Cyfoeth Naturiol Cymru
Natural Resources Wales

# OGN200 Form2

# Draft Habitats Regulations Assessment of the fourth cycle River Dee River Basin Management Plan

Version 1.0: Draft HRA to accompany draft RBMP4 consultation

# Crynodeb annhechnegol

*Beth yw'r ddogfen hon?*

Dyma grynodeb annhechnegol o'r Asesiad Rheoliadau Cynefinoedd strategol drafft o ffurf ddrafft pedwerydd cylch Cynllun Rheoli Basn Afon Dyfrdwy.

*Cynllun Rheoli Basn Afon*

Mae ffurf ddrafft Cynllun Rheoli Basn Afon Dyfrdwy wedi'i llunio gan Cyfoeth Naturiol Cymru fel yr awdurdod cyfrifol dros gynllunio basnau afonydd yng Nghymru. Gan fod rhan o Ardal Basn Afon Dyfrdwy o fewn Lloegr, mae Cyfoeth Naturiol Cymru wedi gweithio'n agos gydag Asiantaeth yr Amgylchedd i gynhyrchu Cynllun Rheoli Basn Afon Dyfrdwy.

Diben Cynlluniau Rheoli Basnau Afonydd yw gwarchod a gwella'r amgylchedd dŵr er budd ehangach pobl a bywyd gwyllt. Fel rhan o'r cynlluniau, nodir rhaglen gryno o fesurau i gyflawni amcanion statudol.  Yng Nghymru, mae'r rhaglen o fesurau yn cynnwys mesurau cenedlaethol (sy'n berthnasol i Gymru gyfan) a mesurau yn ymwneud â chyrff dŵr (cyfres o fathau o fesurau sy'n cael eu cymhwyso i gyrff dŵr penodol).  Mae rhaglen o fesurau Lloegr (y cyfeirir ati fel safon data mesurau) yn cynnwys haenau o fesurau; mae'r rhain yn gategorïau gweithredu sydd wedi'u dadansoddi yn ôl mathau o weithredu mwy manwl (haen is, mesurau mwy penodol a gymhwysir ar lefel corff dŵr).

Mae'r rhaglen o fesurau wedi'i halinio â materion sylweddol yn ymwneud â rheoli dŵr sy'n bygwth defnydd presennol a defnydd posibl yn y dyfodol o'r amgylchedd dŵr. Mae'r rhain yn cynnwys addasiadau ffisegol; llygredd o ardaloedd gwledig; llygredd o ddŵr gwastraff; llygredd o drefi, dinasoedd a thrafnidiaeth; llygredd o fwyngloddiau segur; newidiadau i'r llif naturiol a lefelau dŵr; a rhywogaethau estron goresgynnol.

Mae'r Asesiad Rheoliadau Cynefinoedd drafft hwn yn canolbwyntio ar y rhaglen o fesurau ac wedi'i ddatblygu'n ailadroddus gyda hi, a bydd y casgliadau'n llywio datblygiad y Cynllun Rheoli Basn Afon drafft a'r adroddiad amgylcheddol cysylltiedig.

*Asesiad Rheoliadau Cynefinoedd*

Mae safleoedd Ewropeaidd wedi'u dynodi i warchod mathau o gynefinoedd a rhywogaethau o bwysigrwydd Ewropeaidd; mae'r rhain yn cynnwys Ardaloedd Cadwraeth Arbennig ac Ardaloedd Gwarchodaeth Arbennig. Polisi Llywodraeth Cymru a Llywodraeth y DU yw y dylid trin Safleoedd Ramsar (sydd wedi'u dynodi'n wlyptiroedd o bwys rhyngwladol) fel pe baent yn safleoedd Ewropeaidd, gan gynnwys at ddibenion Asesiad Rheoliadau Cynefinoedd.

Yn Ardal Basn Afon Dyfrdwy mae 11 Ardal Cadwraeth Arbennig (mae hyn yn cynnwys aber afon Dyfrdwy (Cymru) ac aber afon Dyfrdwy (Lloegr) yn ogystal ag afon Dyfrdwy a Llyn Tegid (Cymru) ac afon Dyfrdwy (Lloegr)), pedair Ardal Gwarchodaeth Arbennig (mae hyn yn cynnwys Bae Lerpwl (Lloegr) a Bae Lerpwl (Cymru) yn ogystal ag aber afon Dyfrdwy (Cymru) ac aber afon Dyfrdwy (Lloegr)), a thri Safle Ramsar.

Mae'r pedwerydd cylch o Gynlluniau Rheoli Basnau Afonydd, yn ôl eu natur, wedi'u llunio i wella ein hamgylchedd ac i ategu'r gwaith o reoli safleoedd Ewropeaidd. Fodd bynnag, mae'r cynlluniau'n cynnwys mesurau a allai arwain at ymyriadau ffisegol yn yr amgylchedd ac, o ganlyniad, mae potensial ar gyfer effeithiau ar safleoedd Ewropeaidd yn ardal y mesurau, yn gyfagos iddynt neu'n gysylltiedig â hwy (e.e. yn sgil y mesurau). Felly mae angen Asesiad Rheoliadau Cynefinoedd o'r cynllun.

Mae Asesiad Rheoliadau Cynefinoedd yn cyfeirio at y sawl cam asesu gwahanol y mae'n rhaid eu cynnal i benderfynu a all cynllun neu brosiect effeithio ar nodweddion gwarchodedig safle Ewropeaidd cyn penderfynu a ddylid ei gynnal, ei ganiatáu neu ei awdurdodi.

Dim ond os gellir diystyru effeithiau niweidiol ar gyfanrwydd safleoedd Ewropeaidd y gellir cymeradwyo'r cynllun yn gyfreithlon, oni bai ei fod yn gallu bodloni cyfres o brofion:

1. Nid oes unrhyw ddatrysiadau amgen ymarferol a fyddai'n llai niweidiol i'r safle neu'n osgoi ei ddifrodi.
2. Mae angen gweithredu'r cynnig am resymau hanfodol, sef er budd cyhoeddus tra phwysig.
3. Gellir sicrhau'r mesurau cydbwyso angenrheidiol.

*Sut mae'r rhaglen o fesurau wedi cael ei hasesu*

Cynhaliwyd Asesiad Rheoliadau Cynefinoedd o'r mesurau sy'n ymwneud â Chymru (mesurau cenedlaethol a mesurau yn ymwneud â chyrff dŵr) ar gyfer Ardal Basn Afon Dyfrdwy gan Cyfoeth Naturiol Cymru; cynhaliwyd Asesiad Rheoliadau Cynefinoedd o'r mesurau sy'n ymwneud â Lloegr (mathau o gamau gweithredu) ar gyfer afon Dyfrdwy gan Asiantaeth yr Amgylchedd. Mae canfyddiadau'r rhain wedi'u crynhoi ar y cyd yn nogfen yr Asesiad Rheoliadau Cynefinoedd.

<u>Rhagsgrinio:</u>

Cynhaliwyd rhagsgrinio cychwynnol fel bod mesurau yn y cynllun – na allant effeithio ar nodweddion safleoedd Ewropeaidd neu pan nad oes llwybr ar gyfer effeithiau o'r fath – yn cael eu heithrio ar unwaith, a chafodd cyfiawnhad ei ddarparu.

Mae hyn yn gofyn am ddull rhagofalus lle dim ond y mesurau hynny nad oes ganddynt unrhyw effaith 'bosibl' ar safleoedd Ewropeaidd oherwydd natur eu dull (e.e. ymchwiliad wrth ddesg yn unig, datganiad o arfer da, neu ddatganiad cyffredinol o bolisi / dyhead cyffredinol ac ati) sy'n cael eu heithrio yn y cam rhagsgrinio.

Pan fydd unrhyw ansicrwydd yn parhau neu lwybr effaith posibl yn bodoli, mae'r mesur yn parhau i gael ei gynnwys i'w ystyried ymhellach yng ngham nesaf yr asesiad.

O'r 54 mesur cenedlaethol sy'n ymwneud â Chymru yn y rhaglen o fesurau, cafodd 32 eu heithrio yn y cam rhagsgrinio. O'r 81 math o fesurau ar gyfer cyrff dŵr yng Nghymru sydd wedi'u cynnwys yn y rhaglen o fesurau ar draws Cymru, cafodd 46 eu

heithrio yn y cam rhagsgrinio. O'r 154 math o gamau gweithredu yn Lloegr o fewn y rhaglen o fesurau, cafodd 33 eu heithrio yn y cam rhagsgrinio.

Sgrinio am effaith arwyddocaol debygol:

Yna cynhaliwyd asesiad sgrinio ar gyfer 'effaith arwyddocaol bosibl', er mwyn ystyried yn fwy manwl y 22 mesur cenedlaethol Cymreig, y 35 math o fesurau ar gyfer cyrff dŵr yng Nghymru, a'r 121 math o gamau gweithredu yn Lloegr a oedd wedi aros yn y broses yn dilyn y cam rhagsgrinio ar lefel uchel.

Nid oedd y sgrinio yn cynnwys unrhyw asesiad gofodol – mae hyn yn seiliedig ar y dybiaeth y bydd nifer bach iawn o gyrff dŵr yn yr ardal basn afon lle nad yw safleoedd dynodedig yn ffactor i'w ystyried (oherwydd nifer y safleoedd Ewropeaidd, a'r gyfran o'r wlad a gwmpesir ganddynt neu sy'n gysylltiedig â nhw). Yn hytrach, ystyriwyd pob mesur yn strategol mewn perthynas â natur ei weithredu, waeth beth oedd y lleoliad; gweithredwyd, felly, ar y dybiaeth gyffredinol y gallai fod un neu fwy o safleoedd Ewropeaidd (o unrhyw fath neu gyda nodweddion o unrhyw fath) yn agos i'w gilydd, wedi'u cysylltu'n hydrolegol a/neu'n gysylltiedig yn swyddogaethol â'r mesur hwnnw pan gaiff ei gymhwyso.

Dilynwyd dull rhagofalus lle cafodd unrhyw fesurau – y nodwyd y gallent gael effaith arwyddocaol debygol neu lle mae ansicrwydd yn parhau (e.e. mesurau sy'n dal i gael eu datblygu neu pan nad oes digon o wybodaeth ar gael i'w hystyried yn llawn) – eu dwyn ymlaen i asesiad priodol i'w hystyried ymhellach. Mae mesurau cenedlaethol Cymru, mathau o fesurau cyrff dŵr yng Nghymru a mathau o gamau gweithredu yn Lloegr sy'n parhau i gael eu cynnwys ar gyfer asesiad priodol i gyd yn cynnwys elfen o gyflawni ar lawr gwlad nad yw'n cael ei gyflwyno na'i reoli'n llwyr gan gynllun neu raglen arall.

Yn dilyn y prawf hwn o'r effaith arwyddocaol debygol, cafodd un mesur cenedlaethol Cymreig arall, saith math o fesurau ar gyfer cyrff dŵr yng Nghymru, a 25 math o gamau gweithredu yn Lloegr eu heithrio, gan adael 21 o fesurau cenedlaethol Cymreig, 28 math o fesurau ar gyfer cyrff dŵr yng Nghymru, a 96 math o gamau gweithredu yn Lloegr i fynd ymlaen i'r asesiad priodol.

Asesiad priodol yn unig:

Mae'r asesiad priodol yn ystyried a fydd effeithiau niweidiol ar gyfanrwydd safleoedd Ewropeaidd yn deillio o'r mesurau na chawsant eu heithrio yn ystod cam prawf yr effaith arwyddocaol debygol.

Ar gyfer cam yr asesiad priodol, dim ond y mathau hynny o fesurau ar gyfer cyrff dŵr yng Nghymru a mathau o gamau gweithredu yn Lloegr sy'n berthnasol i Ardal Basn Afon Dyfrdwy a ystyriwyd. O'r 28 math o fesurau ar gyfer cyrff dŵr yng Nghymru a ddygwyd ymlaen yn genedlaethol i'r asesiad priodol, nid oes 13 ohonynt wedi'u neilltuo i gyrff dŵr o fewn yr ardal basn afon hon; felly, mae cyfanswm o 15 math o fesurau ar gyfer cyrff dŵr yng Nghymru yn cael eu hasesu ar y cam hwn ar gyfer Cynllun Rheoli Basn Afon Dyfrdwy. O'r 96 math o gamau gweithredu sy'n ymwneud â Lloegr a ddygwyd ymlaen yn genedlaethol i'r asesiad priodol, nid yw 80 ohonynt yn berthnasol i reoli Ardal Basn Afon Dyfrdwy gan na chânt eu gweithredu mewn cyrff

dŵr o fewn yr ardal basn afon hon; felly, mae cyfanswm o 16 math o gamau gweithredu sy'n ymwneud â Lloegr yn cael eu hasesu ar y cam hwn ar gyfer Cynllun Rheoli Basn Afon Dyfrdwy. Mae pob un o'r 21 mesur cenedlaethol Cymreig sy'n parhau i gael eu cynnwys ar gyfer asesiad priodol yn berthnasol i'r ardal basn afon hon.
Mae pob un o'r mesurau cenedlaethol Cymreig, y mathau o fesurau ar gyfer cyrff dŵr yng Nghymru, a'r mathau o gamau gweithredu sy'n ymwneud â Lloegr sy'n cael eu gweithredu yn Ardal Basn Afon Dyfrdwy yn debygol o arwain at weithgareddau ffisegol. Er mai'r nod hirdymor yw gwella'r amgylchedd, mae angen i'r Asesiad Rheoliadau Cynefinoedd sicrhau nad oes unrhyw ganlyniadau anfwriadol yn deillio o weithredu'r Cynllun Rheoli Basn Afon ar safleoedd Ewropeaidd.

Oherwydd natur lefel uchel y cynllun, ceir anawsterau ac ansicrwydd cynhenid wrth gynnal asesiad priodol ar y raddfa hon.

O ran mesurau cenedlaethol Cymru, mae llwybrau effaith go iawn a chredadwy; fodd bynnag, o ran cynllun ar y lefel hon, nid oes gennym y manylion angenrheidiol i nodi ble, sut na phryd y gallai effeithiau ddigwydd. O ganlyniad, mae mesurau osgoi a lliniaru lefel uchel wedi'u hamlinellu yn yr Asesiad Rheoliadau Cynefinoedd sy'n rhoi hyder y bydd unrhyw effeithiau niweidiol ar safleoedd Ewropeaidd yn cael eu hosgoi neu eu lliniaru'n ddigonol. Bydd gan y rhaglenni a'r prosiectau a fydd yn cael eu datblygu dan y mesurau hyn fwy o fanylion a hyblygrwydd o ran lleoliadau, amseriad ac arfarnu opsiynau sy'n ystyried sensitifrwydd safleoedd a nodweddion Ewropeaidd. Felly, pan fo'n briodol, rydym yn ceisio cyfeirio'r Asesiad Rheoliadau Cynefinoedd i gynlluniau a phrosiectau haen is, lle bydd mwy o fanylion ar gael i lywio'r asesiad, y mesurau lliniaru a'r mesurau cydbwyso.

Ar gyfer y mathau o fesurau corff dŵr yng Nghymru, roeddem yn gallu cael mynediad at wybodaeth ofodol sy'n dangos ble bydd pob math o fesur corff dŵr yn cael ei gymhwyso i gorff dŵr ac felly lefel fwy o fanylder ar y llwybrau ar gyfer effeithiau a allai ddigwydd. Er nad yw hyn yn darparu lleoliad penodol y gwaith nac yn darparu manylion ynghylch y math o waith na'r rhaglen waith ac ati, mae wedi caniatáu adolygiad ychydig yn fwy manwl o ba safleoedd Ewropeaidd a allai gael eu heffeithio arnynt a'r nodweddion cymwys y gallent gael eu heffeithio arnynt mewn ffordd niweidiol. Fodd bynnag, mae yna lawer iawn o ansicrwydd o hyd ynghylch ble, sut neu pryd yn union y gellir cymryd camau gweithredu neu y gallai effeithiau ddigwydd. Felly, mae'r asesiad yn dal i ddibynnu ar amlinelliad o fesurau osgoi a lliniaru ar lefel uchel sy'n rhoi hyder y bydd unrhyw effeithiau niweidiol ar unrhyw safleoedd Ewropeaidd yn cael eu hosgoi neu eu lliniaru'n ddigonol. Pan fo'n briodol, rydym yn ceisio cyfeirio'r Asesiad Rheoliadau Cynefinoedd i gynlluniau a phrosiectau haen is, lle bydd lefel fwy o fanylder ar gael i lywio'r Asesiad Rheoliadau Cynefinoedd a mesurau lliniaru a chydbwyso.

Ar gyfer y mathau o gamau gweithredu yn Lloegr a ddygwyd ymlaen i asesiad priodol, mae Asiantaeth yr Amgylchedd wedi ystyried ymhellach y llwybrau ar gyfer effaith ac wedi edrych i weld a oes mesurau lliniaru generig a fyddai'n rheoli unrhyw effeithiau a nodwyd. Pan fo'n briodol, rydym yn ceisio cyfeirio'r Asesiad Rheoliadau Cynefinoedd i gynlluniau a phrosiectau haen is, lle bydd lefel fwy o fanylder ar gael i lywio'r Asesiad Rheoliadau Cynefinoedd a mesurau lliniaru a chydbwyso.

Asesiad priodol ar y cyd:

Cynhaliwyd adolygiad strategol o gyfuniad o fesurau ar gyfer yr ardal basn afon hon (mesurau cenedlaethol Cymreig, mathau o fesurau cyrff dŵr yng Nghymru, a mathau o gamau gweithredu yn Lloegr). Daeth yr asesiad priodol i'r casgliad, ar ei ben ei hun, y gall y mesurau hyn – drwy'r prosesau rheoleiddio a'r mesurau lliniaru generig a amlinellwyd – osgoi effeithiau niweidiol ar gyfanrwydd safleoedd Ewropeaidd (neu y gellir ystyried dewisiadau amgen); fodd bynnag, nid oes digon o fanylion ar gael i gadarnhau a allai fod effeithiau gweddilliol.

Ystyriwyd y rhyngweithio posibl rhwng mesurau cenedlaethol Cymru a hefyd rhwng mathau o fesurau cyrff dŵr Cymru a mathau o gamau gweithredu Lloegr lle maent yn digwydd mewn cyrff dŵr tebyg. Yn unol â natur lefel uchel y cynllun, a chan nad yw manylion ynghylch gweithredu'r mesurau ar gael eto (y gweithgareddau union a fydd yn cael eu cynnal, union leoliad y gwaith, cwmpas gofodol, gwybodaeth amserol ac ati), cynhaliwyd hyn ar lefel strategol yn unig.

At ddibenion yr asesiad, ystyriwyd hefyd gynlluniau neu brosiectau allweddol perthnasol ar lefel uchel a allai arwain at effeithiau ar y cyd â'r Cynllun Rheoli Basn Afon.

*Y prif ganfyddiadau*

Ystyriwyd cyfanswm o 21 o fesurau cenedlaethol Cymru, 15 o fathau o fesurau cyrff dŵr yng Nghymru, ac 16 o fathau o gamau gweithredu yn Lloegr fel rhan o'r asesiad priodol ar gyfer Ardal Basn Afon Dyfrdwy.

O ran yr holl fesurau yn y rhaglen o fesurau (Cymru a Lloegr) ar gyfer Cynllun Rheoli Basn Afon Dyfrdwy, mae hyder – boed hynny drwy fesurau unigol neu gyfuniad ohonynt – y gellir datblygu a chyflwyno cynlluniau, rhaglenni a phrosiectau haen is. Gellir gwneud hyn drwy weithredu'r mesurau lliniaru cyffredinol a nodwyd, ac ystyried effeithiau lleol ar y cyd, heb achosi effaith niweidiol ar gyfanrwydd unrhyw safleoedd Ewropeaidd; fel arall, gellir chwilio am gynigion amgen. Mae mecanweithiau rheoleiddio, trwyddedu a chydsynio sefydledig yn darparu mesurau diogelwch priodol i sicrhau bod effeithiau ar safleoedd Ewropeaidd yn cael eu hasesu a'u rheoli cyn eu gweithredu.

