heavily modified for navigation, ports and harbours and removal of these structures relates to port activities, the removal would not alter hydromorphological parameters of the estuary or stop the mitigation measures identified for the water body being implemented. See Section 6.5.1
Biology		
Is 0.5km ² or larger	No	The removal of the structures would not impact an area greater than 0.5km ² or be equivalent to 1% of the WFD water body.
Is 1% or more of the water body's area	No	
Is within 500m of any higher sensitivity habitat	No	There are no higher sensitivity habitats within 500m of the removal locations.
Is 1% or more of any lower sensitivity habitat	No	No – the area impacted is considered to be soft intertidal and soft subtidal sediment of which there is 610.31 hectares.

Consider if the footprint of your activity;	Scoped in (yes/no)	Risk Issue
Biology (fish)		
Is in an estuary and could affect fish in the estuary, outside the estuary but could delay or prevent fish entering it or could affect fish migrating through the estuary	No	See comments in water quality below. There may be temporary sediment resuspension but this is expected to be short term and localised to the working area. Effects on fish migrating through the estuary would therefore not occur.
Could impact on normal fish behaviour like movement, migration or spawning (for example creating a physical barrier, noise, chemical change or a change in depth or flow)		
Could cause entrainment or impingement of fish	No	No risk of entrainment or impingement.
Water Quality		
Could affect water clarity, temperature, salinity, oxygen levels, nutrients or microbial patterns continuously for longer than a spring neap tidal cycle (about 14 days)	No	<p>The concrete deck of the existing jetties and locally on the wharf is likely to be either broken up using a long reach excavator with hydraulic demolition attachments, working from the shore (and supported by a jack-up barge, slave barge and safety/workboat). Alternatively, the demolition may include cutting sections of the deck and lifting them onto the land for disposal. Best practice working methods would be adopted to ensure that transport of debris into the Tees is minimised. Should any debris fall into the river channel during demolition, this would be removed as early as practicable. There are therefore limited risks to water quality in relation to the deck structure removal.</p> <p>The timber parts of the deck of the existing wharf would be removed using a long reach excavator working from the shore, and supported by a jack up barge, slave barge and safety boat. As with the concrete deck, best practice demolition techniques would be adopted to ensure transport of debris into the Tees is minimised, with any debris that does fall into the river being removed as early as practicable.</p> <p>The piles supporting the concrete jetties and the wharf, as well as the pipework feeding the pumping station would all be removed. It is proposed that the piles would be extracted using vibration techniques. It is anticipated that such works would be undertaken using a jack-up barge with crawler crane, a slave barge and a safety/workboat. This marine plant would be supported through the use of divers. There is the possibility of sediment plumes</p>

Consider if the footprint of your activity;	Scoped in (yes/no)	Risk Issue
		during the demolition works but these are only expected to be localised to the working area and temporary. Any sediment resuspension is unlikely to last more than a few hours per pile.
Is in a water body with a phytoplankton status of moderate, poor or bad	No	Status is good
Is in a water body with a history of harmful algae	No	No history of issues with harmful algae listed in the WFD water body summary table.
If your activity uses or releases chemicals (for example through sediment disturbance or building works) consider if: The chemicals are on the Environmental Quality Standards Directive (EQSD) list	No	In the unlikely event of a spill, appropriate spill kits will be available on board the barges and crew will be trained in spill response. In addition, all vessels will ensure that suitable bunding and storage facilities are employed to prevent the release of fuel oils, lubricating fluids associated with the plant and equipment into the marine environment.
If your activity uses or releases chemicals (for example through sediment disturbance or building works) consider if: It disturbs sediment with contaminants above Cefas Action Level 1	No	Sediment samples available from the NGCT project collected in 2019 are likely to contain contaminants above action level 1. There is the possibility of sediment plumes during the demolition works but these are only expected to be localised to the working area and temporary. Any sediment resuspension is unlikely to last more than a few hours per pile. Significant resuspension of contamination is therefore not predicted.
Protected Areas		
Within 2km of any WFD protected area	No	The SPA is located within 2km of the activity however the effects predicted are small and localised to the works. Considered in more detail in Section 29 .
Invasive species		
Introduce or spread Invasive Non-native Species (INNS)	No	Biosecurity measures would be implemented to avoid the importing of non-native invasive species. Equipment, plant and PPE brought to site would be clean and free of material and vegetation. To ensure measures are implemented, biosecurity toolbox talks would be given to all site staff and rigorous inspections would be undertaken of all equipment delivered to site, following the Check Clean and Dry campaign.