Felly, gohirir y manylion tan yr Asesiad Rheoliadau Cynefinoedd ar gyfer cynlluniau, rhaglenni a phrosiectau haen is, pan fydd mwy o wybodaeth ar gael i lywio'r asesiad, y mesurau lliniaru a'r mesurau cydbwyso. Dylai asesiad o effeithiau ar y cyd hefyd fod yn rhan o'r Asesiad Rheoliadau Cynefinoedd hwn ar lefel adolygu prosiectau neu gynlluniau lleol.

Mae cynlluniau cenedlaethol a rhanbarthol perthnasol wedi cael eu hadolygu ar lefel uchel i benderfynu a oes unrhyw effeithiau arwyddocaol tebygol 'mewn cyfuniad'. Mae'r holl gynlluniau'n rhannu'r angen i reoli adnoddau naturiol megis dŵr yn gynaliadwy ac yn ceisio addasu yng ngoleuni ein hinsawdd sy'n newid. Nid yw'r adolygiad hwn wedi nodi unrhyw effeithiau posibl nac effeithiau cyfun tebygol sy'n deillio o weithredu'r Cynllun Rheoli Basn Afon ar y cyd â'r cynlluniau a'r rhaglenni eraill hyn.

# Non-technical Summary

*What is this document?*

This is the non-technical summary of the draft strategic Habitats Regulations Assessment (HRA) of the draft fourth cycle River Dee River Basin Management Plan.

*River Basin Management Plan*

The draft River Dee River Basin Management Plan has been produced by Natural Resources Wales as the responsible authority for river basin planning in Wales. As part of the Dee River Basin District is within England, Natural Resources Wales has worked closely with the Environment Agency to produce the Dee River Basin Management Plan.

The purpose of the River Basin Management Plans is to protect and improve the water environment for the wider benefits to people and wildlife. As part of the plans a summary Programme of Measures to achieve statutory objectives is identified. In Wales, the Programme of Measures includes national measures (applicable to the whole of Wales) and Water body measures (a suite of measure types that are applied to specific water bodies). The English Programme of Measures (referred to as a Measures Data Standard) consists of tiers of measures; these are action categories that are each broken down into more detailed action types (lower tier, more specific measures applied at a Water body level).

The Programme of Measures are aligned with Significant Water Management Issues that threaten the current and potential future uses of the water environment. These include physical modifications; pollution from rural areas; pollution from wastewater; pollution from towns, cities and transport; pollution from abandoned mines; changes to natural flow and levels of water and non-native invasive species.

This draft Habitat Regulations Assessment is focussed on and has been developed iteratively with the Programme of Measures, and the conclusions will inform the development of the draft River Basin Management Plan and accompanying Environmental Report.

*Habitat Regulations Assessment*

European sites are designated to protect habitat types and species of European importance; these include Special Areas of Conservation and Special Protection Areas. Welsh Government and UK Government policy is that Ramsar sites (which are designated wetlands of international importance) should also be treated as though they are European sites, including for the purposes of Habitat Regulations Assessment.

In the River Dee River Basin District there are 11 Special Areas of Conservation (this includes both the Dee Estuary (Wales) and Dee Estuary (England) as well as both the River Dee and Bala Lake (Wales) and River Dee and Bala Lake (England)), 4 Special Protection Areas (this includes both Liverpool Bay (England) and Liverpool

Bay (Wales) as well as both the Dee Estuary (Wales) and the Dee Estuary (England)), and 3 Ramsar Sites.

The fourth cycle River Basin Management Plans by their nature, are designed to improve our environment and to be complementary to the management of European sites. However, the plans include measures that could result in physical interventions in the environment and consequently, there is potential for effects on European sites located on, adjacent to or linked with (e.g. downstream of) measures. Habitat Regulations Assessment of the plan is therefore required.

A Habitats Regulations Assessment refers to the several distinct stages of assessment which must be undertaken to determine if a plan or project may affect the protected features of a European site before deciding whether to undertake, permit or authorise it.

The plan can only lawfully be approved if adverse effects on integrity of European sites can be ruled out, unless it is able to meet a series of tests:

1. There are no feasible alternative solutions that would be less damaging or avoid damage to the site.
2. The proposal needs to be carried out for imperative reasons of overriding public interest.
3. The necessary compensatory measures can be secured.

*How the Programme of Measures have been assessed*

Habitat Regulations Assessment of the Welsh measures (national measures and Water body measures) for the Dee River Basin District were carried out by Natural Resources Wales; Habitat Regulations Assessment of the English measures (Detailed actions) for the Dee has been carried out by the Environment Agency. The findings of these are summarised jointly in the Habitat Regulations Assessment document.

<u>Pre-screening</u>:

Initial pre-screening was undertaken so that measures in the plan which cannot affect or have no pathway for effects on European site features, are screened out immediately, with justification provided.

This requires a precautionary approach where only those measures that have ‘no conceivable’ impact on European sites due to the nature of their approach (e.g. purely desk-based investigation, statement of good practice, or a general statement of policy/general aspiration etc.), are screened out at the pre-screening stage.

Where any uncertainty remains or a potential impact pathway exists, the measure remains screened in for further consideration in the next stage of assessment.

Of the 54 Welsh national measures in the Programme of Measures, 32 were screened out at the pre-screening stage. Of the 81 Welsh Water body measure types in the Programme of Measures across Wales, 46 were screened out at the

pre-screening stage. Of the 154 English Detailed actions in the Programme of Measures across England, 33 were screened out at the pre-screening stage

Screening for Likely Significant Effect:

A Likely Significant Effect screening assessment was then undertaken to consider in more detail the 22 Welsh national measures, the 35 Welsh Water body measure types and the 121 English Detailed action types that remained screened in after the initial high-level pre-screening.

The screening did not include any spatial assessment - this is based on the assumption there will be very few water bodies where designated sites are not a consideration in the River Basin District (due to the number and area of the country covered by European sites, or that are linked to European sites). Instead, each measure was considered strategically in relation to the nature of its delivery, irrelevant of location and therefore working on the general assumption there could be one/more European sites (of any type/with any feature) in proximity, hydrologically linked and/or functionally linked for that measure when applied.

A precautionary approach was followed whereby any measures where a Likely Significant Effect was identified or where uncertainty remains (e.g. measures are still in development, lack sufficient information to fully consider etc.) were taken through to Appropriate Assessment for further consideration. Welsh national measures, Welsh Water body measure types and English Detailed action types remaining screened in for Appropriate Assessment all involve an element of on the ground delivery that is not entirely delivered or controlled by another plan or programme.

Following this Test of Likely Significant Effect, a further 1 Welsh national measure, 7 Welsh Water body measure types and 25 English Detailed action types were screened out, leaving 21 Welsh national measures, 28 Welsh Water body measure types and 96 English Detailed action types to be taken forward to Appropriate Assessment.

Appropriate Assessment alone:

The Appropriate Assessment is the consideration of whether adverse effects on European site integrity will occur for the measures that have not been screened out at the Test of Likely Significant Effect stage.

For the Appropriate Assessment stage, only those Welsh Water body measure types and English Detailed action types that are of relevance to the River Dee River Basin District were considered. Of the 28 Welsh Water body measure types that were taken forward nationally into the Appropriate Assessment, 13 have not been assigned to water bodies within this River Basin District, leaving a total of 15 Welsh Water body measure types being assessed at this stage for the River Dee River Basin Management Plan. Of the 96 English Detailed action types that were taken forward nationally into Appropriate Assessment, 80 are not relevant to the Dee River Basin Management as they will not be implemented at water bodies within this River Basin District, leaving a total of 16 English Detailed action types being assessed at this stage for the River Dee River Basin Management Plan. All 21 Welsh national

measures remaining screened in for Appropriate Assessment are relevant to this River Basin District.

Each of the screened in Welsh national measures, Welsh Water body measure types and English Detailed action types being implemented in the River Dee River Basin District are likely to result in physical activities and whilst the long-term aim is environmental improvement, the Habitat Regulations Assessment needs to establish that there are no unintended consequences of the implementation of the River Basin Management Plan on European sites.

Because of the high level nature of the plan there are inherent difficulties and uncertainties in carrying out an Appropriate Assessment at this scale.

For Welsh national measures there are real and credible pathways for effect that could occur, but at this level of plan we do not have the detail available to say where, how or when effects might occur. As a result, high-level avoidance and mitigation measures are outlined in the Habitat Regulations Assessment that give confidence that any adverse effects on European sites will be avoided or adequately mitigated. The programmes and projects that will be developed under these measures will have greater detail and flexibility in terms of locations, timing and options appraisal that takes into account the sensitivities of European sites and features. Therefore, where appropriate, we seek to defer the Habitat Regulations Assessment to lower tier plans and projects, where a greater level of detail will be available to inform the assessment, mitigation and compensation.

For the Welsh Water body measure types, we were able to access spatial information which shows where each Water body measure type will be applied to a water body and therefore a greater level of detail on the pathways for effects that could potentially occur. Whilst this does not provide specific location of works or provide detail regarding the type of works or work programme etc., it has allowed for a slightly more in-depth review of which European sites may be affected and the qualifying features for which adverse effect could occur. There is still, however a large degree of uncertainty on exactly where, how or when actions may be taken or effects might occur. The assessment is therefore still reliant on an outline of high-level avoidance and mitigation measures that give confidence that any adverse effects on any European sites will be avoided or adequately mitigated. Where appropriate, we seek to defer the HRA to lower tier plans and projects, where a greater level of detail will be available to inform the HRA, mitigation and compensation.

For the English Detailed action types taken though to Appropriate Assessment the Environment Agency has further considered the pathways for effect and looked to see whether there are generic mitigation measures that would control any impacts identified. Where appropriate, we seek to defer the HRA to lower tier plans and projects, where a greater level of detail will be available to inform the HRA, mitigation and compensation.

<u>Appropriate Assessment in combination</u>:

A strategic review was undertaken in combination of measures for this River Basin District (Welsh national measures, Welsh Water body measure types and English Detailed action types) where the Appropriate Assessment alone concluded that these measures through the regulatory processes and generic mitigation outlined can avoid adverse effects on European site integrity (or alternatives can be considered) but where sufficient detail is not known to confirm whether there may be residual effects.

Consideration was given to potential interaction between Welsh national measures and also between Welsh Water body measure types and English Detailed action types where occurring in similar water bodies. In keeping with the high-level nature of the plan and as detail regarding implementation of the measures is not yet available (exact activities that will be undertaken, exact location of works, spatial extent, temporal information etc.) this was conducted at a strategic level only.

For the purpose of the assessment, key relevant high-level plans or projects that could potentially result in in-combination effects with the River Basin Management Plan were also considered.

*Key Findings*

A total of 21 Welsh national measures, 15 Welsh Water body measure types and 16 Detailed English action types were considered as part of the Appropriate Assessment for the River Dee River Basin District.

For all measures in the Welsh and English Programme of Measures for the River Dee River Basin Management Plan, there is confidence, whether alone or in combination, that lower tier plans, programmes and projects can be developed and delivered implementing the generic mitigation outlined and considering local in combination impacts, without causing an adverse effect on site integrity for any European sites, or alternative proposals can be sought. Established regulatory, permitting and consenting mechanisms provide appropriate safeguards to ensure that impacts on European sites are assessed and managed before implementation.

Detail is therefore deferred to the Habitat Regulations Assessment of lower tier plans, programmes and projects where a greater level of information will be available to inform the assessment, mitigation and compensation; in combination assessment should also form part of this Habitat Regulations Assessment at a local project/plan review level.

Relevant national and regional plans have been reviewed at a high level to determine whether there are any likely significant ‘in combination’ effects. The plans all share the need to sustainably manage natural resources such as water and seek to adapt in light of our changing climate. This review has not indicated any potential or likely in combination effects arising from implementation of the River Basin Management Plan in combination with these other plans and programmes.

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## Acronyms

| Acronym | Meaning |
|---|---|
| AA | Appropriate Assessment |
| AMP | Asset Management Plan |
| CAP | Common Agricultural Policy |
| CCW | Consumer Council for Wales |
| CSO | Combined Sewer Overflow |
| cSAC | candidate Special Area of Conservation |
| DCWW | Dwr Cymru Welsh Water |
| DIN | Dissolved Inorganic Nitrogen |
| DTA | David Tyldesley and Associates |
| DrWPA | Drinking Water Protection Area |
| DWMP | Drainage and Waste Water Management Plan |
| DWPP | Diffuse Water Pollution Plan |
| EA | Environment Agency |
| EC | European Commission |
| ELM | Environmental Land Management scheme |
| EQSD | Environmental Quality Standards Directive |
| EU | European Union |
| FCERM | Flood and Coastal Erosion Risk Management |
| FRM | Flood Risk Management |
| FRMP | Flood Risk Management Plan |
| GES | Good Ecological Status |
| HRA | Habitats Regulation Assessment |
| INNS | Invasive Non-Native Species |
| LSE | Likely Significant Effect |
| MPA | Marine Protected Area |
| MPS | Marine Policy Statement |
| MRA | Mining Remediation Authority |
| NASCO | North Atlantic Salmon Conservation Organisation |
| NEP | National Environment Programme |
| NFD | National Development Framework |
| NFM | Natural Flood Management |
| NMP | Nutrient Management Plan |
| NRP | Natural Resources Policy |
| NRW | Natural Resources Wales |

| Acronym | Meaning |
|---|---|
| NSFCERMW | National Strategy for Flood and Coastal Erosion Risk Management in Wales |
| OGN | Operational Guidance Note |
| PoM | Programme of Measures |
| pSPA | potential Special Protection Area |
| RBD | River Basin District |
| RBMP | River Basin Management Plan |
| RNAG | Reasons for Not Achieving Good |
| SAC | Special Area of Conservation |
| SAT | Strategic Assessment Team |
| SEA | Strategic Environmental Assessment |
| SFP | Sustainable Fisheries Programme |
| SFS | Sustainable Farming Scheme |
| SMP | Shoreline Management Plan |
| SMNR | Sustainable Management of Natural Resources |
| SPA | Special Protection Area |
| STW | Sewage Treatment Works |
| SuDS | Sustainable (urban) Drainage System |
| SWMI | Significant Water Management Issue |
| SWPA | Shellfish Water Protected Area |
| UK | United Kingdom |
| WFD | Water Framework Directive |
| WGWE | Welsh Government Woodland Estate |
| WMMRP | Wales Metal Mine Remediation Programme |
| WNMP | Welsh National Marine Plan |
| WRMP | Water Resources Management Plan |

# 1. Introduction

This document sets out the draft strategic Habitats Regulations Assessment (HRA) of the draft fourth cycle River Dee River Basin Management Plan (RBMP).
The River Dee RBMP has been produced by Natural Resources Wales (NRW) as the responsible authority for river basin planning in Wales.
As part of the Dee River Basin District (RBD) is within England, NRW has worked closely with the Environment Agency to produce the Dee RBMP. The plans are a requirement of the Water Framework Directive (WFD) (2000/60/EC) which is transposed into UK law under the Water Environment (Water Framework Directive) England and Wales Regulations 2017 (referred to as WFD Regulations 2017).

Figure 1 shows the study area for this HRA.

HRA of the Welsh measures for the Dee RBD were carried out by NRW; HRA of the English measures for the Dee has been carried out by the Environment Agency. The findings of these are summarised jointly in this document.

The neighbouring Western Wales RBMP HRA has been delivered as a separate document by NRW. The other neighbouring RBMPs, including North West and Severn, will undergo HRA separately and will be delivered by the Environment Agency.

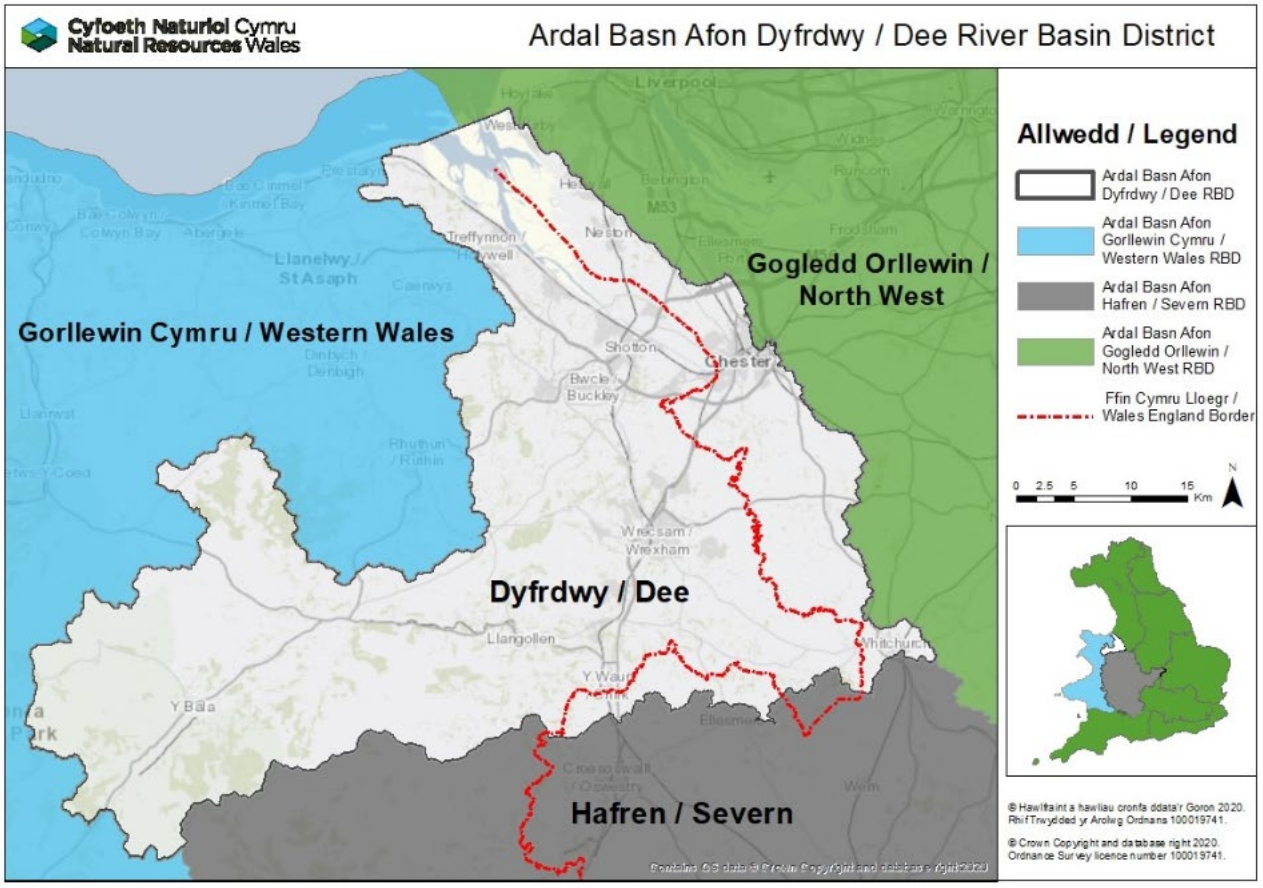



**Figure 1. Study area for the River Dee fourth RBMP.**

# 2. Determining the need for a Habitats Regulations Assessment

## 2.1 Introduction to Habitats Regulations Assessment

The Conservation of Habitats and Species Regulations 2017 (as amended), termed the 'Habitats Regulations', provides the legal framework for the protection of habitats and species of national importance in the UK.

A European site is a Special Area of Conservation (SAC) or Special Protection Area (SPA). European sites are designated to protect habitat types and species of European importance. The designation of each European sites includes a list of the particular habitat types and/or species for which it is designated, often referred to as the site's features.

Most European sites in Wales and the rest of the UK were designated under the EC Habitats and Birds Directives when the UK was a member of the European Union and the sites formed part of the EU network of sites called Natura 2000. Since the UK's exit from the EU, SACs and SPAs in the UK no longer form part of the EU's Natura 2000 network, but they are still referred to under UK legislation (and throughout this document) as European sites. For the purposes of this document, the term European site includes European marine sites and European offshore marine sites, unless otherwise indicated. Collectively, the UK's European sites now comprise what is referred to in the Habitats Regulations as the National Site Network.

A number of European sites have also been designated as Ramsar sites, which are wetlands of international importance designated under the 1971 Ramsar Convention on Wetlands. In many cases the Ramsar site features are also European site features, but in some cases Ramsar sites have additional features which are not part of the SAC or SPA designation. Ramsar sites are not legally subject to the Habitats Regulations, but it is Welsh Government and UK Government policy that they should be treated as though they are European sites, including with respect to HRA, and including with respect to any non- SAC/SPA features. It is also Welsh and UK Government policy that protection similar to that given to European sites under the Habitats Regulations should also be given to:

- proposed SACs and SPAs
- areas secured as sites compensating for damage to a European site from a plan or project agreed to as a derogation.

Except where otherwise indicated, all further references in this document to European sites should be taken to include Ramsar sites, proposed SACs and SPAs and compensatory sites.

The Habitats Regulations require that a competent authority, before deciding to undertake, or give any consent, permission or other authorisation for a plan or project which is likely to have a significant effect on a European site and is not

directly connected with or necessary to the management of that site, must make an appropriate assessment of the implications for that site in view of that site's conservation objectives.

The aim of the WFD Regulations 2017 is to establish a framework for the protection of all surface waters and groundwater with the aim to reach good status in all waters. Both the Habitats Regulations and the WFD Regulations 2017 promote the achievement of healthy aquatic ecosystems while at the same time ensuring a balance between water, nature protection and the sustainable use and management of natural resources. Indeed, there are many synergies as water dependent SACs and SPA's are also Protected Areas under the WFD Regulations and the implementation of measures will generally benefit the objectives of the nature legislation. However, this HRA has been developed iteratively with the fourth cycle RBMPs to ensure there are no unintended consequences of their implementation on European sites.

## 2.2 River Dee RBD European Sites

Figure 2 shows all European sites within or close to the study area based on the most up to date information. These include:

- 3 Ramsar Sites
- 11 SACs – note this includes the Dee Estuary (Wales), Dee Estuary (England), River Dee and Bala Lake (Wales) and River Dee and Bala Lake (England)
- 4 SPAs – note this includes Liverpool Bay (England), Liverpool Bay (Wales), The Dee Estuary (Wales) and the Dee Estuary (England)

The River Dee and Bala Lake is designated a SAC. The interest features include Floating Water Plantain, Atlantic Salmon, Lamprey, Otter and fluvial geomorphology. Bala Lake (Llyn Tegid) in the upper reaches of the Dee is also designated a Ramsar, as are the Midland Meres and Mosses to the east of the RBD. The tidal Dee Estuary is also internationally important for nature conservation, being a SAC (with marine components) with interest features/sub-features including diadromous fish (sea lamprey and river lamprey as well as Atlantic salmon) of which the Dee Estuary and River Dee support internationally important populations. The Dee Estuary is also designated as a SPA and Ramsar Site.

We do not propose listing names/features of each European site shown on Figure 2 at this stage in this document as the HRA is generally being undertaken at a strategic high level given the nature of the RBMP being considered and as such a significant proportional area of Wales is designated - many European sites being present across the land mass and coastal areas of the RBD.
Where relevant however, specific sites (and where appropriate their qualifying features) are considered against Water body measures in the Appropriate Assessment stage of the HRA (Section 6).

Key issues identified for the RBD through the RBMP SEA scoping exercise that are of relevance to European sites include:

- Climate and ecosystem resilience – including sea level rise implications and where constraints to physical processes, such as sea defences, are affecting habitat extent, condition and overall resilience, by impeding their ability to move inland in response to sea level rise (coastal squeeze) and leaving habitats/sites increasingly vulnerable to increased wave action and accelerated coastal erosion associated with climate change.
- Pollution pressures - the water environment within the RBD receives pollution pressures from various sources. These have direct and indirect impacts on aquatic biodiversity, flora and fauna for example, pollution from wastewater (and other sources) may increase risk of olfaction inhibition in fish.
- Nutrient enrichment - (nitrogen and phosphorus) in river, lake and groundwater water bodies and subsequently transitional and coastal waterbodies, can impact on aquatic biodiversity, flora and fauna. In 2024, the SAC river compliance assessments showed 62 % of water bodies in the Welsh part of the River Dee & Bala lake SAC exceeded phosphorus targets. Diffuse pollution from the way we manage our land through to point sources from wastewater and sewage are the primary sources of nutrients.
- Physical modifications - impacts associated with physical modification of river, estuarine and coastal physical forms and processes (hydromorphology), for example where barriers to fish migration are present, within the RBD catchments, limiting movement, distribution and population size. Changes to the natural flow and levels of water from abstraction is also a key issue for fish in rivers with particular low flow concerns, and entrainment of fish is a risk for abstractions which are not screened appropriately.
- Non-native invasive species – invasive species in the River Dee RBD include Japanese Knotweed, Himalayan Balsam and Chinese Mitten Crab. Invasive Non-Native Species (INNS) can have an impact on our water bodies, for example Chinese Mitten Crabs can burrow into riverbanks and plant species that form large monocultures which die back in winter, can leave banks vulnerable to erosion.
- Pests and diseases - for example *Phytophthora ramorum*, a highly destructive organism that can cause extensive damage and death to more than 150 plant species, including some forest species. Damage and loss of plants, trees and woodlands across catchments from insects, pests, and organisms such as bacteria and fungi is likely to increase in future with potentially significant impacts for catchments. Increased human mobility (and movement of goods) as well as changes in climate all contributing to heightened risk of spread of existing or introduction of new pests and diseases.
- The potential for future development of tidal range energy projects in the Dee Estuary and adjacent Mersey Estuary that could impact the estuary dynamics, and fish/bird populations.

Specific threats and pressures identified for SACs and SPAs within the RBD through site specific data forms include the above as well as other threats such as: human induced changes to hydraulic conditions, increased recreational pressure on sites, pollution to groundwater (point and diffuse sources), INNS, grazing and mowing practices, fire and fire suppression, marine water pollution, pollution to surface waters, human resource use such as mining/quarrying, outdoor sports and

recreational activities, air pollution and airborne pollutants, urbanisation and building in the landscape etc. (list not exhaustive).

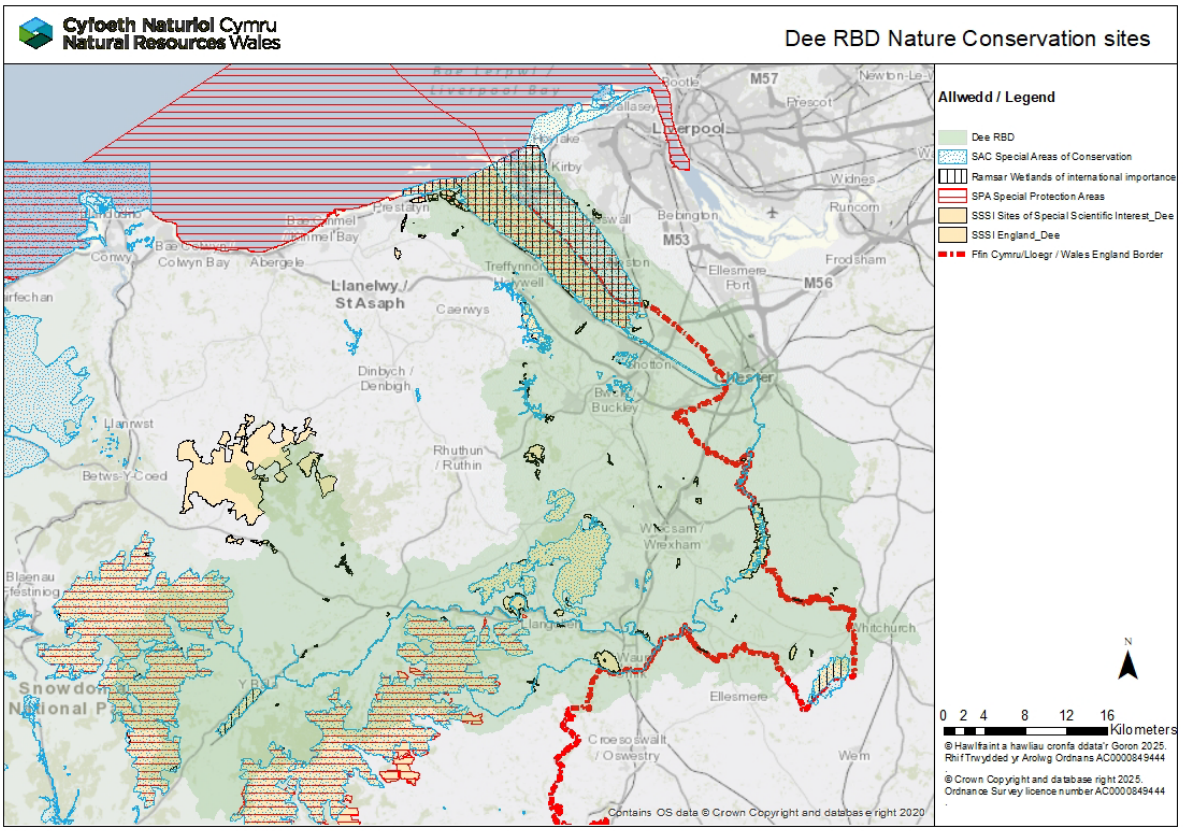



**Figure 2. European Sites across the River Dee RBD.**

## *2.3* Stages of Habitats Regulations Assessment

Official guidance on the Habitats Regulations sets out several stages to the carrying out of assessments required under Regulation 63 of the Habitats Regulations. We refer to this process as 'Habitats Regulations Assessment' (HRA). This HRA follows NRW Operational Guidance Note 200 on the HRA of Plans and Projects.

The HRA process is made up of a series of stages that is summarised below:

1. Screening I: Determining which plans should be subject to HRA.
2. Screening II: Pre-screening and Test of Likely Significant Effects
3. Appropriate Assessment and test of site integrity
4. Derogation

The plan can only lawfully be approved or enacted if adverse effects on site integrity can be ruled out, unless it is able to meet the three tests set out under the derogations, namely:

1. There are no feasible alternative solutions that would be less damaging or avoid damage to the site.
2. The proposal needs to be carried out for imperative reasons of overriding public interest.
3. The necessary compensatory measures can be secured.

### 2.3.1 Screening II approach

The screening II stage in strategic HRA starts with pre-screening. This is initially undertaken so that measures/policies that cannot affect or have no pathway for effects on European site features are screened out immediately, with justification provided. Those with potential pathways for effects are considered further in the Test of Likely Significant Effects.

## 3. An overview of the Plan

RBMPs take a holistic approach to managing our waters, looking at the water within the wider ecosystem and taking into account the movement of water through the hydrological cycle from source to sea. The purpose of the RBMPs is to protect and improve the water environment for the wider benefits to people and wildlife.

The first RBMPs were published in 2009 and set the framework for protecting and enhancing the water environment from 2009 to 2015. Some commitments extended to 2021 and /or 2027 and these were reviewed and updated in the second cycle RBMP, published in 2015. The third cycle again, reviewed progress against the objectives and where necessary revised objectives and the associated Programme of Measures (PoM) for delivery between 2021 and 2027. For the fourth cycle NRW and the EA have reviewed again progress and the PoM and included measures required at a water body scale to meet good status/potential by 2027. There are some water bodies where the objective of good status/potential has been extended beyond 2027. See Figure 3 below.

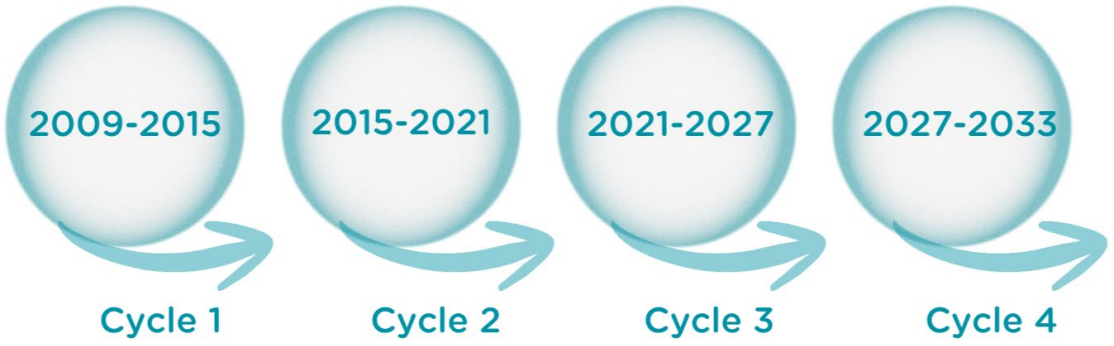



**Figure 3. Schematic demonstrating the periods of time covered by each RBMP cycle**

The fourth cycle RBMPs are produced by NRW and the Environment Agency under the Water Environment (Water Framework Directive) England and Wales Regulations 2017. The plans include a summary of:

- Classification of water bodies: The baseline status in each water body. This enables us to understand the current condition of the water bodies including all the quality elements. Preventing deterioration from this baseline is a key objective of this plan, and also one of our greatest challenges in protecting the water environment.

- Summary of Programme of Measures (PoM) to achieve statutory objectives (National and water body measures). The PoM includes the measures required over this planning cycle to restore water bodies to good status/potential. It also includes the local actions identified in cycle 3 for the Opportunity Catchments in Wales, focussing on collaborative working and the delivery of multiple benefits for people and wildlife. The HRA focusses on assessing the PoM.
- Statutory objectives for water bodies: Objectives have been set for each quality element in all water bodies, including an objective for the water body as a whole. The default objective is to aim to achieve good status or potential by 2027. However, in some circumstances, we have extended the deadline or set an objective of less than good where this is justified on the basis of natural conditions, ecological recovery time, technical feasibility or disproportionate cost.

Since publishing the third cycle RBMPs, the UK and Welsh governments launched an independent commission in 2024, led by Sir Jon Cunliffe and supported by expert advisors, to recommend reforms to the water sector regulatory system. The review aimed to build consensus for a resilient and innovative water sector and a robust wider regulatory framework that:

- delivers long-term benefits
- restores rivers, lakes, and seas to good health
- provides a reliable and efficient water supply in a changing climate
- ultimately serves both customers and the environment

In addition to the above, the High Court ruling on the Pickering Fishery Association), R (On the Application Of) v Environment Agency [2023] is also now available and has influenced the development of cycle 4 RBMPs.

The PoM is aligned with the list of the Significant Water Management issues (SWMI) that NRW and EA believe threaten the current and potential future uses of the water environment

Between October 2025 and April 2026 NRW undertook a public consultation to share an overview of the SWMI's identified across Wales' RBD's. The EA undertook this consultation for the English RBD's between November 2025 and May 2026. The consultation responses have informed the respective reviews of the program of measures.

The Significant Water Management Issues (SWMI) in the fourth cycle of the RBMP remain consistent with the third cycle RBMPs:

- **Physical modifications** Changes made to natural forms and processes of rivers, lakes, estuaries and coastal waters.
- **Pollution from rural areas** Poor agricultural practice and forestry management can result in nutrients, sediment and bacteria affecting the water environment.

- **Pollution from wastewater** Wastewater can contain large amounts of nutrients (such as phosphorus and nitrates), ammonia, harmful bacteria and other contaminants. This includes treated water from wastewater treatment works, untreated intermittent discharges from storm overflows, private wastewater treatment and misconnected household appliances.
- **Pollution from towns, cities and transport** Atmospheric deposition and runoff from man-made surfaces carries pollutants into waters. Some of these contaminants adhere to sediment in our lakes, rivers, estuaries and coastal water bodies. These contaminates are either gradually released or released in larger quantities when there is a disturbance such as high flows or dredging.
- **Pollution from abandoned mines** Contaminated water draining from historic mines.
- **Changes to natural flow and levels of water** Taking too much water from rivers, lakes and underground, causes problems for wildlife, ecosystems and impacts recreational use of water
- **Non-native invasive species** Presence of invasive non-native plants and animals in our watercourses poses a threat to biodiversity, increases flood risk, affects the state of our water environment and costs the economy billions per annum.

These issues can act as sources of many of the wide-ranging pressures impacting many of our waters, such as chemicals, nutrients, bacteria and invasive non-native species. The nature and climate emergencies are cross-cutting issues which are also impacting water, habitats and species.

This draft HRA is focussed on and has been developed iteratively with the PoM. The Welsh PoM consists of 54 national measures (applicable to the whole of Wales) and Water body measures (a suite of measures that are applied to specific water bodies). The national measures are made up of those carried forward from earlier cycles of the RBMP, modified measures and new measures. There are 81 types of Water body measures, grouped by SWMI, that have been applied to specific waterbodies, not achieving their WFD Regulations objectives.

The English Programme of Measures (Measures Data Standard), developed by the Environment Agency, consists of tiers of measures. These are Action Categories that are each broken down into Detailed Actions. These Detailed Actions were applied at a Water body level.

HRA must be an iterative process, and the conclusions will inform the development of the RBMP and the SEA. The draft HRA will be discussed with the Appropriate Nature Conservation Bodies (NRW and Natural England) and there will be informed public consultations on the draft plans. The HRA will then be revised in light of these discussions, responses to the draft plan consultation and as the RBMPs themselves evolve, concluding in a Final HRA which will be published alongside the adopted RBMPs.

# 4. Screening I: Determining whether the plan should be subject to HRA

## 4.1 Is the Plan directly connected with or necessary to the management of a European site for the purposes of conserving the habitats or species for which the European sites are designated?

The fourth cycle RBMPs are not directly connected with or necessary to the management of European sites. By their nature, RBMPs are designed to improve our environment and hence should be complementary to the management of European sites and meet Protected Area objectives for water dependant European sites. However, the plans include measures that could result in physical interventions in the environment and consequently, there is potential for effects on European sites located on, adjacent to or linked with (e.g. downstream of) measures. NRW and the EA have therefore determined that the RBMPs should be subject to HRA.

# 5. Screening II: Test of Likely Significance Alone

## 5.1 Pre-Screening of measures

Pre-screening is undertaken so that measures or policies in the plan which cannot affect, or have no pathway for effects, on European site features, are screened out immediately, with justification provided, and hence transparency.

In Wales, the PoM includes a series of national measures and a suite of Water body measure types developed to align with the SWMI's, aimed at application at a waterbody level for those waterbodies that are not achieving good ecological status or potential.

In England, the Environment Agency has developed a Measures Data Standard to support the consistent recording of measures data. This consists of two tiers of information – a series of 36 Action Categories (a high-level measure) broken down further into 154 Detailed Action types (lower tier more specific measures). These measures are applied at a water body level to identify the actions required to achieve the objectives for the water body.

5.1.1 provides information regarding the categorisation for and pre-screening of the Welsh national measures.

5.1.2 provides information regarding the pre-screening of Welsh Water body measure types.

5.1.3 provides information regarding the pre-screening of the English Measures Data Standard.

### 5.1.1 Pre-screening of National Measures (Wales)

The Welsh national measures are allocated into one of 13 pre-screening categories according to the nature of the measures and the ways in which they could or could

not affect European sites, primarily as a result of their delivery mechanism. These pre-screening categories are described in Table 1.

The pre-screening categories are recommended by NRW Operational Guidance Note (OGN 200) and are an accepted methodology for screening high level policies / measures in strategic HRA. *Credit to David Tyldesley and Associates – DTA – for the original publication of these categories in the DTA Publications Habitat Regulations Handbook which has since been withdrawn (January 2026).* It is a high-level precautionary screening to screen out any measures that obviously fall into Categories A-H below and therefore do not require further consideration as part of the HRA process.

Where potential pathways or uncertainties exist, the measures will be taken forward to the Test of Likely Significance in Section 5.2.