Table A2 Output of WFD scoping for activity C2 Capital dredging

Consider if the footprint of your activity;	Scoped in (yes/no)	Risk Issue
Hydromorphology		
Could impact on the hydromorphology (for example morphology or tidal patterns) of a water body at high status	No	No, the water body is not at high status (neither are the adjoining water bodies)
Could significantly impact the hydromorphology of any water body	Yes	Yes, capital dredging could potentially alter hydromorphological parameters in the water body,
Is in a water body that is heavily modified for the same use as your activity	Yes	Yes, the water body in which the activity will occur is heavily modified for navigation, ports and harbours
Biology		
Is 0.5km ² or larger	Yes	The area to be impacted by dredging equates to 350,000m ² (0.32km ²) which when multiplied by 1.5 is 0.53km ² . Given the answer to this question is yes, biology is scoped in and consideration of the type of habitat to be disturbed/removed by the capital dredge is required.
Is 1% or more of the water body's area		
Is within 500m of any higher sensitivity habitat		
Is 1% or more of any lower sensitivity habitat		
Biology (fish)		
Is in an estuary and could affect fish in the estuary, outside the estuary but could delay or prevent fish entering it or could affect fish migrating through the estuary	Yes (water quality effects only)	There is the possibility of sediment plumes during the dredging works. Possibility of underwater noise during dredging impacting on fish is scoped out due to evidence provided by underwater noise modelling undertaken to inform the York Potash Harbour Facilities which indicated that noise levels considered to be potentially harmful only occur for areas less than 20m from the dredger. It is considered unlikely that fish would remain within the injurious zone given the proximity to the vessel that would be required (see Section 13).
Could impact on normal fish behaviour like movement, migration or spawning (for example creating a physical barrier, noise, chemical change or a change in depth or flow)		
Could cause entrainment or impingement of fish	No	Regular maintenance dredging undertaken within the proposed dredge footprint on a year-round basis suggests that the riverbed is likely to be characterised by regular disturbance events, making it unsuitable for spawning activity by any fish/shellfish species and reducing the risk of direct uptake of eggs during the capital dredge (See Section 13).

Consider if the footprint of your activity;	Scoped in (yes/no)	Risk Issue
Water Quality		
Could affect water clarity, temperature, salinity, oxygen levels, nutrients or microbial patterns continuously for longer than a spring neap tidal cycle (about 14 days)	Yes	There is the possibility of sediment plumes during the dredging works
Is in a water body with a phytoplankton status of moderate, poor or bad	No	Status is good
Is in a water body with a history of harmful algae	No	No history of issues with harmful algae listed in the WFD water body summary table.
If your activity uses or releases chemicals (for example through sediment disturbance or building works) consider if: The chemicals are on the Environmental Quality Standards Directive (EQSD) list	Yes	Sediment samples are likely to contain contaminants above Cefas Action Level 1 (see Chapter 7)
If your activity uses or releases chemicals (for example through sediment disturbance or building works) consider if: It disturbs sediment with contaminants above Cefas Action Level 1		
Protected Areas		
Within 2km of any WFD protected area	No	The SPA is within 2km however given it is considered in detail in Section 29 , consideration is not required here. Refer to Section 29 .
Invasive species		
Introduce or spread Invasive Non-native Species (INNS)	No	Two individuals of the invasive species <i>Theora lubrica</i> were found within the northern half of the turning circle at the entrance to Tees Dock. However given the low numbers it is not expected that significant numbers would be present in the berth area. A biosecurity plan or ballast water management plan would be produced to manage the risk of introduction and spread of invasive species. This plan may include management measures such as filtering or treating of ballast water prior to being discharged into the water when not needed. This plan will be in line with any management measures relating to biosecurity or ballast water management that are already put in place and enforced by PDT.