**Table 1. Pre-screening Assessment Categories**

| Category | Description |
|---|---|
| A | **General statements of policy/general aspirations**. Policies which are no more than general statements of policy or general political aspirations should be **screened out** because they cannot have a significant effect on a site. |
| B | **Policies listing general criteria for testing the acceptability/sustainability of proposals**. These general policies cannot have any effect on a European site and should be **screened out**. |
| C | **Proposal referred to but not proposed by the strategy**. **Screen out** any references to specific proposals for projects, such as those which are identified, for example, in higher policy frameworks such as the Future Wales: The National Plan 2040 or National Policy Statements, relating perhaps to nationally significant infrastructure projects. These will be assessed by the Secretary of State or Welsh Ministers. A useful 'test' as to whether a project should be screened out in this step is to ask the question:<br>'Is the project provided for/proposed as part of another plan or programme and would it be likely to proceed under the other plan or programme irrespective of whether this subject plan is adopted with or without reference to it?'<br>If the answer is 'yes', it will normally be appropriate to screen the project out in this step. |

| Category | Description |
|---|---|
| D | **Environmental protection/site safeguarding policies**. These are policies the obvious purpose of which is to protect the natural environment, including biodiversity, and/or to conserve or enhance the natural, built or historic environment, where enhancement measures will not be likely to have any adverse effect on a European Site. They can be **screened out** because the implementation of the policies is likely to protect rather than adversely affect European sites, and would not undermine their conservation objectives. |
| E | **Policies or proposals that steer change in such a way as to protect European sites from adverse effects**. These types of policies or proposals will have the effect of steering change away from European sites whose qualifying features may be affected by the change, and they can therefore be **screened out**. |
| F | **Policies or proposals that cannot lead to development or other change**. Policies that do not themselves lead to development or other change, for example, because they relate to design or other qualitative criteria for development, such as materials for new development. They do not trigger any development or other changes that could affect a European site, and can be **screened out**. |
| G | **Policies or proposals that could not have any conceivable adverse effect on a site**. Policies which make provision for change, but which could have no conceivable effect on a European site, because there is no causal connection or link between them and the qualifying features of any European site and can therefore be **screened out**. |
| H | **Policies or proposals the (actual or theoretical) effects of which cannot undermine the conservation objectives (either alone or in combination with other aspects of this or other plans or projects)**. Policies or proposals which make provision for change, but which could have no significant effect on a European site, either alone or in combination with other aspects of the same plan, or in combination with other plans or projects, and can therefore be **screened out**. These may include cases where there are some potential effects which (and theoretically even in combination) would plainly be insignificant and could not undermine the conservation objectives. |
| I | **Policies or proposals with a likely significant effect on a site alone**. Policies or proposals which are likely to have a significant effect on a European site alone should be **screened in**. |

| Category | Description |
|---|---|
| J | **Policies or proposals not likely to have a significant effect alone**. These aspects of the plan would have some effect on a site, but the effect would not be likely to be significant; so, they must be checked for in-combination (cumulative) effects. They will then be re-categorised as either Category K (no significant effect in combination) or Category L (likely to have a significant effect in combination), as explained below. |
| K and L | **Policies or proposals not likely to have a significant effect either alone or in combination (K), or likely to have a significant effect in combination (L) after the in-combination test**. Where an aspect of a plan could have some effect on the qualifying feature(s) or a European site, but the effects of that aspect of the plan alone would not be significant, the effects of that aspect of the plan will need to be checked in combination firstly, with other effects of the same plan, and then with the effects of other plans and projects. i.e. policies or proposals which will have no likely significant effect alone or in combination are classified as Category K. Policies or proposals which are likely to have a significant effect in combination are classified as Category L. Category L policies or proposals will require further consideration in terms of potential in-combination effects. Firstly, this will be with regard to other aspects of the Plan itself, and subsequently with other separate plans or projects, for example neighbouring Local Plans. |
| M | **Bespoke area, site or case-specific policies or proposals intended to avoid or reduce harmful effects on a European Site.** Examples of these may be policies or proposals which: are area specific; or provide a bespoke mitigation plan or strategy; or require that a particular proposal be accompanied by a detailed “construction management plan”, or similar plan; or require a proposed change to be subject to early warning monitoring.<br>In all these cases the policies or proposals will have been included with the intention of avoiding or reducing effects on specific European site(s) whose qualifying features may otherwise be affected by the plan being implemented. If it were not for the need to include such policies to afford protection for the relevant European sites, the plan could lawfully and practically be implemented without them. Following the ruling in People Over Wind these policies cannot be taken into account in the formal screening decision and must therefore be **screened in** for further consideration as part of an appropriate assessment. |

Annex 1 provides supplementary information which lists the national measures applicable across Wales - they are grouped under their most relevant SWMI and their delivery mechanism, pre-screening decision and our justification are recorded.

A precautionary approach has been taken where any uncertainty exists because of the following:

- Plans or programmes are still in-development;
- Plans or programmes have no detailed spatial information in terms of their delivery;
- Plans or programmes are being delivered externally to NRW.

In these instances, and for those Welsh measures where a potential pathway may be present that needs further investigation (i.e. where potential pathways or uncertainties exist), we have taken the draft RBMP national measures forward for further consideration of pathways in the test of Likely Significant Effects (LSE) on European Sites (further LSE screening as a result of measures being allocated into pre-screening category I-M).

Of the 54 Welsh national measures, 32 have been screened out at the pre-screening stage (see Annex 1 for justification) and 22 require further screening consideration and justification for LSE.

A summary of the pre-screening decisions for the Welsh national measures is set out in Table 2 below – see Annex 1 for more detail.

**Table 2. Welsh national measures pre-screening results**

| HRA Pre-screening Category | Programme of measures |
|---|---|
| A | CYM25, CYM32, CYM34, CYM35, CYM36, CYM44, CYM51, CYM60, CYM62, CYM74, CYM82, WAL11, WAL12, WAL22, WAL29, WAL30, WAL31, WAL32, WAL33, WAL34, WW0010, WW0212, WW0216, NEW02, NEW03, NEW05 |
| B | - |
| C | - |
| D | CYM61, DrWPA0488 |
| E | CYM69, WAL08, NEW06 |
| F | - |
| G | WAL24 |
| H | - |
| Further LSE Screening I to M | CYM2, CYM4, CYM18, CYM31, CYM41, CYM49, CYM50, CYM73, DE0014, WAL02, WAL03, WAL05, WAL06, WAL10, WAL17, WAL19, WAL20, WAL23, WAL25, WW0031, NEW01, NEW04 |

### 5.1.2 Pre-screening of Water body Measures (Wales)

The pre-screening for Welsh Water body measures uses a simplified national approach for this initial high-level screening.

A suite of Welsh Water body measure types have been developed, aligned with the SWMI's, aimed at application at a water body level for those water bodies that are not achieving good ecological status or potential. The WFD Reasons for Not Achieving Good (RNAG) water bodies informed the development and application of measures. The HRA initially considers the types of Water body measures and then, where pathways for effects exist, the HRA considers their spatial application.

Each type of Welsh Water body measure has a measure description and is identified by a unique ID code that aligns with the relevant SWMI. There are 81 Water body measure types listed nationally in Wales which were each pre-screened. Eleven of the Welsh Water body measure types do not align with any of the SWMI's as they relate to other pressures, other natural causes, suspect data or unknown reasons.

The pre-screening of Welsh Water body measure types did not use the national measures pre-screening criteria as this approach is aimed at strategic plan/programme measures. The Water body measure pre-screening considers only the Water body measure description and likely approach to be taken to implement that measure (investigation, regulatory compliance, good practice or if it relates specifically to an on the ground deliverable). This pre-screening identifies and screens out immediately any Water body measure types that cannot affect or have any pathway for effects on European site features, with justification provided for transparency (Annex 2).

This requires a precautionary approach where only those Water body measure types that have 'no conceivable' impact on designated sites due to the nature of their approach (e.g. purely desk-based investigation), are screened out at the pre-screening stage. Where any uncertainty remains or a potential pathway exists, the Water body measure type remains screened in for further consideration in Section 5.2.

This pre-screening stage, consisted of a high-level review of all Welsh Water body measure types, without referring to any spatial data (i.e. which waterbody(ies) the measure is assigned to or which RBD they relate to), nor background context for that measure being allocated at a specific location (i.e. business category or type of background activity). Some Welsh Water body measures align with the Welsh national measures, but not all, and so the pre-screening was undertaken independently of the national measures.

Annex 2 provides supplementary information which lists each of the Welsh Water body measure types by ID together with the pre-screening decision and justification.

Of the 81 Welsh Water body measure types, 46 have been screened out at the pre-screening stage and 35 require further screening consideration and justification for LSE alongside their relevant Welsh national measure(s).

A summary of the pre-screening decision is set out in Table 3 below – see Annex 2 for more detail.

**Table 3. Welsh Water body measure types pre-screening results**

| HRA Pre-screening Result | Water body measure ID |
|---|---|
| Screened Out – Statement of Regulatory Compliance | WW1.0, WW1.3, TC1.0, TC1.1, TC1.7, TC1.10, NN1.1, RA1.0, RA1.10, OT1.1, UN1.0 |
| Screened Out – Statement of Good Practice | TC1.4, TC1.8, RA1.1, RA1.3, RA1.4, RA1.5, RA1.7, RA1.8, RA2.0, UN1.1 |
| Screened out – Investigations* | IN2.1, IN2.2, IN2.3, IN2.4, IN2.5, IN2.6, IN2.7, IN2.8.1, IN2.8.2, IN2.9, IN2.10, IN2.11, IN2.12, IN4.0, IN1.0, IN3.0, IN3.1, NA1.1, NA1.2, SU1.1, SU1.2 |
| Screened out – No measure taken forward | PM13, NA1.0, OT1.0, SU1.0 |
| Further LSE Screening | WW1.1, WW1.2, WW1.4, WW1.5, WW2.0, TC1.2, TC1.3, TC1.5, TC1.6, TC1.9, TC1.11, TC1.12, PM7, PM12, PM6, PM8.1, PM8.2, PM9, PM10, PM1, PM4, PM2, PM3, PM5, FL1.0, NA1.3, NN1.0, NN1.2, RA1.2, RA1.6, RA1.9, RA1.11, AM1.0, AM1.1, OT1.2 |

**Investigations in this context are taken to be desk based or walkover only and will therefore not lead to direct physical effect or impact pathway (i.e. no on the ground development or other change).*

### 5.1.3 Pre-screening of English Measures Data Standard (England)

The Environment Agency carried out a "national once" (England) precautionary high-level screening of the English measures data standard to identify whether any measures can be screened out at this pre-screening stage. This focussed on the English Detailed action types (lower tier more specific measures – grouped by action categories).

As for the approach followed for the Welsh national measures, this pre-screening made use of categories recommended by NRW Operational Guidance Note (OGN 200) - an accepted methodology for screening high level policies / measures in strategic HRA. *Credit to David Tyldesley and Associates – DTA – for the original publication of these categories in the DTA Publications Habitat Regulations Handbook which has since been withdrawn (January 2026).*

This high-level precautionary screening was completed to screen out any English Detailed action types that obviously fall into Categories A-H as listed in Table 1 (Section 5.1.1 above) and therefore do not require further consideration as part of the HRA process. Examples of these measures include those that are solely educational, awareness raising, inspections or investigations.

Where any uncertainty remains, and for those Detailed action types where a potential pathway may be present that needs further investigation (i.e. where

potential pathways or uncertainties exist), these are taken forward for further consideration of pathways in the test of Likely Significant Effects (LSE) on European Sites (further LSE screening as a result of measures being allocated into pre-screening category I-M).

Annex 3 provides supplementary information which lists out the English Detailed action types that have been screened out at this pre-screening stage, together with pre-screening justification.

Of the 154 English Detailed action types, 33 have been screened out at the pre-screening stage (see Annex 3 for justification) and 121 require further screening consideration and justification for LSE.

A summary of the pre-screening decisions for the English Detailed action types is set out in Table 4 – see Annex 3 for more detail.

**Table 4. English Detailed action type pre-screening results**

| HRA Pre-screening Category | Programme of measures |
|---|---|
| A | - |
| B | - |
| C | - |
| D | - |
| E | - |
| F | WQA20.02, WQA24.01, WQA24.02, WQA30.01, WQA32.02, WQA32.03, WQA33.02, WQA33.03 WQA33.04, WQA34.06, WQA35.01, WQA35.02, WQA35.03 |
| G | WQA01.01, WQA01.02, WQA01.03, WQA01.04, WQA01.05, WQA01.06, WQA01.07, WQA02.01, WQA02.02, WQA02.0, WQA03.03, WQA08.01, WQA08.05, WQA12.01, WQA19.02, WQA25.06, WQA25.08, WQA27.01, WQA27.02, WQA34.01, |
| H | - |

| HRA Pre-screening Category | Programme of measures |
|---|---|
| Further LSE Screening I to M | WQA03.01, WQA03.02, WQA04.01, WQA04.02, WQA04.03, WQA04.04, WQA04.05, WQA05.01, WQA05.02, WQA05.03, WQA05.04, WQA05.05, WQA05.06, WQA06.01, WQA06.02, WQA06.03, WQA06.04, WQA07.01, WQA07.02, WQA08.02, WQA08.03, WQA08.04, WQA09.01, WQA09.02, WQA10.01, WQA10.02, WQA11.01, WQA11.02, WQA11.03, WQA11.04, WQA12.02, WQA12.03, WQA12.04, WQA12.05, WQA13.01, WQA13.02, WQA13.03, WQA14.01, WQA15.01, WQA15.02, WQA16.01, WQA16.02, WQA17.01, WQA17.02, WQA18.01, WQA18.02, WQA18.03, WQA18.04, WQA19.01, WQA20.01, WQA21.01, WQA22.01, WQA22.02, WQA23.01, WQA23.02, WQA24.03, WQA25.01, WQA25.02, WQA25.03, WQA25.04, WQA25.05, WQA25.07, WQA25.09, WQA26.01, WQA26.02, WQA26.03, WQA26.04, WQA26.05, WQA27.03, WQA27.04, WQA27.05, WQA27.06, WQA27.07, WQA27.08, WQA27.09, WQA27.10, WQA27.11, WQA27.12, WQA28.01, WQA28.02, WQA28.03, WQA28.04, WQA28.05, WQA28.06, WQA28.07, WQA28.08, WQA28.09, WQA28.10, WQA28.11, WQA28.12, WQA29.01, WQA29.02, WQA29.03, WQA29.04, WQA29.05, WQA29.06, WQA29.07, WQA29.08, WQA29.09, WQA29.10, WQA29.11, WQA29.12, WQA29.13, WQA29.14, WQA29.15, WQA30.02, WQA30.03, WQA31.01, WQA31.02, WQA31.03, WQA31.04, WQA31.05, WQA31.06, WQA32.01, WQA33.01, WQA34.02, WQA34.03, WQA34.04, WQA34.05, WQA34.07, WQA36.01 |

### 5.1.4 Summary of Conclusions from the pre-screening

Of the 54 Wales national measures, 32 have been screened out at the pre-screening stage (see Annex 1 for justification) and 22 require further screening consideration and justification for LSE in Section 5.2.

Of the 81 Water body measure types in Wales, 46 have been screened out at the pre-screening stage (see Annex 2 for justification) and 35 require further screening consideration and justification for LSE in Section 5.2.

Of the 154 English Detailed action types, 33 have been screened out at the pre-screening stage (see Annex 3 for justification) and 121 require further screening consideration and justification for LSE in Section 5.3.

The Welsh measures that remain screened in for further screening for LSE can be further broken down by SWMI as below in Table 5. Any Welsh Water body measure types remaining screened in that do not align with the SWMI's are presented under "other" as below (this is not relevant for Welsh national measures as they all align with SWMI).

The 121 English action types progressing to LSE are not grouped by SWMI so are just listed as one entry in Table 5 below.

**Table 5. Pre-screening summary – measures remaining screened in for LSE**

| SWMI | Welsh national measures for further LSE screening | Welsh Water body measure types for further LSE screening |
|---|---|---|
| Pollution from waste water | CYM18, WAL06, WAL10, WAL25, NEW01, WAL23 | WW1.1, WW1.2, WW1.4, WW1.5, WW2.0 |
| Pollution from towns, cities and transport | - | TC1.2, TC1.3, TC1.5, TC1.6, TC1.9, TC1.11. TC1.12 |
| Physical modifications | CYM2, CYM4, CYM31, CYM50, WAL02, WAL17, WAL19 | PM1, PM7, PM12, PM6, PM8.1, PM8.2, PM9, PM10, PM5, PM4, PM2, PM3 |
| Changes to natural flow and levels of water | CYM73 | FL1.0, NA1.3 |
| Non-native invasive species | - | NN1.0, NN1.2 |
| Pollution from rural areas | CYM41, WAL05 | RA1.2, RA1.6, RA1.9, RA1.11 |
| Pollution from abandoned mines | CYM49, DE0014, WW0031 | AM1.0, AM1.1 |
| All | WAL03, WAL20, NEW04 | - |
| "Other" | Not relevant for national measures | OT1.2<br>listed under "other pressures" and not aligned to a SWMI |
| *Total* | *22* | *35* |

**English action types for further LSE screening** ***(not grouped by SWMI)***

| |
|---|
| WQA03.01, WQA03.02, WQA04.01, WQA04.02, WQA04.03, WQA04.04, WQA04.05, WQA05.01, WQA05.02, WQA05.03, WQA05.04, WQA05.05, WQA05.06, WQA06.01, WQA06.02, WQA06.03, WQA06.04, WQA07.01, WQA07.02, WQA08.02, WQA08.03, WQA08.04, WQA09.01, WQA09.02, WQA10.01, WQA10.02, WQA11.01, WQA11.02, WQA11.03, WQA11.04, WQA12.02, WQA12.03, WQA12.04, WQA12.05, WQA13.01, WQA13.02, WQA13.03, WQA14.01, WQA15.01, WQA15.02, WQA16.01, WQA16.02, WQA17.01, WQA17.02, WQA18.01, WQA18.02, WQA18.03, WQA18.04, WQA19.01, WQA20.01, WQA21.01, WQA22.01, WQA22.02, WQA23.01, WQA23.02, WQA24.03, WQA25.01, WQA25.02, WQA25.03, WQA25.04, WQA25.05, WQA25.07, WQA25.09, WQA26.01, WQA26.02, WQA26.03, WQA26.04, WQA26.05, WQA27.03, WQA27.04, WQA27.05, WQA27.06, WQA27.07, WQA27.08, WQA27.09, WQA27.10, WQA27.11, WQA27.12, WQA28.01, WQA28.02, WQA28.03, WQA28.04, WQA28.05, WQA28.06, WQA28.07, WQA28.08, WQA28.09, WQA28.10, WQA28.11, WQA28.12, WQA29.01, WQA29.02, WQA29.03, WQA29.04, WQA29.05, WQA29.06, WQA29.07, WQA29.08, WQA29.09, WQA29.10, WQA29.11, WQA29.12, WQA29.13, WQA29.14, WQA29.15, WQA30.02, WQA30.03, WQA31.01, WQA31.02, WQA31.03, WQA31.04, WQA31.05, WQA31.06, WQA32.01, WQA33.01, WQA34.02, WQA34.03, WQA34.04, WQA34.05, WQA36.01 |
| ***TOTAL: 121*** |

The Welsh national measures that remain screened in, fall under the following delivery mechanisms: strategic plans, water company investment (Asset Management Plan (AMP)), investigations, partnerships and regulation.

Welsh Water body measures that remain screened in are those where an on the ground deliverable is the likely approach to implementation of the measure, or where uncertainty remains.

There are two instances where all Welsh national measures for a SWMI have been screened out at pre-screening (Pollution from towns, cities and transport and Non-native invasive species) but one or more Water body measure type aligned with this SWMI remain screened in. In these instances, the national measures have been screened out as they relate to general statements of policy/general aspiration (Category A) or Environmental protection/site safeguarding policies (Category D) rather than on the ground delivery. The aligned Welsh Water body measure types, however, relate to more specific on the ground deliverables at a more localised scale, to implement change/improvement at a water body level with the aim of contributing to these more general national aspirations and policies. Further consideration of the interaction between aligned national measures and Water body measures remaining screened in for LSE is provided below.

English Detailed action types remaining screened in are those where on the ground deliverable forms the likely approach to implementation of the measure, or where uncertainty remains regarding measures and on the ground delivery cannot be ruled out at this pre-screening stage.

The remaining 22 Welsh national measures, 35 Welsh Water body measure types and 121 English Detailed action types following the initial pre-screening are considered further in Section 5.2 and 5.3– Test of Likely Significant Effect.

## 5.2 Test of Likely Significant Effect - Wales

The text through this section provides a Likely Significant Effect (LSE) screening assessment of the remaining 22 Welsh national measures (i.e. measures/policies that fall into categories I to M being considered further to test LSE) and the 35 remaining Welsh Water body measure types that remained screened in after the initial high-level pre-screening.

Welsh national measures and Water body measure types are grouped together through this section, under their relevant SWMI.

National measures are considered as an overarching measure/policy to identify any potential LSE that may occur. A precautionary approach has been followed whereby any national measures where a LSE is identified or where uncertainty remains (e.g. national measures are still in development, lack sufficient information to fully consider etc.) are taken through to Appropriate Assessment for further consideration.

As for the pre-screening stage, Water body measure types are initially considered from their description, regardless of where or how frequently they are applied. All 35

Welsh Water body measure types taken through to LSE are considered (irrelevant of which RBD they may relate to).

The LSE does not therefore include any spatial assessment at this stage for Water body measure types. This is based on the assumption there will be very few waterbodies where designated sites are not a consideration across Wales (due to the number and area of the country covered by European sites). Each measure is considered strategically in relation to the nature of its delivery, irrelevant of location and therefore working on the general assumption there could be one/more European sites (of any type/with any feature) in proximity, hydrologically linked and/or functionally linked for that measure when applied at a water body level.

If the Water body measure type would result in an on the ground deliverable, directly as a result of the RBMP, it is considered there is potential for impact pathway to a European site (irrelevant of location/type/feature) and therefore LSE cannot be ruled out at this stage and this measure is screened through to Appropriate Assessment for further consideration of spatial factors (and to take into account additional mitigation/controls). Where there is any uncertainty (e.g. measures are still in development, lack sufficient information to fully consider, spatial data required to fully assess etc.), measures are also taken through to Appropriate Assessment.

Annex 4 lists the Welsh national measures that remain screened in for LSE consideration, grouped under their most relevant SWMI and their delivery mechanism, LSE decision and justification are recorded.

Annex 5 lists the Welsh Water body measure types that remain screened in for LSE consideration, grouped under their most relevant SWMI, and their LSE decision and justification are recorded.

A summary of the supplementary information above is included in this section.

As part of the LSE determination, there has also been consideration of the combined national measures and Water body measures LSE screening to check for any contradictions (e.g. if a national measure has been screened out but an associated Water body measure remains screened in).

Where a national measure may have been screened out initially during the LSE process but Water body measure(s) aligned with it remain screened in for Appropriate Assessment, the national measure also now is taken through with that Water body measure or justification is provided in the text below as to why it is appropriate for this measure to remain screened out.

### 5.2.1 Pollution from waste water

The following measures relating to pollution from waste water remain screened in for LSE consideration following the initial high level pre-screening:

- six national measures – CYM18, WAL06, WAL10, WAL25, NEW01, WAL23
- five Water body measure types – WW1.1, WW1.2, WW1.4, WW1.5, WW2.0

National measures CYM18, WAL06, WAL10, WAL25, NEW01 and WAL23 all remain screened in at this LSE stage and will be taken through to Appropriate Assessment as the potential for LSE cannot be ruled out.

- CYM18 - Water companies develop and deliver catchment management options that improve water quality and deliver additional ecosystem services
- WAL06 - Deliver measures in AMP8 (Menai Strait and Bury Inlet SWPA's) to endeavour to achieve the Shellfish Water Protected Area objective. Plans are also in place to continue to gain a better understanding of improvements required to achieve Shellfish Water Protected Area objective in the wider hydrological catchments.
- WAL10 - The Water Industry will deliver a programme of investigations and improvements to sewage discharges (both continuous and intermittent) in order to support delivery of WFD Regulation 2017 and Protected Area objectives through AMP.
- WAL25 - Water Companies will deliver DWMPs (Drainage and Waste Water Management Plans)
- NEW01 - Investigate, identify and deliver a range of catchment measures to achieve and maintain the bathing water standard in all designated bathing waters.
- WAL23 - Water Companies will deliver a programme of investigations and improvements to deal with chemicals to support delivery of WFD Regulations 2017 and Protected Area objectives through AMP

There are clear environmental benefits associated with these measures; however, there is also potential for impact pathways to arise during implementation and in the long-term and the level of detail is not sufficient to rule out LSE on European sites either at the location of works/in proximity or that are hydrologically/functionally linked. The measures are therefore taken through to Appropriate Assessment.

Water body measure types WW1.2, WW1.4, WW1.5 and WW2.0 remain screened in at this LSE stage and will be taken through to Appropriate Assessment as the potential for LSE cannot be ruled out.

- WW1.2 - Deliver action(s) identified in the NEP / AMP to secure compliance
- WW1.4 - Deliver improved discharge quality/reduce spills from all intermittent point source discharges e.g. CSOs, emergency overflows etc.
- WW1.5 - National chemical measure(s) apply
- WW2.0 - Deliver action(s) identified in the NEP / AMP to restore SAC towards favourable condition

Whilst WW2.0 is specifically aimed at delivering actions to restore SAC water bodies towards favourable condition, impact pathways and LSE cannot be ruled out if work is within/in close proximity to or in a waterbody that is hydrologically/ functionally linked to European sites and their qualifying features, as a precaution these measures will be considered further in the context of additional mitigation/control as part of the Appropriate Assessment stage.

WW1.2, WW1.4 and WW2.0 directly align with national measure WAL10 (The Water Industry will deliver a programme of investigations and improvements to sewage discharges (both continuous and intermittent) in order to support delivery of WFD Regulation 2017 and Protected Area objectives through AMP), and WW1.5 aligns with WAL23 (*Water Companies will deliver a programme of investigations and improvements to deal with chemicals to support delivery of WFD Regulations 2017 and Protected Area objectives through AMP*). These national measures also remain screened in for further consideration at Appropriate Assessment.

Water body measure type WW1.1 is screened out at this LSE stage.

- WW1.1 - Where required review/amend permits to reduce impact of discharges

This relates to review and where appropriate amendment of permits to reduce impact of discharges. NRW Regulatory Guidance Series RGN 4 sets the standards for environmental protection with regard to environmental permitting. The permitting process in Wales requires that designated wildlife sites are considered. Environmental protection measures and conditions of the permit are imposed as required and specific conditions are included in a permit to avoid adverse effects on any European site, over and above those to ensure compliance with the Regulations. Where an application still threatens an unacceptable impact on such a site, the application would be refused. Enforcement would look to ensure conditions and protection measures are in place.

By its nature and through the regulatory controls already in place on the permitting process, WW1.1 would not create impact pathways to European sites or their qualifying features and there would be no LSE as a result of its inclusion in the RBMP.

### 5.2.2 Pollution from towns, cities and transport

The following measures relating to pollution from towns, cities and transport remain screened in for LSE consideration following the initial high level pre-screening:

- no national measures
- seven Water body measure types – TC1.2, TC1.3, TC1.5, TC1.6, TC1.9, TC1.11. TC1.12

All national measures relating to this SWMI were screened out at the pre-screening stage.

Water body measure types TC1.2, TC1.3, TC1.5, TC1.6 and TC1.11 remain screened in at this LSE stage and will be taken through to Appropriate Assessment as the potential for LSE cannot be ruled out.

- TC1.2 - Remediate contaminated land
- TC1.3 - Where appropriate remove/remediate sediment from watercourses and treat contaminated water
- TC1.5 - Improve the drainage Screen outfalls from the transport network and urban environment to reduce levels of contaminants

- TC1.6 - Maintain and improve sewerage drainage system to rectify misconnections and leaks
- TC1.11 - Remediation of landfill and extraction/treatment of leachate

These types of measure could feasibly result in impact pathways and LSE if work is within/in close proximity to or in a waterbody that is hydrologically/ functionally linked to European sites and their qualifying features. Therefore, as a precaution these measures will be considered further in the context of additional mitigation/control as part of the Appropriate Assessment stage.

Water body measure type TC1.9 and TC1.12 are both screened out at this LSE stage.

- TC1.9 - Review and where appropriate vary and/or enforce existing Discharge Permits.
- TC1.12 - National chemical measure(s) apply

Water body measure TC1.9 relates to the review and where appropriate variation and/or enforcement of existing Discharge Permits. TC1.9 looks to where appropriate vary existing permits (for overall environmental benefit) - or to enforcement of existing permits to ensure regulatory compliance. NRW Regulatory Guidance Series RGN 4 sets the standards for environmental protection with regard to environmental permitting. The permitting process in Wales requires that designated wildlife sites are considered. Environmental protection measures and conditions of the permit are informed by project level HRA and imposed as required. Specific conditions are included in a permit to avoid adverse effects on any European site, over and above those to ensure compliance with the Regulations. Where an application still threatens an unacceptable impact on such a site, the application would be refused. Enforcement would look to ensure conditions and protection measures are in place. By its nature and through the regulatory controls already in place on the permitting process, TC1.9 would not create impact pathways to European sites or their qualifying features and there would be no LSE as a result of its inclusion in the RBMP.

Water body measure type TC1.12 states that national chemical measure(s) should apply at aligned waterbodies; no direct deliverables are to be implemented as a result of this Water body measure type at these locations. The aligned national measure to this Water body measure type (i.e. the national measure that will therefore apply at these waterbodies) is CYM82 (*Control the release of chemicals, to the environment, at source i.e. production and use, through the implementation of domestic Legislation and International agreements*) which was screened out during the pre-screening stage as Cat A: General statements of policy/general aspirations. There is therefore nothing tangible for this Water body measure type that would result in an impact pathway or likely significant effect to European sites.

### 5.2.3 Physical modifications

The following measures relating to physical modifications remain screened in for LSE consideration following the initial high level pre-screening:

- seven national measures – CYM2, CYM4, CYM31, CYM50, WAL02, WAL17, WAL19
- twelve Water body measure types – PM1, PM7, PM12, PM6, PM8.1, PM8.2, PM9, PM10, PM4, PM5, PM2, PM3

National measures CYM2, CYM4, CYM31, CYM50, WAL02, WAL17 and WAL19 all remain screened in at this LSE stage and will be taken through to Appropriate Assessment as the potential for LSE cannot be ruled out.

- CYM2 - Deliver our statutory duties to maintain, improve and develop salmon, trout, freshwater and eel fisheries
- CYM4 - Deliver the strategic outcomes of the Climate Resilient Fisheries Strategy for the sustainable management of migratory and freshwater fisheries of Wales.
- CYM31 - National Environment Programme schemes to investigate and implement measures to resolve impacts caused by water storage reservoirs
- CYM50 - In waterbodies designated as heavily modified due to flood and coastal protection, mitigation for NRW owned assets and activities will be reviewed and delivered on a prioritised basis
- WAL02 - A programme to develop, support, promote and deliver appropriate river restoration options to deliver multiple benefits at a number of high priority river catchments identified under the integrated River Restoration Programme for Wales
- WAL17 - Support Wales to have a coastline that is sustainable and resilient to climate change. Plan for coastal adaptation in line with Shoreline Management Plan policy for coastal defence management. Enable the National Habitat Creation Programme to deliver compensatory intertidal habitat where required. Integrate, where appropriate, nature-based solutions into the delivery of coastal defence schemes
- Water Companies will address the impacts of water company assets on fish passage causing failure of WFD Regulations 2017 objectives in accordance with objectives in AMP. This will address structures that act as barriers to fish migration which are associated with other aspects of water company operations, such as trunk sewers and mains pipes located in river channels, and associated concrete sills and structures. In some cases, there may be uncertainty over asset ownership which will need to be resolved. Solutions may often be implemented through working in partnership with other sectors

There are clear environmental benefits associated with these measures; however, there is also potential for impact pathways to arise during work and in the long-term through implementation of these measures and as the level of detail is not sufficient to rule out LSE on any European sites at the location of works/in proximity or that are hydrologically/functionally linked, the measures are carried through to Appropriate Assessment.

Water body measure types PM1, PM7, PM6, PM8.1, PM8.2, PM9, PM10, PM5, PM4, PM2 and PM3 remain screened in at this LSE stage and will be taken through to Appropriate Assessment as the potential for LSE cannot be ruled out.

- PM1 - Mitigate impacts on fish migration caused by water storage impoundments
- PM7 - Resolve impacts caused by barriers to fish migration and natural continuity in river and tidal channels (e.g., dams, weirs, culverts, sluices, tidal gates)
- PM6 - Resolve impacts caused by hard / engineered protection of river and tidal channel banks (e.g., steel piling, concrete, gabions).
- PM8.1 - Resolve impacts caused by straightening and or re-alignment of river and tidal channels.
- PM8.2 - Resolve impacts caused by artificial modification of river and or tidal channel beds
- PM9 - Resolve impacts caused by hard / engineered out-of bank flood walls, embankments and high ground
- PM10 - Resolve impacts caused by operational water level management for land drainage or flood protection
- PM5 - Improve management of water storage impoundment shorelines
- PM4 - Mitigate impacts on river water temperature and dissolved oxygen downstream of water storage impoundments
- PM2 - Improve insufficient flow regime (baseline flow quantity or flow variability) downstream of water storage impoundments
- PM3 - Improve and or maintain sediment supply and transport downstream of water storage impoundments

As these all include on the ground deliverables there is potential for impact pathways to occur and as the level of detail is not sufficient to rule out LSE on any European sites at the location of works/in proximity or that are hydrologically/functionally linked, the measures are carried through to Appropriate Assessment.

All the Water body measures are aligned with screened in national measures.

Water body measure type PM12 is screened out at this LSE stage.

- PM12 - Resolve impacts of operational and maintenance activities in river and tidal channels managed for flood and coast protection

It seeks to make improvements to the way existing operational and maintenance activities in river and tidal channels managed for flood and coast protection are implemented, to reduce their environmental impact. No new activities are suggested and any changes would form part of ongoing operational good practice. Therefore, new impact pathways are not expected to arise as a result of this Water body measure type. This measure is therefore screened out at this stage.

### 5.2.4 Changes to natural flow and levels of water

The following measures relating to changes to natural flow and levels of water remain screened in for LSE consideration following the initial high level pre-screening:

- one national measure – CYM73
- two Water body measure types – FL1.0, NA1.3

National measure CYM73 remains screened in at this LSE stage and will be taken through to Appropriate Assessment as the potential for LSE cannot be ruled out.

- CYM73 - Support the delivery of the Welsh Government National Peatland Restoration Programme

Despite CYM73 being for the restoration and improvement of peatlands, there is potential for the activities relating to its implementation to have pathways for effects on certain features of European sites, even if they might be benefitting other features; this measure will therefore be considered further in the context of additional mitigation/control as part of the Appropriate Assessment stage.

Water body measure types FL1.0 and NA1.3 are screened out at this LSE stage. They are screened out as a result of more detailed consideration of the measure wording and their approach – full justification is provided in Annex 5, a summary is provided below.

Water body measure type FL1.0 relates to the review and where appropriate amendment of abstraction licenses. NRW Regulatory Guidance Series RGN 4 sets the standards for environmental protection with regard to environmental permitting. The permitting process in Wales requires that designated wildlife sites are considered. Environmental protection measures and conditions of the permit are informed by project level HRA and imposed as required. Specific conditions are included in a permit to avoid adverse effects on any European site, over and above those to ensure compliance with the Regulations. Where an application still threatens an unacceptable impact on such a site, the application would be refused. Enforcement would look to ensure conditions and protection measures are in place. By its nature and through the regulatory controls already in place on the permitting process, FL1.0 itself would not create impact pathways to European sites or their qualifying features and therefore no LSE would result as a result of its inclusion in the RBMP.

NA1.3 promotes the incorporation and implementation of nature based solutions in projects for increased ecosystem resilience - it does not relate to any specific on the ground deliverable. This is therefore a general good practice statement of aspiration/policy rather than an on the ground deliverable in isolation. There is therefore no potential for impact pathway to arise as a result of this measure as on its own it cannot lead to development or other change.

### 5.2.5 Non-native invasive species

The following measures relating to changes to non-native invasive species remain screened in for LSE consideration following the initial high level pre-screening:

- no national measures
- two Water body measure types – NN1.0, NN1.2

All national measures relating to this SWMI were screened out at the pre-screening stage.

Water body measure types NN1.0 and NN1.2 remain screened in at this LSE stage and will be taken through to Appropriate Assessment as the potential for LSE cannot be ruled out.

- NN1.0 - Reduce the extent and eradicate INNS using sustainable/ cost effective methods of management and control.
- NN1.2 - Restore habitats after control of INNS has taken place

Although the overall aim of these measures is environmental benefit, as the level of detail is not sufficient to rule out LSE on any European sites at the location of works/in proximity or that are hydrologically/functionally linked, as a precaution the measures are carried through to Appropriate Assessment for further consideration.

### 5.2.6 Pollution from rural areas

The following measures relating to changes to pollution from rural areas remain screened in for LSE consideration following the initial high level pre-screening:

- two national measures – CYM41, WAL05
- four Water body measure types – RA1.2, RA1.6, RA1.9, RA1.11

National measures CYM41 and WAL05 both remain screened in at this LSE stage and will be taken through to Appropriate Assessment as the potential for LSE cannot be ruled out.

- CYM41 - NRW delivers a prioritised programme of measures on the Welsh Government Woodland Estate to support delivery of WFD Regulations 2017 and Protected Area objectives
- WAL05 - At risk Drinking Water Protection Areas (DrWPAs) (and all upstream water bodies) have been taken forward as Safeguard Zones for funded Asset Management Plan (AMP) Investigations to assess the sources of the raw water failure and to identify viable catchment solutions. Where catchment solutions are found to be possible, and stakeholder agreement can be assured, improvement measures will be delivered through the AMP

CYM41 requires that NRW delivers a prioritised programme of measures on the Welsh Government Woodland Estate to support delivery of WFD Regulations 2017 and Protected Area objectives. This is a measure that has formed part of previous RBMP cycles. There remains uncertainty as to what the prioritised programme of measures are going forward into cycle 4; where these are to be/have been implemented; and how much of this programme has already been completed under previous cycles.

It may be appropriate for this national measure to be removed from the final plan PoM if it has been completed or if it will not be advanced in RBMP4; this however, still requires confirmation so at this stage the measure remains screened in for further consideration. Given uncertainty remains, this measure will be taken through for further consideration at the Appropriate Assessment stage.

Implementation of WAL05 will involve on the ground delivery and there is therefore potential for pathways for effects on features of European sites, and LSE cannot be

ruled out at this stage; this measure will therefore be considered further in the context of additional mitigation/control as part of the Appropriate Assessment stage.

Water body measure types RA1.2, RA1.6 and RA1.9 all remain screened in at this LSE stage and will be taken through to Appropriate Assessment as the potential for LSE cannot be ruled out.

- RA1.2 - Improve land management to ensure that all nutrient and fertiliser applications match soil and crop requirements and reduce soil erosion to minimise nutrient and sediment losses from land
- RA1.6 - Where required remove/remediate sediment from watercourses and treat contaminated water
- RA1.9 - Remediate polluted water and or soil/sediment where necessary

These measures could potentially create a direct or indirect impact pathway and therefore LSE to European sites and their qualifying feature, they are therefore taken through to Appropriate Assessment for further consideration.

Water body measure type RA1.2 aligns directly with national measure WAL34 (*Welsh Government and Natural Resources Wales and others will embed checks and balances and deliver a programme of incentives to drive improvements to diffuse pollution in order to support delivery of WFD Regulations 2017 and Protected Area objectives*) which was screened out at pre-screening as Cat A: General statements of policy/general aspirations. On review, the fact WAL34 was screened out but an aligned Water body measure remains screened in (RA1.2) is appropriate given the different aims/aspirations of the measures (national measure WAL34 being more of a general aspiration/policy statement and Water body measure type RA1.2 potentially leading to on the ground changes).

Water body measure types RA1.6 and RA1.9 both align with national measure WAL12 (*Ensure compliance with the Water Resources (Control of Agricultural Pollution) (Wales) Regulations 2021 in Wales including: nutrient management planning; sustainable fertiliser applications linked to the requirements of the crop; protection of water from pollution related to when, where and how fertilisers are spread; manure storage standards*). WAL12 was screened out at the pre-screening stage as Category A: General statements of policy/general aspirations as the measure requests compliance with the Water Resources (Control of Agricultural Pollution) (Wales) Regulations 2021 in Wales, rather than on the ground delivery of measures. On review, the fact the national measure (WAL12) was screened out but aligned Water body measures (RA1.6 and RA1.9) remain screened in at this LSE stage is appropriate given the different aims/aspirations of the measures (national measure WAL12 being more of a general aspiration/policy statement and Water body measure types RA1.6 and RA1.9 being delivered as on the ground activities). WAL12 therefore remains screened out despite the link to RA1.6 and RA1.9 and will not be considered further.