Table A3 Output of WFD scoping for activity C3 Riverbank excavation

Consider if the footprint of your activity;	Scoped in (yes/no)	Risk Issue
Hydromorphology		
Could impact on the hydromorphology (for example morphology or tidal patterns) of a water body at high status	No	No, the water body is not at high status (neither are the adjoining water bodies)
Could significantly impact the hydromorphology of any water body	Yes (for O1)	Yes, earth excavation could potentially alter hydromorphological parameters in the water body. These effects are considered under O1.
Is in a water body that is heavily modified for the same use as your activity	Yes	Yes, the water body in which the activity will occur is heavily modified for navigation, ports and harbours
Biology		
Is 0.5km ² or larger	No	The riverbank excavation will increase the subtidal area of the water body by 55,000m ² .
Is 1% or more of the water body's area		
Is within 500m of any higher sensitivity habitat		
Is 1% or more of any lower sensitivity habitat		
Biology (fish)		
Is in an estuary and could affect fish in the estuary, outside the estuary but could delay or prevent fish entering it or could affect fish migrating through the estuary	No	There could be temporary effects associated with riverbank excavation however the majority of material would be removed using land based equipment and backhoe which would reduce sediment spill. Additionally, where possible material would be removed in the dry. Any effects are therefore likely to be localised and temporary.
Could impact on normal fish behaviour like movement, migration or spawning (for example creating a physical barrier, noise, chemical change or a change in depth or flow)		
Could cause entrainment or impingement of fish	No	No risk of entrainment or impingement.
Water Quality		

Consider if the footprint of your activity;	Scoped in (yes/no)	Risk Issue
Could affect water clarity, temperature, salinity, oxygen levels, nutrients or microbial patterns continuously for longer than a spring neap tidal cycle (about 14 days)	No	There could be temporary effects associated with riverbank excavation however the majority of material would be removed using land based equipment and backhoe which would reduce sediment spill. Additionally, where possible material would be removed in the dry. Any effects are therefore likely to be localised and temporary.
Is in a water body with a phytoplankton status of moderate, poor or bad	No	Status is good
Is in a water body with a history of harmful algae	No	No history of issues with harmful algae listed in the WFD water body summary table.
If your activity uses or releases chemicals (for example through sediment disturbance or building works) consider if: The chemicals are on the Environmental Quality Standards Directive (EQSD) list	No	Site characterisation would be undertaken prior to any works and remediation implemented should it be required - the risk of releasing contamination would be managed.
If your activity uses or releases chemicals (for example through sediment disturbance or building works) consider if: It disturbs sediment with contaminants above Cefas Action Level 1		
Protected Areas		
Within 2km of any WFD protected area	No	The SPA is within 2km however given it is considered in detail in Section 29, consideration is not required here. Refer to Section 29 .
Invasive species		
Introduce or spread Invasive Non-native Species (INNS)	No	Biosecurity measures would be implemented to avoid the importing of non-native invasive species. Equipment, plant and PPE brought to site would be clean and free of material and vegetation. To ensure measures are implemented, biosecurity toolbox talks would be given to all site staff and rigorous inspections would be undertaken of all equipment delivered to site, following the Check Clean and Dry campaign.

Table A4 Output of WFD scoping for activity C4 Installation of rock blanket

Consider if the footprint of your activity;	Scoped in (yes/no)	Risk Issue
Hydromorphology		
Could impact on the hydromorphology (for example morphology or tidal patterns) of a water body at high status	No	No, the water body is not at high status (neither are the adjoining water bodies)
Could significantly impact the hydromorphology of any water body	Yes	There is the possibility that construction and presence of the rock blanket would impact on hydromorphological parameters.
Is in a water body that is heavily modified for the same use as your activity	Yes	Yes, the water body in which the activity will occur is heavily modified for navigation, ports and harbours
Biology		
Is 0.5km ² or larger	No	The area of existing subtidal within the WFD water body that would be impacted by the rock blanket would be 50,000m ² . Therefore the effect would not be greater than 0.5km ² nor will it be greater than 1% of the water body.
Is 1% or more of the water body's area		
Is within 500m of any higher sensitivity habitat		
Is 1% or more of any lower sensitivity habitat		
Biology (fish)		
Is in an estuary and could affect fish in the estuary, outside the estuary but could delay or prevent fish entering it or could affect fish migrating through the estuary	No	There may be a temporary effect associated with placing the rock blanket on the seabed however this would be localised and temporary.
Could impact on normal fish behaviour like movement, migration or spawning (for example creating a physical barrier, noise, chemical change or a change in depth or flow)	No	
Could cause entrainment or impingement of fish	No	
Water Quality		

Consider if the footprint of your activity;	Scoped in (yes/no)	Risk Issue
Could affect water clarity, temperature, salinity, oxygen levels, nutrients or microbial patterns continuously for longer than a spring neap tidal cycle (about 14 days)	No	There is the possibility that small localised disturbance of sediment could occur as a result of working in the water. However this is likely to be localised to the works and temporary in nature.
Is in a water body with a phytoplankton status of moderate, poor or bad	No	Status is good
Is in a water body with a history of harmful algae	No	No history of issues with harmful algae listed in the WFD water body summary table.
If your activity uses or releases chemicals (for example through sediment disturbance or building works) consider if: The chemicals are on the Environmental Quality Standards Directive (EQSD) list	Yes	Any marine sediments that are disturbed are likely to have contaminant levels greater than Action Level 1.
If your activity uses or releases chemicals (for example through sediment disturbance or building works) consider if: It disturbs sediment with contaminants above Cefas Action Level 1		
Protected Areas		
Within 2km of any WFD protected area	No	The SPA is within 2km however given it is considered in detail in Section 29, consideration is not required here. Refer to Section 29 .
Invasive species		
Introduce or spread Invasive Non-native Species (INNS)	No	A biosecurity plan or ballast water management plan would be produced to manage the risk of introduction and spread of invasive species. This plan may include management measures such as filtering or treating of ballast water prior to being discharged into the water when not needed. This plan will be in line with any management measures relating to biosecurity or ballast water management that are already put in place and enforced by PDT.

Table A5 Output of WFD scoping for activity C5 Construction of new quay wall

Consider if the footprint of your activity;	Scoped in (yes/no)	Risk Issue
Hydromorphology		
Could impact on the hydromorphology (for example morphology or tidal patterns) of a water body at high status	No	No, the water body is not at high status (neither are the adjoining water bodies)
Could significantly impact the hydromorphology of any water body	No	The new quay will be built from land, using land-based plant, with no activity in the river. There will therefore be no impacts during construction of the quay on the hydrodynamics and sedimentary regime of the Tees estuary.
Is in a water body that is heavily modified for the same use as your activity	Yes	Yes, the water body in which the activity will occur is heavily modified for navigation, ports and harbours
Biology		
Is 0.5km ² or larger	No	No, the proposed quay will be created by the land excavation and therefore there would be no loss of intertidal associated with the construction and operation of the quay wall.
Is 1% or more of the water body's area		
Is within 500m of any higher sensitivity habitat		There are no higher sensitivity habitats within 500m of the proposed activity
Is 1% or more of any lower sensitivity habitat		N/A
Biology (fish)		
Is in an estuary and could affect fish in the estuary, outside the estuary but could delay or prevent fish entering it or could affect fish migrating through the estuary	No	The potential risk associated with piling on land and the potential for underwater noise is considered in Section 13.5.4 . Subacoustech (2020) reviewed the risk of transmission of underwater noise into the river from the piling activities and the potential impacts on migratory fish and calculated the likely reduction in noise levels. For both resident and migratory fish the effect on noise levels was sufficient to reduce noise levels below harmful trigger values (see Section 13 for further detail).
Could impact on normal fish behaviour like movement, migration or spawning (for example creating a physical barrier, noise, chemical change or a change in depth or flow)	No	
Could cause entrainment or impingement of fish	No	
Water Quality		