Water body measure type RA1.11 is screened out at this LSE stage.

- RA1.11 - National chemical measure(s) apply

It states that national chemical measure(s) should apply at aligned water bodies; no on the ground activities are to be implemented as a result of this Water body measure type at these locations. The aligned national measure to this Water body measure type (i.e. the national measure that will therefore apply at these water bodies) is CYM82 (*Control the release of chemicals, to the environment, at source i.e. production and use, through the implementation of domestic Legislation and International agreements*) which was screened out during the pre-screening stage as Cat A: General statements of policy/general aspirations. There is therefore nothing tangible for this Water body measure type that would result in an impact pathway or likely significant effect to European sites.

### 5.2.7 Pollution from abandoned mines

The following measures relating to changes to pollution from abandoned mines remain screened in for LSE consideration following the initial high level pre-screening:

- three national measures – CYM49, DE0014, WW0031
- two Water body measure types – AM1.0, AM1.1

National measures CYM49, DE0014 and WW031 all remain screened in at this LSE stage and will be taken through to Appropriate Assessment as the potential for LSE cannot be ruled out.

- CYM49 - Mining Remediation Authority work through the Wales Metal Mine Programme to deliver abandoned metal mine remediation
- DE0014 - Mine Remediation Authority minewater preventative and remediation programme
- WW031 - NRW work through the Wales Metal Mine programme to investigate the impacts of abandoned metal mines

There is potential for the activities associated with these measures to have pathways for effects on certain features of European sites either at the location of the works or if hydrologically linked and LSE cannot be ruled out. These measures are therefore taken through for further consideration at the Appropriate Assessment stage.

Water body measure types AM1.0 and AM1.1 both remain screened in at this LSE stage and will be taken through to Appropriate Assessment as the potential for LSE cannot be ruled out.

- AM1.0 - Control and remediate point and/or diffuse discharges from abandoned metal mines
- AM1.1 - Control and remediate point and/or diffuse discharges from abandoned coal mines

Both Water body measure types could potentially create impact pathways to European sites on the abandoned mine as well as those hydrologically and functionally linked as a result of direct impact (disturbance, fragmentation, damage) and/or indirect impact as a result of for example changes in flow/erosion or metal concentration in downstream habitats and the impact pathway that may create to sensitive /unique habitats and species. Therefore, LSE cannot be ruled out at this

stage and the measures remain screened in for further consideration at Appropriate Assessment.

### 5.2.8 All

The following measures relating to all SWMI remain screened in for LSE consideration following the initial high level pre-screening:

- three national measures – WAL03, WAL20, NEW04

WAL03 and NEW04 remains screened in at this LSE stage and will be taken through to Appropriate Assessment as the potential for LSE cannot be ruled out.

- WAL03 - NRW and its partners deliver improvements for water in 'Opportunity Catchments' using the Sustainable Management of Natural Resources (SMNR) principles
- NEW04 - Marine Nature Networks Programme delivering investigations and management actions within the MPA network

Measure WAL03 aims for collaborative working within catchments which can range from education, awareness raising through to influencing land management. The application of the SMNR principles and appropriate engagement should aim to avoid or reduce any impacts. As this measure is very broad however, there remains uncertainty regarding specifics of implementation and therefore of effects. This measure is therefore taken through for further consideration at the Appropriate Assessment stage.

Implementation of on the ground activities relating to the Marine Nature Networks Programme have potential for pathways for effects on certain features of European sites either at the location of the works or if hydrologically linked and LSE cannot be ruled out. This measure is therefore pulled through for further consideration at the Appropriate Assessment stage.

National measure WAL20 is screened out at this LSE stage.

- WAL20 - Deliver actions within the annual Marine Protected Area Network Management Action Plan linked to the MPA Network Management Frameworks for Wales. These actions include reviewing impacts of unregulated activities, improving biosecurity for marine invasive species and improving condition of features within European Marine sites

It is screened out as a result of more detailed consideration of the measure wording and its delivery mechanism – full justification is provided in Annex 4, a summary is provided below.

WAL20 seeks to ensure actions within the Marine Protected Area Network Management Action Plan linked to the MPA Network Management Frameworks for Wales are delivered; it does not propose their delivery. These plans are subject to their own SEA and HRA process and their actions would be likely to proceed irrespective of whether this subject plan is adopted with or without reference to it. By

ensuring delivery of these actions, WAL20 seeks to support the protection and safeguarding of the Marine Protected Areas Network.

### 5.2.9 "Other" (measures that do not fit into the SWMI categories.)

The following measures that do not fit into the SWMI categories remain screened in for LSE consideration following the initial high level pre-screening:

- one Water body measure type – OT1.2 listed under "other pressures" and not aligned to a SWMI

Water body measure type OT1.2 remains screened in at this LSE stage and will be taken through to Appropriate Assessment as the potential for LSE cannot be ruled out.

- OT1.2 - Implement relevant NASCO Conservation Commitments and the Salmon and Sea trout Plan of Action measures ("other pressures")

Water body measure type OT1.2 is not aligned to a SWMI category, however, it can be linked to national measure CYM4 (*Deliver the strategic outcomes of the Climate Resilient Fisheries Strategy for the sustainable management of migratory and freshwater fisheries of Wales*).

OT1.2 may result in on the ground deliverables to implement changes where poor salmon recruitment has been identified as a result of "natural" pressures (not from physical barriers to migration). It is therefore not possible to rule out impact pathways or LSE for European sites on/in proximity to waterbodies where works are being undertaken or for functionally/hydrologically linked European sites and their qualifying features.

## 5.3 Test of Likely Significant Effect – England

The Environment Agency undertook a LSE screening assessment of the remaining 120 English Detailed action types that remained screened in after the initial high-level pre-screening. All remaining Detailed action types were screened to look for potential pathways and significant effects.

Where there is any uncertainty (e.g. measures are still in development, lack sufficient information to fully consider, spatial data required to fully assess etc.), measures are also taken through to Appropriate Assessment.

Annex 6 sets out the LSE outcomes for the English Detailed action types that remained screened in after the initial pre-screening.

A total of 25 English Detailed action types have been screened out at this LSE stage by the Environment Agency. The actions screened out at this stage are listed below, with justification provided in Annex 6:

- WQA04.04 - Increase maintenance of sewerage drainage system
- WQA05.01 - Amend permit limit at sewage treatment works

- WQA05.02 - Improve Sewage Treatment Works to meet an amended permit limit
- WQA05.03 - Improve Sewage Treatment Works (catchment permitting approach)
- WQA05.05 - Improve conceptual understanding of GW and ensure permits meet prevent and limit requirements
- WQA06.02 - Secure any necessary upgrades to existing STWs through the regulatory cycle
- WQA06.03 - Review/amend permits to reduce impact of permitted private small domestic sewage discharges
- WQA06.04 - Ensure septic tanks are compliant with regulatory requirements, including general binding rules
- WQA07.01 - Review and, if required, amend permits to reduce environmental impact of aquaculture discharges
- WQA07.02 - Review/amend permits to reduce environmental impact of trade/industry discharge & GW activities
- WQA10.01 - Ensure safe storage of pollutants (slurry, silage, fuel oils, pesticides, sludge, materials to land)
- WQA10.02 - Voluntary substitute (or withdraw) polluting chemicals
- WQA11.01 - Develop and implement Nutrient Management Plan to ensure applied nutrients do not exceed need
- WQA11.02- Ensure nutrient applications are planned and applied to not exceed forestry and soil needs
- WQA11.03 - Reduce the substances of concern impact of spreading sludge or materials to land
- WQA11.04 - Improve chemical product application and disposal (e.g. pesticides, biocides, veterinary medicines)
- WQA19.01 - Rectify sewer misconnections to the surface water system
- WQA22.01- Reduction of Oil and fuel spills
- WQA22.02 - Reduce plastic pollution
- WQA32.01 - Eradicate new invasions (when practicable)
- WQA33.01 - Eradicate selected high risk species
- WQA34.02 - Reduce the extent of invasive non-native species
- WQA34.03 - Eradicate invasive non-native species at selected SSSIs and European Nature sites
- WQA34.04 – Investigate sustainable and cost-effective methods for managing established invasions of species
- WQA34.05 - Restore habitats after control of an invasive non-native species

96 English Detailed action types remain screened in for further consideration at Appropriate Assessment.

### 5.4 Conclusions of Test of likely significant effects (alone)

A total of 22 Welsh national measures, 35 Welsh Water body measure types and 121 English action types were considered as part of the Test of Likely Significant Effects as outlined above and as presented in Annex 4, 5 and 6.

Following this Test of Likely Significant Effect, a further 1 Welsh national measure (WAL20), 7 Welsh Water body measure types (RA1.11, TC1.9, TC1.12, WW1.1, PM12, FL1.0 and NA1.3) and 25 English action types (WQA04.04, WQA05.01 , WQA05.02, WQA05.03, WQA05.05, WQA06.02, WQA06.03, WQA06.04, WQA07.01, WQA07.02, WQA10.01, WQA10.02, WQA11.01, WQA11.02, WQA11.03, WQA11.04, WQA19.01, WQA22.01, WQA22.02, WQA32.01, WQA33.01, WQA34.02, WQA34.03, WQA34.04, WQA34.05) have been screened out, leaving 21 Welsh national measures, 28 Welsh Water body measure types and 96 English action types to be taken forward to Appropriate Assessment.

The Welsh measures that remain screened in for Appropriate Assessment can be broken down by SWMI as below in Table 6. As for Table 5, any Welsh Water body measure types remaining screened in that do not align with the SWMI headers are presented under “other”.

The 96 English action types progressing to Appropriate Assessment are not grouped by SWMI so are just listed as one entry below.

**Table 6 LSE summary – measures remaining screened in for AA**

| SWMI | Welsh National measures for Appropriate Assessment | Welsh Water body measure types for Appropriate Assessment |
|---|---|---|
| Pollution from waste water | CYM18, WAL06, WAL10, WAL25, NEW01, WAL23 | WW1.2, WW1.4, WW1.5, WW2.0 |
| Pollution from towns, cities and transport | - | TC1.2, TC1.3, TC1.5, TC1.6, TC1.11 |
| Physical modifications | CYM2, CYM4, CYM31, CYM50, WAL02, WAL17, WAL19 | PM1, PM7, PM6, PM8.1, PM8.2, PM9, PM10, PM5, PM4, PM2, PM3 |
| Changes to natural flow and levels of water | CYM73 | - |
| Non-native invasive species | - | NN1.0, NN1.2 |
| Pollution from rural areas | CYM41, WAL05 | RA1.2, RA1.6, RA1.9 |
| Pollution from abandoned mines | CYM49, DE0014, WW0031 | AM1.0, AM1.1 |
| All | NEW04 | - |

| SWMI | Welsh National measures for Appropriate Assessment | Welsh Water body measure types for Appropriate Assessment |
|---|---|---|
| "Other" | Not relevant for national measures | OT1.2<br>listed under "other pressures" and not aligned to a SWMI |
| *Total* | *21* | *28* |

**English action types for Appropriate Assessment** ***(not currently grouped by SWMI)***

| |
|---|
| WQA03.01, WQA03.02, WQA04.03, WQA04.01, WQA04.02, WQA04.03, WQA04.05, WQA05.04, WQA05.06, WQA06.01, WQA08.02, WQA08.03, WQA08.04, WQA09.01, WQA09.02, WQA12.02, WQA12.03, WQA12.04, WQA12.05, WQA13.01, WQA13.02, WQA13.03, WQA14.01, WQA15.01, WQA15.02, WQA16.01, WQA16.02, WQA17.01, WQA17.02, WQA18.01, WQA18.02, WQA18.03, WQA18.04, WQA20.01, WQA21.01, WQA23.01, WQA23.02, WQA24.03, WQA25.01, WQA25.02, WQA25.03, WQA25.04, WQA25.05, WQA25.07, WQA25.09, WQA26.01, WQA26.02, WQA26.03, WQA26.04, WQA26.05, WQA27.03, WQA27.04, WQA27.05, WQA27.06, WQA27.07, WQA27.08, WQA27.09, WQA27.10, WQA27.11, WQA27.12, WQA28.01, WQA28.02, WQA28.03, WQA28.04, WQA28.05, WQA28.06, WQA28.07, WQA28.08, WQA28.09, WQA28.10, WQA28.11, WQA28.12, WQA29.01, WQA29.02, WQA29.03, WQA29.04, WQA29.05, WQA29.06, WQA29.07, WQA29.08, WQA29.09, WQA29.10, WQA29.11, WQA29.12, WQA29.13, WQA29.14, WQA29.15, WQA30.02, WQA30.03, WQA31.01, WQA31.02, WQA31.03, WQA31.04, WQA31.05, WQA31.06, WQA34.07, WQA36.01 |
| TOTAL: 96 |

Welsh national measures and Welsh Water body measure types remaining screened in for Appropriate Assessment all involve an element of on the ground delivery that is not entirely delivered or controlled by another plan or programme. Where any aligned national measures and Water body measure types differ in relation to their LSE screening; justification has been provided in the text above.

There is considered to be potential for impact pathways to arise as a result of these Welsh national measures, Welsh Water body measure types and English Detailed action types. At this stage as there is insufficient information to rule out potential for LSE arising from these pathways, a precautionary approach has been taken to allow for further consideration of the measures in the context of additional mitigation/control through Appropriate Assessment.

As per NRW OGN 200 guidance, no in-combination consideration of LSE is required at this stage:

- Potential for LSE has been identified for certain measures, in this situation, the measures will need to be subject to an appropriate assessment on their own, i.e. without taking into consideration the effects of any other plans or projects. The remaining 21 Welsh national measures, 28 Welsh Water body

measure types and 96 English action types following test of LSE are therefore considered further in Section 6 – Appropriate Assessment.

- Some measures have been screened out fully at completion of this LSE stage. By the nature of our precautionary approach to LSE in this plan, these are measures where it has been determined as not being likely to have any effect at all (significant or non-significant) on any European sites (for example because there is no impact pathway or where they will be taken forward by other plans that are also subject to their own HRA etc.). In this situation, by definition, the possibility of significant effects in combination with other plans or projects cannot arise. Therefore, the requirements of the Habitats Regulations have been met, and no further assessment is required.

# 6. Appropriate Assessment

## 6.1 Approach to the appropriate assessment

The likelihood and significance of effects of the plan have been identified in the earlier parts of this HRA. The Appropriate Assessment (AA) is the consideration of whether adverse effects on site integrity will occur for the measures that have not been screened out at the Test of Likely Significant Effect stage. We (NRW and EA) have taken these measures forward into the AA because of uncertainty over the scale/location/magnitude of significant effects that we could not conclude were not likely to happen.

Each of the screened in Welsh national measures and Welsh Water body measure types are likely to result in physical works and whilst the long-term aim is environmental improvement, the HRA needs to establish that there are no unintended consequences of the implementation of the RBMP on European sites. For example, weir removal aimed at improving fish passage, can result in mobilisation of suspended solids, affect the hydrogeomorphology of a channel, disturb species such as otters or bats, and so impact on other features of European sites.

The Environment Agency screened in English Detailed Action types that may result in physical works impacting on species and habitats or have impacts on water flows, quantity and/or quality that may impact on features of European sites.

The RBMP's are overarching plans covering a very wide number of lower tier environmental plans and programmes, all aiming to improve the water environment. Because of the high level nature of the plans there are inherent difficulties and uncertainties in carrying out an AA at this scale. However, adverse effects on the integrity of European sites must be assessed as far as possible using the available detail associated with the screened in measures. This AA must then inform development of those measures, with lower tier plan, programme and project level HRA increasing in specificity in subsequent stages.

The approach to AA of the Welsh national measures and Welsh Water body measure types differs due to level of spatial data available to support the assessment.

For national measures there are real and credible pathways for effect that could occur, but at this level of plan we do not have the detail available to say where, how or when effects might occur. There is therefore insufficient detail available to predict the likelihood and significance of effects in a meaningful and robust way. As a result, we are outlining high-level avoidance and mitigation measures that will give us confidence that any adverse effects on any European sites will be avoided or adequately mitigated. The mitigation is not intended to be comprehensive, and it is very likely that there will be other impacts and therefore other mitigation that will be required which it is not possible to identify at plan level because the nature, timing, duration, scale or location is not yet known. This detail is deferred to the HRA of lower tier plans, programmes and projects.

The plans, programmes and projects that will be developed under these Welsh national measures will have greater detail and flexibility in terms of locations, timing and options appraisal that takes into account the sensitivities of European sites and features. Therefore, where appropriate, we seek to defer the HRA to lower tier plans and projects, where a greater level of detail will be available to inform the HRA, mitigation and compensation. We have shown throughout this assessment that the national scale of the measures lack detail of approaches and spatial extents or locations.

Further information regarding the Welsh national measures AA is provided in Section 6.2.

For the Welsh Water body measure types, we have been able to access spatial information which shows where each Water body measure type will be applied at a water body and therefore a greater level of detail on the pathways for effects that could potentially occur. Whilst this does not provide specific location of works or provide detail regarding the type of works or work programme etc., it has allowed for a slightly more in-depth review of which European sites may be affected and the qualifying features for which adverse effect could occur. There is still, however a large degree of uncertainty on exactly where, how or when effects might occur. The assessment is therefore still reliant on an outline of high-level avoidance and mitigation measures that will give us confidence that any adverse effects on any European sites will be avoided or adequately mitigated. Where appropriate, we seek to defer the HRA to lower tier plans and projects, where a greater level of detail will be available to inform the HRA, mitigation and compensation. Further information regarding the Welsh Water body measures AA is provided in Section 6.3.

For the English Detailed action types taken though to AA the Environment Agency has further considered the pathways for effect and looked to see whether there are generic mitigation measures that would control any impacts identified. Where appropriate, we seek to defer the HRA to lower tier plans and projects, where a greater level of detail will be available to inform the HRA, mitigation and compensation. Further information regarding the English Detailed action types AA is provided in Section 6.4.

The criteria for any measures that must be met to defer down are:

- The higher-level plan assessment cannot reasonably predict any effect on a European site in a meaningful way; whereas
- The lower tier plan or project level, which will identify more precisely the nature, timing, duration, scale or location of development, and thus its potential effects, will have the necessary flexibility over the exact nature, timing, duration, scale and location of the proposal to enable an adverse effect on site integrity to be avoided; and
- The HRA of the lower tier plan or project is required as a matter of law or Government policy.

Where NRW is developing and delivering programmes and projects they must be delivered following our Operational Guidance Notes. Those of relevance are:

- OGN 84: Screening internal plans, programmes and strategies for SEA
- OGN 85: Undertaking SEA of Internal plans, programmes and strategies
- OGN 86: Environmental screening of internal projects
- OGN 87: Undertaking environmental assessment of internal projects
- OGN 200: Habitats Regulations Assessment approach and technical guidance
- OGN 72: Guidance for assessing activities and projects for compliance with the WFD

The Environment Agency utilise internal policy and guidance (Operational Instructions)

The draft RBMP does not allocate or authorise specific works, locations, designs or implementation methods. The plan retains sufficient flexibility to avoid, modify or not proceed with measures where subsequent HRA concludes adverse effects on site integrity cannot be ruled out.

### 6.2 Appropriate Assessment of National Measures (Wales)

The 21 national measures remaining screened in for Appropriate Assessment are:

- CYM18 - Water companies develop and deliver catchment management options that improve water quality and deliver additional ecosystem services
- WAL03 - NRW and its partners deliver improvements for water in ‘Opportunity Catchments’ using the Sustainable Management of Natural Resources (SMNR) principles.
- WAL06 - Deliver measures in AMP8 (Menai Strait and Bury Inlet SWPA's) to endeavour to achieve the Shellfish Water Protected Area objective. Plans are also in place to continue to gain a better understanding of improvements required to achieve Shellfish Water Protected Area objective in the wider hydrological catchments.