Consider if the footprint of your activity;	Scoped in (yes/no)	Risk Issue
Could affect water clarity, temperature, salinity, oxygen levels, nutrients or microbial patterns continuously for longer than a spring neap tidal cycle (about 14 days)	No	The main effects associated with potential impacts on water quality are considered in river bank excavation, activity C3.
Is in a water body with a phytoplankton status of moderate, poor or bad	No	Status is good
Is in a water body with a history of harmful algae	No	No history of issues with harmful algae listed in the WFD water body summary table.
If your activity uses or releases chemicals (for example through sediment disturbance or building works) consider if: The chemicals are on the Environmental Quality Standards Directive (EQSD) list	No	The main effects associated with potential impacts on water quality are considered in river bank excavation, activity C3.
If your activity uses or releases chemicals (for example through sediment disturbance or building works) consider if: It disturbs sediment with contaminants above Cefas Action Level 1		
Protected Areas		
Within 2km of any WFD protected area	No	The SPA is within 2km however given it is considered in detail in Section 29, consideration is not required here. Refer to Section 29 .
Invasive species		
Introduce or spread Invasive Non-native Species (INNS)	No	A biosecurity plan or ballast water management plan would be produced to manage the risk of introduction and spread of invasive species. This plan may include management measures such as filtering or treating of ballast water prior to being discharged into the water when not needed. This plan will be in line with any management measures relating to biosecurity or ballast water management that are already put in place and enforced by PDT.

OPERATION

Table A6 Output of WFD scoping for activity O1 Operational presence of new structures

Consider if the footprint of your activity;	Scoped in (yes/no)	Risk Issue
Hydromorphology		
Could impact on the hydromorphology (for example morphology or tidal patterns) of a water body at high status	No	No, the water body is not at high status (neither are the adjoining water bodies)
Could significantly impact the hydromorphology of any water body	Yes	There is the possibility that the presence of the new quay would impact on hydromorphological parameters.
Is in a water body that is heavily modified for the same use as your activity	Yes	Yes, the water body in which the activity will occur is heavily modified for navigation, ports and harbours
Biology		
Is 0.5km ² or larger	No	There will be no direct loss of intertidal or subtidal habitat as a result of the quay construction as the quay would be constructed in an area excavated on land.
Is 1% or more of the water body's area		
Is within 500m of any higher sensitivity habitat		
Is 1% or more of any lower sensitivity habitat		
Biology (fish)		
Is in an estuary and could affect fish in the estuary, outside the estuary but could delay or prevent fish entering it or could affect fish migrating through the estuary	No	No risk to fish during the operational phase.
Could impact on normal fish behaviour like movement, migration or spawning (for example creating a physical barrier, noise, chemical change or a change in depth or flow)	No	
Could cause entrainment or impingement of fish	No	
Water Quality		

Consider if the footprint of your activity;	Scoped in (yes/no)	Risk Issue
Could affect water clarity, temperature, salinity, oxygen levels, nutrients or microbial patterns continuously for longer than a spring neap tidal cycle (about 14 days)	No	No risk to water quality during operation.
Is in a water body with a phytoplankton status of moderate, poor or bad	No	Status is good
Is in a water body with a history of harmful algae	No	No history of issues with harmful algae listed in the WFD water body summary table.
If your activity uses or releases chemicals (for example through sediment disturbance or building works) consider if: The chemicals are on the Environmental Quality Standards Directive (EQSD) list	No	No risk to water quality during operation.
If your activity uses or releases chemicals (for example through sediment disturbance or building works) consider if: It disturbs sediment with contaminants above Cefas Action Level 1		
Protected Areas		
Within 2km of any WFD protected area	No	The SPA is within 2km however given it is considered in detail in Section 29, consideration is not required here. Refer to Section 29 .
Invasive species		
Introduce or spread Invasive Non-native Species (INNS)	No	A biosecurity plan or ballast water management plan would be produced to manage the risk of introduction and spread of invasive species. This plan may include management measures such as filtering or treating of ballast water prior to being discharged into the water when not needed. This plan will be in line with any management measures relating to biosecurity or ballast water management that are already put in place and enforced by PDT.

Table A6 Output of WFD scoping for activity O2 Discharge of surface water

Consider if the footprint of your activity;	Scoped in (yes/no)	Risk Issue
Hydromorphology		
Could impact on the hydromorphology (for example morphology or tidal patterns) of a water body at high status	No	No, the water body is not at high status (neither are the adjoining water bodies)
Could significantly impact the hydromorphology of any water body	No	No, the discharge of surface water would not impact on hydromorphology.
Is in a water body that is heavily modified for the same use as your activity	No	Whilst the activity relates to port activity, discharge of clean surface water (see water quality below) would not impact on the mitigation measures identified for this water body.
Biology		
Is 0.5km ² or larger	No	The area potentially impacted by clean surface water would be small and localised to the quay wall. Effects on biological habitats are not anticipated.
Is 1% or more of the water body's area		
Is within 500m of any higher sensitivity habitat		
Is 1% or more of any lower sensitivity habitat		
Biology (fish)		
Is in an estuary and could affect fish in the estuary, outside the estuary but could delay or prevent fish entering it or could affect fish migrating through the estuary	No	During the operational phase the quay would be surfaced with crushed stone. This would allow uncontaminated surface water to drain through the crushed stone into the underlying material without the need for a formal drainage system. Where there is a risk of contamination, a drainage system would be installed which would capture surface water runoff through a series of gullies. This water would then be passed through an interceptor before discharge to the Tees estuary. No foul water would require discharge as part of the operational phase.
Could impact on normal fish behaviour like movement, migration or spawning (for example creating a physical barrier, noise, chemical change or a change in depth or flow)	No	A drainage system would however be required on the heavy lift areas, as such areas are proposed to be surfaced with concrete. Such a system would capture surface water runoff from the heavy lift areas through a series of gullies. The collected water will be discharged into the Tees estuary through the quay wall, via an interceptor. As a result, activity O2 is screened out of the assessment.
Could cause entrainment or impingement of fish	No	No risk of entrainment or impingement.

Consider if the footprint of your activity;	Scoped in (yes/no)	Risk Issue
Water Quality		
Could affect water clarity, temperature, salinity, oxygen levels, nutrients or microbial patterns continuously for longer than a spring neap tidal cycle (about 14 days)	No	<p>During the operational phase the quay would be surfaced with crushed stone. This would allow uncontaminated surface water to drain through the crushed stone into the underlying material without the need for a formal drainage system. Where there is a risk of contamination, a drainage system would be installed which would capture surface water runoff through a series of gullies. This water would then be passed through an interceptor before discharge to the Tees estuary. No foul water would require discharge as part of the operational phase.</p> <p>A drainage system would however be required on the heavy lift areas, as such areas are proposed to be surfaced with concrete. Such a system would capture surface water runoff from the heavy lift areas through a series of gullies. The collected water will be discharged into the Tees estuary through the quay wall, via an interceptor. As a result, activity O2 is screened out of the assessment.</p>
Is in a water body with a phytoplankton status of moderate, poor or bad	No	Status is good
Is in a water body with a history of harmful algae	No	No history of issues with harmful algae listed in the WFD water body summary table.
If your activity uses or releases chemicals (for example through sediment disturbance or building works) consider if: The chemicals are on the Environmental Quality Standards Directive (EQSD) list	No	No risk to water quality during operation.
If your activity uses or releases chemicals (for example through sediment disturbance or building works) consider if: It disturbs sediment with contaminants above Cefas Action Level 1		
Protected Areas		
Within 2km of any WFD protected area	No	The SPA is within 2km however given it is considered in detail in Section 29, consideration is not required here. Refer to Section 29 .
Invasive species		
Introduce or spread Invasive Non-native Species (INNS)	No	No risk identified