- WAL10 - The Water Industry will deliver a programme of investigations and improvements to sewage discharges (both continuous and intermittent) in order to support delivery of WFD Regulation 2017 and Protected Area objectives through AMP.
- WAL25 - Water Companies will deliver DWMPs (Drainage and Waste Water Management Plans)
- CYM2 - Deliver our statutory duties to maintain, improve and develop salmon, trout, freshwater and eel fisheries
- CYM4 - Deliver the strategic outcomes of the Climate Resilient Fisheries Strategy for the sustainable management of migratory and freshwater fisheries of Wales.
- CYM31 - National Environment Programme schemes to investigate and implement measures to resolve impacts caused by water storage reservoirs
- CYM50 - In waterbodies designated as heavily modified due to flood and coastal protection, mitigation for NRW owned assets and activities will be reviewed and delivered on a prioritised basis.
- WAL02 - A programme to develop, support, promote and deliver appropriate river restoration options to deliver multiple benefits at a number of high-priority river catchments identified under the integrated River Restoration Programme for Wales
- WAL17 - Support Wales to have a coastline that is sustainable and resilient to climate change. Plan for coastal adaptation in line with Shoreline Management Plan policy for coastal defence management. Enable the National Habitat Creation Programme to deliver compensatory intertidal habitat where required. Integrate, where appropriate, nature-based solutions into the delivery of coastal defence schemes.
- WAL19 - Water Companies will address the impacts of water company assets on fish passage causing failure of WFD Regulations 2017 objectives in accordance with objectives in AMP. This will address structures that act as barriers to fish migration which are associated with other aspects of water company operations, such as trunk sewers and mains pipes located in river channels, and associated concrete sills and structures. In some cases, there may be uncertainty over asset ownership which will need to be resolved. Solutions may often be implemented through working in partnership with other sectors.
- CYM73 - Support the delivery of the Welsh Government National Peatland Restoration Programme.
- CYM41 - NRW delivers a prioritised programme of measures on the Welsh Government Woodland Estate to support delivery of WFD Regulations 2017 and Protected Area objectives
- CYM49 - Mining Remediation Authority work through the Wales Metal Mine Programme to deliver abandoned metal mine remediation.
- DE0014 - Mine Remediation Authority minewater preventative and remediation programme.
- WW0031 - NRW work through the Wales Metal Mine programme to investigate the impacts of abandoned metal mines
- NEW01 - Investigate, identify and deliver a range of catchment measures to achieve and maintain the bathing water standard in all designated bathing waters.

- WAL23 - Water Companies will deliver a programme of investigations and improvements to deal with chemicals to support delivery of WFD Regulations 2017 and Protected Area objectives through AMP.
- WAL05 - At risk Drinking Water Protection Areas (DrWPAs) (and all upstream water bodies) have been taken forward as Safeguard Zones for funded Asset Management Plan (AMP) Investigations to assess the sources of the raw water failure and to identify viable catchment solutions. Where catchment solutions are found to be possible, and stakeholder agreement can be assured, improvement measures will be delivered through the AMP.
- NEW04 - Marine Nature Networks Programme delivering investigations and management actions within the MPA network

A review of potential impact pathways and appropriate high-level mitigation to avoid or reduce any possible impacts associated with the development and delivery of the screened in national measures is provided in Annex 9 and considered further in Section 6.5, grouped by SWMI.

This generic mitigation outlined in Annex 9 and considered in Section 6.5 provides confidence that for these national measures, lower tier plans, programmes and projects can be developed and delivered without causing an adverse effect on site integrity for any European sites. Established regulatory, permitting and consenting mechanisms provide appropriate safeguards to ensure that impacts on European sites are assessed and managed before implementation.

It is possible that under CYM4, CYM73 and WAL02, the fisheries, peatland and river restoration programmes, our partners may be delivering projects under grants from NRW. A condition of these grants is that our partners must ensure all relevant assents and consents are in place when they deliver the work, this would include a HRA.

Any proponent of projects such as NRW, EA, Water Companies, MRA etc, are required by UK law to complete a HRA when undertaking operations that could have pathways for effects on European sites. Or in the case of NRW, Environment Agency or Local Authorities, when determining applications made by external parties for any form of authorisation to undertake projects with the potential to affect European sites.

We are therefore confident that the criteria for deferring down the HRA to a lower tier are met for all national measures.

### 6.3 Appropriate Assessment of Water body Measures (Wales)

For the AA, only those Welsh Water body measure types that are of relevance to the River Dee RBD are considered.

Of the 28 Welsh waterbody measure types that were taken forward into AA, 13 have not been assigned to water bodies within the Dee RBD (RA1.6, RA1.9, TC1.2, TC1.3, TC1.5, TC1.11, WW1.2, PM4, PM1, PM5, NN1.0, NN1.2 and OT1.2).

The 15 Welsh Water body measure types remaining screened in for AA that are of relevance to the Dee RBMP are listed in Table 6 below together with information

regarding the number of water bodies each Water body measure type will be implemented in as part of the cycle 4 RBMP in the Dee RBD (together with number of associated water bodies at a national scale for context).

**Table 7. Welsh Water body measure types remaining screened in for Appropriate Assessment that will be implemented within the Dee RBD**

| **Water body measure type ID** | **Water body measure type description** | **Number of associated water bodies in Dee RBD (Wales)** | ***Number of associated water bodies nationally (Wales) (for context)*** |
|---|---|---|---|
| RA1.2 | Improve land management to ensure that all nutrient and fertiliser applications match soil and crop requirements and reduce soil erosion to minimise nutrient and sediment losses from land. | 20 | *194* |
| AM1.0 | Control and remediate point and/or diffuse discharges from abandoned metal mines | 6 | *59* |
| AM1.1 | Control and remediate point and/or diffuse discharges from abandoned coal mines | 1 | *6* |
| TC1.6 | Maintain and improve sewerage drainage system to rectify misconnections and leaks. | 1 | *23* |
| WW1.4 | Deliver improved discharge quality/reduce spills from all intermittent point source discharges e.g. CSOs, emergency overflows etc. | 3 | *19* |
| WW1.5 | National chemical measure(s) apply | 1 | *23* |
| WW2.0 | Deliver action(s) identified in the NEP / AMP to restore SAC towards favourable condition | 4 | *25* |
| PM7 | Resolve impacts caused by barriers to fish migration and natural continuity in river and tidal channels (e.g., dams, weirs, culverts, sluices, tidal gates). | 2 | *70* |
| PM6 | Resolve impacts caused by hard / engineered protection of river and tidal channel banks (e.g., steel piling, concrete, gabions). | 1 | *13* |

| Water body measure type ID | Water body measure type description | Number of associated water bodies in Dee RBD (Wales) | *Number of associated water bodies nationally (Wales) (for context)* |
|---|---|---|---|
| PM8.1 | Resolve impacts caused by straightening and or re-alignment of river and tidal channels. | 1 | *15* |
| PM8.2 | Resolve impacts caused by artificial modification of river and or tidal channel beds. | 1 | *16* |
| PM9 | Resolve impacts caused by hard / engineered out-of bank flood walls, embankments and high ground | 1 | *13* |
| PM10 | Resolve impacts caused by operational water level management for land drainage or flood protection | 2 | *8* |
| PM2 | Improve insufficient flow regime (baseline flow quantity or flow variability) downstream of water storage impoundments | 8 | *24* |
| PM3 | Improve and or maintain sediment supply and transport downstream of water storage impoundments | 8 | *35* |

Generic mitigation outlined in Annex 9 and considered in Section 6.5 provides confidence that for these Water body measure types, lower tier plans, programmes and projects can be developed and delivered without causing an adverse effect on site integrity for any European sites. Established regulatory, permitting and consenting mechanisms provide appropriate safeguards to ensure that impacts on European sites are assessed and managed before implementation.

We are therefore confident that the criteria for deferring down the HRA to a lower tier are met for all Welsh Water body measure types.

Supplementary information is provided in Annex 7 which outlines the consideration that has been given for each Welsh Water body measure type relating to spatial spread within the RBD, types of European sites and interest features that these types of measure may result in impact pathways to. Where specific impact pathways have been identified and/or mitigation requirements considered likely, these have been added to the generic mitigation etc. for the relevant SWMI (see Annex 9).

## 6.1 Appropriate Assessment of Detailed Action Types (England)

For the AA, only those English Detailed action types that are of relevance to the River Dee RBD are considered.

Of the 96 English Detailed action types that were taken forward nationally into AA, 80 are not relevant to the Dee RBMP as they will not be implemented at water bodies within this RBD.

The 16 English Detailed action types remaining screened in for AA that are of relevance to the Dee RBMP are listed in Table 7 below together with information regarding the number of waterbodies each Detailed Action type will be implemented in as part of the cycle 4 RBMP in the English Dee.

**Table 8. English Detailed action types remaining screened in for Appropriate Assessment that will be implemented within the Dee RBD**

| English action type ID | Detailed Action type description | Number of associated waterbodies in Dee RBD (England) |
|---|---|---|
| WQA03.01 | Review and where appropriate vary and/or enforce existing Discharge Permits (including STW's) | 1 |
| WQA03.02 | Review and where appropriate vary and/or enforce existing Abstraction Licence | 1 |
| WQA12.03 | Improve farmyard infrastructure measures (feed, housing, yard cleaning/manure) to reduce pollution | 7 |
| WQA12.04 | Improve field management and field infrastructure measures to reduce pollution from livestock | 6 |
| WQA13.02 | Improve land management to prevent soil erosion and to reduce pollutant loss from the land | 2 |
| WQA21.01 | Mitigate drainage outfalls from the urban environment to reduce levels of contaminants | 2 |
| WQA25.07 | Cap Licence to prevent risk of deterioration | 1 |
| WQA27.03 | Remove structures | 2 |
| WQA27.04 | Partial removal of structures | 2 |
| WQA27.05 | Modify structures (not technical fish/eel passes) | 3 |
| WQA27.06 | Remove bank and/or bed reinforcements or replace with more natural options | 4 |
| WQA28.06 | Mechanisms to improve floodplain connectivity | 2 |
| WQA29.01 | Prevent or control the distribution of contaminated sediments | 3 |
| WQA29.02 | Sustainable sediment management | 1 |
| WQA29.08 | Protection of existing natural/semi-natural vegetation during operational or maintenance activities | 3 |
| WQA31.02 | Manage habitat/features sensitively | 3 |

Annex 8 sets out the Environment Agency's Appropriate Assessment of the Detailed actions proposed for the English Dee water bodies and also includes generic

mitigation (see also Section 6.6) which provides confidence that lower tier plans, programmes and projects can be developed and delivered without causing an adverse effect on site integrity for any European sites. Established regulatory, permitting and consenting mechanisms provide appropriate safeguards to ensure that impacts on European sites are assessed and managed before implementation.

We are therefore confident that the criteria for deferring down the HRA to a lower tier are met for all water body measure types.

## 6.2 Avoidance and Mitigation of Impacts – Welsh Dee

The European Court judgement in the case of People Over Wind (People Over Wind & Sweetman v. Coillte, 2018) has clarified that it is not appropriate at the screening stage to take account of mitigation measures intended to avoid or reduce the harmful effects of a plan or project upon a European site, and such mitigation measures should, instead, be taken into account as part of an appropriate assessment.

There is a legislative requirement for HRA to be undertaken for any plans, strategies or projects that could have pathways for effects on European sites. This is required by NRW, EA, water companies, MRA etc as competent authorities undertaking works on or near sites, or by NRW (or other consenting authorities), permitting or consenting strategies or projects that take place on or near a European site.

Annex 9 outlines mitigatory approaches relevant to those Welsh measures scoped into the appropriate assessment. The measures have been grouped by SWMI as these are generally grouped into similar activities - to prevent duplication and repetition.

These are not intended to be comprehensive, and it is very likely that there will be other impacts and therefore other mitigation that will be required which it is not possible to identify at plan level because the nature, timing, duration, scale or location is not yet known. However, they should be considered when preparing lower tier programmes and projects.

The mitigatory approaches outlined in Annex 9 have been considered for each SWMI, with a summary of key findings outlined in Sections 6.5.1-6.5.8 below.

### 6.2.1 Pollution from waste water

Measures remaining screened in at this AA stage for the Dee RBD under this SWMI are as follows:

- National measures (Wales) – CYM18, WAL06, WAL10, WAL25, WAL23, NEW01
- Water body measure types (Wales) - WW1.4, WW1.5, WW2.0

As a group of measures these relate to investigation, identification and delivery of a range of measures to alleviate the impact of pollution from waste water – in particular on Shellfish Water Protected Areas and designated bathing waters and those associated with Protected Area objectives. This includes WW2.0 which is specifically aimed at delivering actions identified in the NEP / AMP to restore certain

SACs towards favourable condition. Overall, the aims are beneficial to European sites; however, certain on the ground activities will be required in order to implement the measures and therefore adverse impact pathways are possible.

Annex 9, Table A provides an outline of potential impact pathways and generic mitigation that should be applied for lower tier plans, programmes and projects associated with these measures against the identified impact pathway types for measures under this SWMI.

There is confidence that for these measures, lower tier plans, programmes and projects can be developed and delivered implementing the generic mitigation above (plus any other specific requirements identified at project level for that location) without causing an adverse effect on site integrity for any European sites, or alternatives can be sought.

There is opportunity for direct long-term benefit to European sites through measures in this SWMI that should be maximised wherever possible.

### 6.2.2 Pollution from towns, cities and transport

Measures remaining screened in at this AA stage for the Dee RBD under this SWMI are as follows:

- Water body measure types (Wales) –TC1.6

All national measures for this SWMI were screened out at pre-screening as general statements of policy/general aspirations.

The group of Water body measure types aligned with this SWMI relate to on the ground delivery of improvement measures associated with contamination arising from towns, cities and transport such as maintaining and improving the sewerage drainage system to rectify misconnections and leaks. Overall, these measures will be beneficial to water bodies and a range of water dependent European sites and works are likely to be localised. However, certain on the ground activities will be required in order to implement the measures and therefore adverse impact pathways are possible.

Annex 9, Table B provides an outline of potential impact pathways and generic mitigation that should be applied for lower tier plans, programmes and projects associated with these measures against the identified impact pathway types for measures under this SWMI.

There is confidence that for these measures, lower tier plans, programmes and projects can be developed and delivered implementing the generic mitigation outlined (plus any other specific requirements identified at project level for that location) without causing an adverse effect on site integrity for any European sites, or project alternatives can be sought.

### 6.2.3 Physical modifications

Measures remaining screened in at this AA stage for the Dee RBD under this SWMI are as follows:

- National measures (Wales) – CYM2, CYM4, CYM31, CYM50, WAL02, WAL17, WAL19
- Water body measure types (Wales) - PM7, PM6, PM8.1, PM8.2, PM9, PM10, PM2, PM3

As a group of measures these relate to works associated with fisheries, remediation for existing physical modifications (including but not exclusively those impeding fish movement and natural continuity in river and tidal channels) and habitat restoration. The type of physical modifications where impacts are to be resolved include dams, weirs, culverts, sluices, tidal gates, hard / engineered protection of river and tidal channel banks (e.g., steel piling, concrete, gabions), straightening and or re-alignment of river and tidal channels, artificial modification of river and or tidal channel beds, hard / engineered out-of bank flood walls, embankments and high ground. The measures also look to resolve impacts associated with operational water level management for land drainage or flood protection and insufficient flow regime (baseline flow quantity or flow variability) downstream of water storage impoundments as well as improving/maintaining sediment supply and transport downstream of water storage impoundments. These measures could be disruptive during works and may create change to river hydromorphological processes; however, the overall aim is benefit to the river environment and associated species.

Annex 9, Table C provides an outline of potential impact pathways and generic mitigation that should be applied for lower tier plans, programmes and projects associated with these measures against the identified impact pathway types for measures under this SWMI.

There is confidence that for these measures, lower tier plans, programmes and projects can be developed and delivered implementing the generic mitigation outlined (plus any other specific requirements identified at project level for that location) without causing an adverse effect on site integrity for any European sites, or project alternatives can be sought.

### 6.2.4 Changes to natural flow and levels of water

Measures remaining screened in at this AA stage for the Dee RBD under this SWMI are as follows:

- National measures (Wales) - CYM73

The only remaining measure in this SWMI relates to national peatland restoration, with works relating to peat erosion (reprofiling and revegetation etc.), drainage (ditch blocking etc.), sustainable management of peat (mowing/grazing regime modification, low contour bunding etc.), action for lowland peatlands (addressing major issues which hamper ecosystem recovery and achievement of sustainable management including scrub cover, adverse hydrological/hydrochemical regimes, access, security for grazing etc.), afforested peat (peatland restoration at priority locations etc.).

Annex 9, Table D provides an outline of potential impact pathways and generic mitigation that should be applied for lower tier plans, programmes and projects

associated with these measures against the identified impact pathway types for measures under this SWMI.

There is confidence that for this measure, lower tier plans, programmes and projects can be developed and delivered implementing the generic mitigation outlined (plus any other specific requirements identified at project level for that location) without causing an adverse effect on site integrity for any European sites, or project alternatives can be sought.

### 6.2.5 Non-native invasive species

Measures remaining screened in at this AA stage for the Dee RBD under this SWMI are as follows:

- Water body measure types (Wales) – Not assigned to any water bodies in the Dee RBD.

### 6.2.6 Pollution from rural areas

Measures remaining screened in at this AA stage are as follows:

- National measures (Wales) – CYM41, WAL05
- Water body measure types (Wales) – RA1.2

This group of measures include land management practices, and a programme of measures to be delivered by NRW on the Welsh Government Woodland Estate to support delivery of WFD Regulations 2017 and Protected Area objectives.

Annex 9, Table F provides an outline of potential impact pathways and generic mitigation that should be applied for lower tier plans, programmes and projects associated with these measures against the identified impact pathway types for measures under this SWMI.

There is confidence that for these measures, lower tier plans, programmes and projects can be developed and delivered implementing the generic mitigation outlined (plus any other specific requirements identified at project level for that location) without causing an adverse effect on site integrity for any European sites, or project alternatives can be sought.

### 6.2.7 Pollution from abandoned mines

Measures remaining screened in at this AA stage for the Dee RBD under this SWMI are as follows:

- National measures (Wales) – CYM49, DE0014 and WW031
- Water body measure types (Wales) – AM1.0 and AM1.1

As a group of measures these relate to works associated with remediation of abandoned metal and coal mines.  Activities include investigation of the impacts of abandoned metal mines and delivery of metal mine remediation schemes and the Mining Remediation Authority (MRA) progressing with coal mine remediation schemes.

Annex 9, Table G provides an outline of potential impact pathways and generic mitigation that should be applied for lower tier plans, programmes and projects associated with these measures against the identified impact pathway types for measures under this SWMI.

Projects delivered under national measure CYM49 and Water body measure type AM1.0 in the Dee RBD aim to address water contamination levels (reduction in metal loading) or hydromorphological changes (e.g. sediment deposition/erosion alteration) and so there is potential for adverse effects on sensitive habitats (primarily Calaminarian Grasslands) within or hydrologically linked to the study areas. Whilst this habitat is protected under Section 7 of the Environment (Wales) Act, it is not a feature of a European Site that is hydraulically linked to or within, water bodies where this measure is to be applied (See Figure 4).