Appendix B Scoping tables for groundwater bodies

The following tables summarise the information relevant to the consideration of the requirements of the Water Framework Directive (tables modified from Clearing the Waters for All, Environment Agency 2016 to reflect groundwater assets). Note that although the answer to the question is sometimes yes, the evidence provided in the notes column allows the issue to be scoped out.

CONSTRUCTION

Table B1 Completed Scoping Tables for Activity: C1 Demolition of timber wharf and jetties

Consider if the activity could impact on...		Scoped in (yes/no)	Notes
Qualitative status	Quantitative Dependent Surface Water Body Status	No	The proposed demolition would not impact on the groundwater body
	Quantitative GWDTEs test		
	Quantitative Saline Intrusion		
	Quantitative Water Balance		
Chemical	Chemical Dependent Surface Water Body Status	No	The proposed demolition of timber wharfs would not impact on the groundwater body
	Chemical Drinking Water Protected Area		
	Chemical Groundwater dependent terrestrial ecosystem (GWDTEs) test		
Supporting elements	Prevent and limit objectives	No	The proposed demolition of timber wharfs would not impact on the groundwater body

Table B2 Completed Scoping Tables for Activity: C2 Capital dredging

Consider if the activity could impact on...		Scoped in (yes/no)	Notes
Qualitative status	Quantitative Dependent Surface Water Body Status	No	Capital dredging would not impact on the groundwater body
	Quantitative GWDTEs test		
	Quantitative Saline Intrusion		
	Quantitative Water Balance		
Chemical	Chemical Dependent Surface Water Body Status	No	Capital dredging would not impact on the groundwater body
	Chemical Drinking Water Protected Area		

Consider if the activity could impact on...		Scoped in (yes/no)	Notes
	Chemical Groundwater dependent terrestrial ecosystem (GWDTEs) test		
Supporting elements	Prevent and limit objectives	No	Capital dredging would not impact on the groundwater body

Table B3 Completed Scoping Tables for Activity: C3 River bank excavation

Consider if the activity could impact on...		Scoped in (yes/no)	Notes
Qualitative status	Quantitative Dependent Surface Water Body Status	No	The excavation of the river bank would not impact on any quantitative parameters of the ground water body
	Quantitative GWDTEs test		
	Quantitative Saline Intrusion		
	Quantitative Water Balance		
Chemical	Chemical Dependent Surface Water Body Status	Yes	Ground investigations have indicated the presence of historic contamination which may have an impact the quality of groundwater and result in impacts on water quality. If not addressed during the development, the excavation has the potential to increase the release and migration of contaminants. There is the potential for earthworks and piling activities to disturb pre-existing contamination which may be present within the proposed scheme. The works may result in the migration of contaminants to the underlying aquifers and create new pathways which may impact both groundwater quality and / or usability.
	Chemical Drinking Water Protected Area	No	Not located within 2km
	Chemical Groundwater dependent terrestrial ecosystem (GWDTEs) test	No	None within vicinity of proposed scheme
Supporting elements	Prevent and limit objectives	No	N/A

Table B4 Completed Scoping Tables for Activity: C4 Placement of rock platform

Consider if the activity could impact on...		Scoped in (yes/no)	Notes
Qualitative status	Quantitative Dependent Surface Water Body Status	No	The placement of the rock would not impact on the groundwater body.
	Quantitative GWDTEs test		
	Quantitative Saline Intrusion		
	Quantitative Water Balance		
Chemical	Chemical Dependent Surface Water Body Status	No	The placement of the rock would not impact on the groundwater body.
	Chemical Drinking Water Protected Area		
	Chemical Groundwater dependent terrestrial ecosystem (GWDTEs) test		
Supporting elements	Prevent and limit objectives	No	The placement of the rock would not impact on the groundwater body.

Table B5 Completed Scoping Tables for Activity: C5 Construction of new quay

Consider if the activity could impact on...		Scoped in (yes/no)	Notes
Qualitative status	Quantitative Dependent Surface Water Body Status	No	Construction of new quay would not interfere with groundwater levels.
	Quantitative GWDTEs test		
	Quantitative Saline Intrusion		
	Quantitative Water Balance		
Chemical	Chemical Dependent Surface Water Body Status	Yes	Ground investigations (See Chapter 8) have indicated the presence of historic contamination which may have an impact the quality of groundwater and result in impacts on water quality. If not addressed during the development, the construction phase of the new quay which includes piling, has the potential to increase the release and migration of contaminants. There is the potential for earthworks and piling activities to disturb pre-existing contamination which may be present within the proposed scheme. The works may result in the migration of contaminants to the underlying aquifers and create new pathways which may impact both groundwater quality and / or usability.
	Chemical Drinking Water Protected Area	No	Not located within 2km
	Chemical Groundwater dependent terrestrial ecosystem (GWDTEs) test	No	Not located within the vicinity of the project
	Supporting elements	Prevent and limit objectives	No

OPERATION

Table B6 Completed Scoping Tables for Activity: O1 Presence of new quay wall

Consider if the activity could impact on...		Scoped in (yes/no)	Notes
Qualitative status	Quantitative Dependent Surface Water Body Status	No	The presence of the new quay may alter the infiltration of rainwater to ground very locally, however the nature of the natural strata and overlying made ground are such that the current rate of recharge within the footprint of the development is likely to be very small. Therefore quantitative impacts are anticipated to be undiscernible.
	Quantitative GWDTEs test		
	Quantitative Saline Intrusion		
	Quantitative Water Balance		
Chemical	Chemical Dependent Surface Water Body Status	No	Surface water would be managed and would not infiltrate to underlying groundwater. As a result there is no pathway for effect in the operational phase of the new quay.
	Chemical Drinking Water Protected Area	No	
	Chemical Groundwater dependent terrestrial ecosystem (GWDTEs) test	No	
Supporting elements	Prevent and limit objectives	No	None identified

Table B7 Completed Scoping Tables for Activity: O2 Surface water drainage

Consider if the activity could impact on...		Scoped in (yes/no)	Notes
Qualitative status	Quantitative Dependent Surface Water Body Status	No	The presence of the new quay may alter the infiltration of rainwater to ground very locally, however the nature of the natural strata and overlying made ground are such that the current rate of recharge within the footprint of the development is likely to be very small. Therefore quantitative impacts are anticipated to be undiscernible.
	Quantitative GWDTEs test		
	Quantitative Saline Intrusion		
	Quantitative Water Balance		
Chemical	Chemical Dependent Surface Water Body Status	No	Surface water would be managed and would not infiltrate to underlying groundwater. As a result there is no pathway for effect in the operational phase of the new quay.
	Chemical Drinking Water Protected Area	No	

Consider if the activity could impact on...		Scoped in (yes/no)	Notes
	Chemical Groundwater dependent terrestrial ecosystem (GWDTEs) test	No	
Supporting elements	Prevent and limit objectives	No	None identified