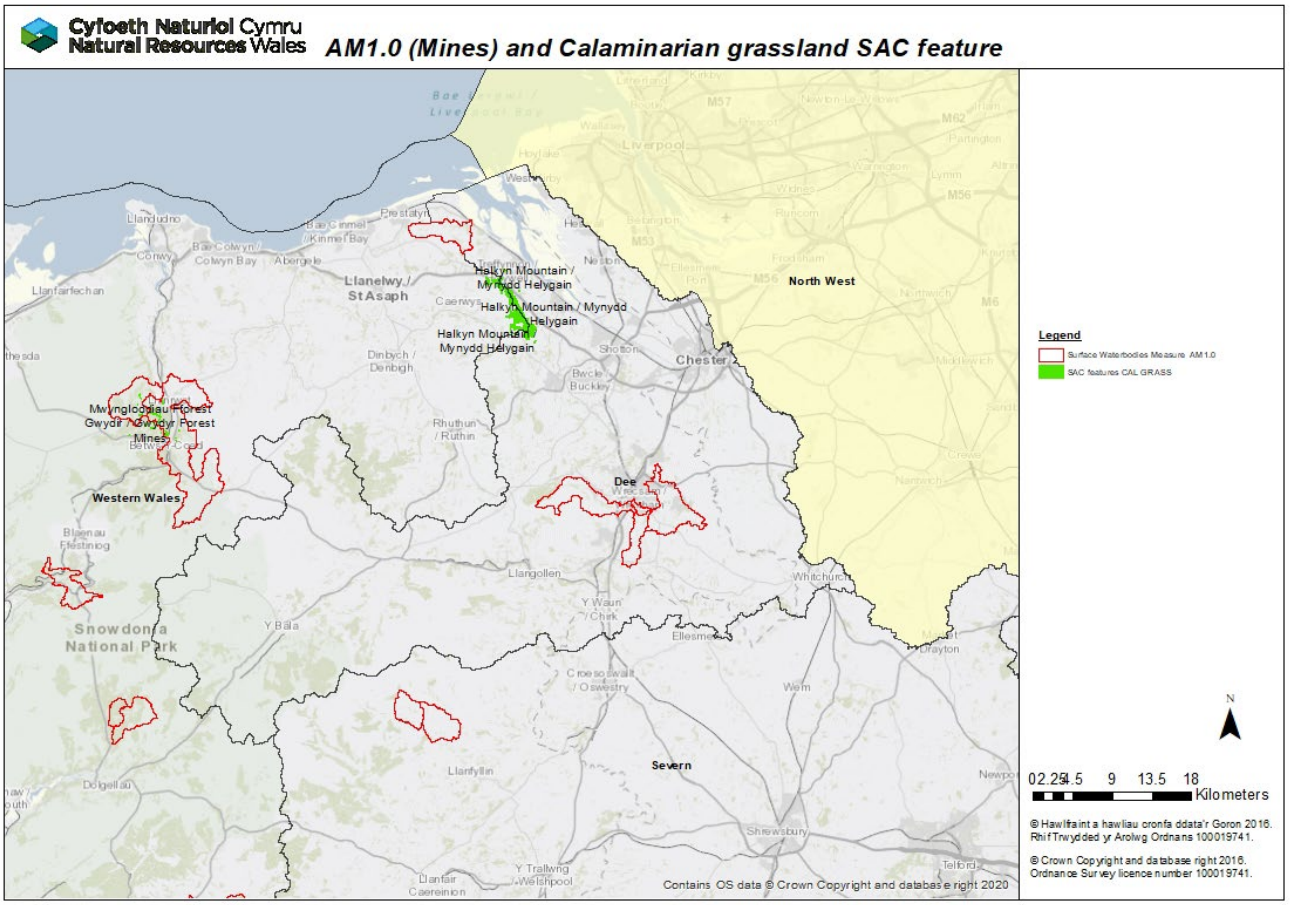



**Figure 4: Map of Water bodies where Measure AM1.0 have been applied and SACs with Calaminarian Grassland as a feature**

There is confidence that for these measures in the Dee RBD, lower tier plans, programmes and projects can be developed and delivered implementing the generic mitigation outlined (plus any other specific requirements identified at project level for that location) without causing an adverse effect on site integrity for any European sites. Further confidence is provided as there are no Calaminarian grassland SAC's located within or downstream of the water bodies (Figure 4). Specific requirements identified at project level or project alternatives can be delivered.

### 6.2.8 All

Measures remaining screened in at this AA stage for the Dee RBD under this SWMI are as follows:

- National measures (Wales) – NEW04

The only remaining measure in this SWMI relates to the Marine Nature Networks Programme delivering investigations and management actions within the MPA network. Whilst this will have overall benefit, impacts could occur during delivery of on the ground actions.

Annex 9, Table H provides an outline of potential impact pathways and generic mitigation that should be applied for lower tier plans, programmes and projects associated with this measure against the identified impact pathway types for measures under this category.

There is confidence that for this measure, lower tier plans, programmes and projects can be developed and delivered implementing the generic mitigation outlined (plus any other specific requirements identified at project level for that location) without causing an adverse effect on site integrity for any European sites, or project alternatives can be sought.

## 6.3 Avoidance and Mitigation of Impacts – English Dee

### 6.3.1 Action Category to enforce regulations to ensure compliance

Measures remaining screened in at this AA stage for the Dee RBD under this action category are as follows:

- WQA03.01 Review and where appropriate vary and/or enforce existing Discharge Permits (including STW's)
- WQA03.02 Review and where appropriate vary and/or enforce existing Abstraction Licence

These Detailed actions could result in changes to water flows and water quality which could have potential pathways for effects to protected species and habitats that could be features of protected sites.

These are existing permits that have already undergone HRAs where the Environment Agency screening processes have identified a possible effect. Any amendments to these permits will undergo further HRA assessment.

### 6.3.2 Action category to reduce pollution from livestock

Measures remaining screened in at this AA stage for the Dee RBD under this action category are as follows:

- WQA12.03 Improve farmyard infrastructure measures (feed, housing, yard cleaning/manure) to reduce pollution
- WQA 12.04 Improve field management and field infrastructure measures to reduce pollution from livestock

These Detailed actions could result in changes to grazing management, stocking density, infrastructure, land management and manure handling which may alter habitats, hydrology and water quality affecting habitats and species that are features of European Sites. Implementation may involve fencing, storage structures, habitat management and changes to land use.

The potential pathways for effects will be mitigated by delivery through the Environmental Land Management (ELM) scheme, Catchment Sensitive Farming, planning controls and project-level assessment which will ensure measures will be designed to avoid damage to European sites. Good practice land management, pollution prevention and habitat protection measures will be applied.

### 6.3.3 Action category to improve land management practices

- WQA13.02 Improve land management to prevent soil erosion and to reduce pollutant loss from the land

Land-use change, woodland establishment, peatland restoration and soil management may alter habitats, ecological communities, runoff pathways, groundwater recharge and hydrological processes connected to European sites.

Projects are implemented through ELM, peatland programmes, Forestry England and other environmental delivery mechanisms that require environmental assessment, habitat surveys and HRA where necessary. Design and implementation are undertaken at a scale that protects designated sites.

### 6.3.4 Action category to control run-off from the built environment

- WQA 21.01 Mitigate drainage outfalls from the urban environment to reduce levels of contaminants

Installation of drainage infrastructure, swales, balancing ponds and SuDS may affect habitats, hydrology and water quality during construction and operation, resulting in potential pathways for effects on European sites.

Planning controls, SuDS guidance, Construction Environmental Management Plans, pollution prevention measures and HRA, where required, will ensure effects are avoided or mitigated.

### 6.3.5 Action category to amend permit limits on abstractions

- WQA25.07 Cap Licence to prevent risk of deterioration

Changes to abstraction controls, quantities and licence conditions may alter hydrological regimes, groundwater levels and ecological functioning of freshwater and coastal systems, resulting in potential pathways for effects on European sites.

Abstraction licences are regulated through established Environment Agency processes and subject to HRA where effects on European sites are possible.

### 6.3.6 Action category to resolve structures that inhibit natural process, fish or eel passage or entrainment

- WQA27.03 Remove structures

- WQA27.04 Partial removal of structures
- WQA27.05 Modify structures (not technical fish/eel passes)
- WQA27.06 Remove bank and/or bed reinforcements or replace with more natural options

Works to remove, modify or bypass structures and improve fish or eel passage may alter habitats, sediment processes, hydrology and ecological connectivity. Construction activities may also disturb species and habitats. There is therefore potential pathways for effects on European sites through the delivery of these measures.

Physical river restoration projects are subject to environmental assessment, permitting and project-level HRA where necessary. Detailed design and timing of works are used to avoid adverse effects on European sites.

Good practice pre-construction and construction methods including effective planning of the timing, extent and duration of the works to avoid impacts on protected sites and species and the method of operation and pollution prevention measures during construction (implementing soil management practices, biosecurity controls, and pollution control measures for sediments and other potential contaminants) at the project level are established mitigation measures and can be expected to avoid or reduce impacts on European sites.

### 6.3.7 Action category to restore or rehabilitate inland and coastal waters

- WQA28. 06 Mechanisms to improve floodplain connectivity

River restoration, managed realignment, floodplain reconnection, habitat creation and geomorphological enhancement may alter habitats, hydrology, sediment transport and ecological processes, resulting in potential pathways for effects on European sites.

Restoration projects are subject to detailed design, environmental assessment, Flood Risk Activity Permits and project-level HRA before implementation.

Good practice pre-construction and construction methods including effective planning of the timing, extent and duration of the works to avoid impacts on protected sites and species and the method of operation and pollution prevention measures during construction (implementing soil management practices, biosecurity controls, and pollution control measures for sediments and other potential contaminants) at the project level are established mitigation measures and can be expected to avoid or reduce impacts.

### 6.3.8 Action category to improve operations and maintenance activities to reduce their impacts

- WQA29.01 Mechanisms to improve floodplain connectivity
- WQA29.02 Sustainable sediment management
- WQA29.08 Protection of existing natural/semi-natural vegetation during operational or maintenance activities

Operational and maintenance activities may influence habitats, sediment movement, water levels, navigation, recreation and ecological functioning resulting in potential pathways for effects on European sites.

Operational plans, maintenance strategies, environmental permits and project-level HRA ensure that impacts are assessed and managed appropriately.

### 6.3.9 Action category to create, restore and enhance biodiversity habitat

- WQA31.02 Manage habitat/features sensitively

Habitat creation, restoration and enhancement may modify habitats, hydrology and ecological connectivity, resulting in pathways for effects on European sites. Beaver-related measures may alter water levels and floodplain processes.

Habitat projects are designed at site level and are subject to environmental assessment, ecological survey and HRA processes where appropriate.

## 6.4 Conclusions of Appropriate Assessment of Welsh and English measures (alone)

The Appropriate Assessment (Section 6.5 and 6.5) of the Welsh and English measures has determined that the deferral criteria can be met for all measures screened into the AA. Potential effects depend on the location, design and implementation of individual projects and cannot be meaningfully assessed at RBMP level.

There is confidence that all Welsh national measures, Welsh Water body measures and English Detailed actions being applied to the Dee RBD can be developed and delivered using standard and well-established mitigation measures which can reasonably be applied to ensure no adverse effect on site integrity for any European sites (Annex 8 and 9).

Established regulatory, permitting and consenting mechanisms provide appropriate safeguards to ensure that impacts on European sites are assessed and managed before implementation.

## 6.5 Assessment of potential in-combination effects

The Habitats Regulations require competent authorities to include within an appropriate assessment, the consideration of any residual effects of the measures/ policies included in the plan under consideration on European site/s in combination with other plans or projects.

This is applied for measures where AA has found they will not on their own adversely affect the integrity of any European site, but there remains a possibility they may have some residual effects (taking into account any mitigation measures). For these measures, it is necessary to consider those effects in combination with the residual effects of other plans or projects. In this context a ‘residual effect’ is an effect which on its own is not significant but which could become significant in combination with the effects of other plans/projects.

This in-combination assessment has been split into two categories below – in combination between measures within the plan where residual effects may apply and consideration of the overall plan in combination with other projects/plans.

### 6.5.1 Measures in combination with other measures within the RBMP

For the purpose of the assessment, a strategic review has been undertaken in combination of measures for this RBD (Welsh national measures, Welsh Water body measure types and English Detailed action types) where the Appropriate Assessment alone concluded that these measures through the regulatory processes and generic mitigation outlined etc. can avoid adverse effects on European site integrity (or alternatives can be considered) but where sufficient detail is not known to confirm whether there may be residual effects.

Consideration is given to potential interaction between national measures and also between Water body measure types where occurring in similar waterbodies. In keeping with the high-level nature of the plan and as detail regarding implementation of the measures is not yet available (exact activities that will be undertaken, exact location of works, spatial extent, temporal information etc.) this has been conducted at a strategic level only.

Welsh National measures

Welsh National measures remaining screened in at this stage that are being considered for in combination effects are: CYM18, WAL06, WAL10, WAL25, NEW01, WAL23, CYM2, CYM4, CYM31, CYM50, WAL02, WAL17, WAL19, CYM73, CYM41, WAL05, DE0014, WW0031, WAL03, NEW04. These relate to remediation relating to pollution from waste water, abandoned mines and rural areas as well as physical modifications and changes to natural flow and levels of water.

There is potential for in combination effects on European sites as a result of implementation of one/more of these measures at a local scale – e.g. implementation of on the ground works within similar waterbodies or with potential for effects on similar European sites. However, this would only occur as a result of specific project delivery arising from these measures, particularly if location and timing of the projects are close. There is insufficient detail on the timing and design of these projects and so in combination effects will need to be considered through the project level HRAs. This will identify any potential effects on European sites alone and in combination at a project level, as more detail emerges. HRA input to the options appraisal process will seek to avoid, reduce or mitigate potential effects. There is confidence that deferring to the lower tier will be sufficient and that through the regulatory processes any adverse effects on site integrity as a result of in combination effects of local projects driven by these measures can be avoided (or alternatives can be considered).

Combination of these national measures at a more strategic scale is considered likely to be one of benefit – aims of the measures overall being to address issues arising from pollution (various sources) and physical modifications that currently impede physical processes and impact on water quality.

Welsh Water body measure types

The interactions between Welsh Water body measure types remaining screened in for this in appropriate assessment in combination is grouped by SWMI below.

*Pollution from waste water –WW1.4, WW1.5, WW2.0*

- In some water bodies, WW1.4 and WW2.0 will both be implemented.
- There may be in combination effects as a result on a range of European sites including: terrestrial and freshwater.
- There are no other Welsh Water body measure types interacting at water bodies where the above measures are to be implemented.

*Pollution from towns, cities and transport –TC1.6*

- The following Welsh Water body measure type also interacts at the waterbody where the above measure is to be implemented: RA1.2 (pollution from rural areas SWMI).
- There may be in combination effects as a result on a range of European sites including: terrestrial and freshwater.

*Physical modifications – PM2, PM3, PM6, PM7, PM8.1, PM8.2, PM9, PM10*

- Many of the water bodies where physical modification Welsh Water body measure types apply have more than one measure that are required and that may cause potentially significant disruption – e.g. to resolve impacts caused by artificial modification of river and or tidal channel beds (PM8.2) as well as impacts caused by hard / engineered out-of bank flood walls, embankments and high ground (PM9). Lower tier programming of projects should consider how best to integrate these works to reduce in combination effects.
- The following Welsh Water body measure types also interact at waterbodies where the above measures are to be implemented: AM1.0 and RA1.2. These fall into the following SWMIs – pollution from abandoned mines; pollution from rural areas.
- There may be in combination effects as a result on a range of European sites including: terrestrial and freshwater.

*Pollution from rural areas – RA1.2*

- In some waterbodies, more than one of the pollution from rural areas Welsh measure types will be implemented.
- The following Welsh Water body measure types also interact at waterbodies where the above measures are to be implemented: AM1.0, PM2, PM3, PM6, PM7, PM8.1, PM8.2, PM9, PM10, TC1.6. These fall into the following SWMIs – physical modification; pollution from towns, cities and transport; and pollution from abandoned mines.
- There may be in combination effects as a result on a range of European sites including: terrestrial, freshwater and marine/coastal.

*Pollution from abandoned mines – AM1.0 and AM1.1*

- AM1.0 will be implemented at the same water body as AM1.1

- The following Welsh Water body measure types also interact in waterbodies where measure AM1.0 will be implemented:  RA1.2, PM7. These fall into the following SWMIs – physical modification; and pollution from abandoned mines.
- There may be in combination effects as a result on a range of European sites including: terrestrial, freshwater and marine/coastal.

There is potential for in combination effects on European sites as a result of implementation of one/more of the above measures at a local scale – e.g. implementation of on the ground works or long-term changes as a result of works, impacting on European sites within/in proximity to works or hydrologically/functionally linked.

However, this would only occur as a result of specific project delivery arising from these measures, particularly if location and timing of the projects are close. There is insufficient detail on the timing, location and design of these various projects and so in combination effects will need to be considered through the project level HRAs. This will identify any potential effects on European sites alone and in combination at a project level, as more detail emerges. HRA input to the options appraisal process will seek to avoid, reduce or mitigate potential effects.

There is confidence that deferring to the lower tier for these Welsh Water body measure types will be sufficient and that through the regulatory processes any adverse effects on site integrity on the above (or any other) European sites that may be affected by Water body measures under this SWMI as a result of in combination effects of local projects driven by these measures can be avoided (or alternatives can be considered).

Within SWMIs, consideration should be given at lower level to how to combine activities – in particular most disruptive activities such as remediation of various physical modifications within the same water body.

<u>English Detailed action types</u>

The interaction between English Detailed action types remaining screened in for this appropriate assessment in combination is considered below.

The English Detailed action types occur across 8 waterbodies within the Dee RBD:

- GB111067052090 Worthenbury Brook (Worthenbury Lower)
- GB111067052120 Aldford Brook
- GB111067052140 Henlake Brook
- GB111067052150 Balderton drain
- GB111067052200 Wych Lower (Worthenbury middle)
- GB111067052230 Bradley Brook
- GB111067056930 Finchetts Gutter
- GB111067056960 Garden City Drain

For all of these waterbodies more than one English Detailed action type will be implemented (e.g. Nine of the action types will be implemented at Balderton Drain -

WQA03.01, WQA03.02, WQA12.03, WQA12.04, WQA21.01, WQA77.06, WQA29.01, WQA29.09 and WQA31.02).

There is potential for in combination effects on European sites as a result of implementation of one/more of the above measures at a local scale – e.g. implementation of on the ground works or long-term changes as a result of works, impacting on European sites within/in proximity to works or hydrologically/functionally linked.

However, this would only occur as a result of specific project delivery arising from these measures, particularly if location and timing of the projects are close. There is insufficient detail on the timing, location and design of these various projects and so in combination effects will need to be considered through the project level HRAs. This will identify any potential effects on European sites alone and in combination at a project level, as more detail emerges. HRA input to the options appraisal process will seek to avoid, reduce or mitigate potential effects.

There is confidence that deferring to the lower tier for these English Detailed action types will be sufficient and that through the regulatory processes any adverse effects on site integrity on the above (or any other) European sites that may be affected by English Detailed action types as a result of in combination effects of local projects driven by these measures can be avoided (or alternatives can be considered).

### 6.5.2 Overall plan in combination with other plans and projects

For the purpose of the assessment, and in keeping with the high-level nature of the plan, only key relevant high-level plans or projects that could potentially result in in-combination effects have been considered.

At this scale, it is not possible to provide an extensive list of all plans and projects which may lead to in-combination effects together with the Plan. These will however need to be considered further where appropriate assessment is required in lower tier assessments.

#### 6.8.2.1 UK Plans considered

**The UK Marine Policy Statement (MPS)**: implements the requirements of The Marine and Coastal Access Act 2009 and sets out a framework for a system of marine planning, providing the high level policy context for the sustainable development of the United Kingdom marine areas. The MPS places a duty on marine plan authorities to prepare Marine Plans for the inshore and offshore regions. For the Dee RBD, the WNMP was adopted in November 2019 and the neighbouring plan, the North West Marine Plan was adopted in June 2021. They set the planning framework that applicants and public authorities must use in applying for and determining proposals and licence applications.

**Water Resources Management Plans (WRMPs)**

WRMPs set out how water companies will balance water supply and demand, including measures such as abstraction management, leakage reduction, water efficiency, and the development of new supply infrastructure. These plans are published every 5years to deal with water supply and demand pressures identified

across the set RBDs, with a view to the challenges of at least the next 25 years. In England and Wales the most recent updates were published (as Final) in 2024 or 2025 (depending upon the water company).

RBMPs, in parallel, aim to achieve good ecological and chemical status of water bodies, including controls on abstraction pressures, protection of environmental flows, and improvements to aquatic ecosystems. There is therefore a strong functional overlap between the two, particularly in relation to abstraction, flow regimes, and ecological health.

There is not expected to be any in combination effects where WRMP measures support RBMP objectives. For example, demand management, leakage reduction, and water reuse can reduce abstraction pressures, helping to maintain environmental flows and improve water body status. Similarly, catchment-based approaches promoted in both plans, such as nature-based solutions and integrated water management, can enhance ecosystem resilience, water quality, and biodiversity while supporting long-term water resource security.

There are links with the RBMPs as certain infrastructure such as reservoirs have a shared function of providing water resource but also allowing control of releases during periods of high flows.  However, the main potential for in combination effects on European sites will come from project delivery arising from the two plans, particularly if location and timing are close. There is insufficient detail on the timing and design of these projects and so in combination effects will need to be considered through the project level HRAs.

The HRAs of the WRMPs concluded that they will have no adverse effects, alone or in combination, on the integrity of any European sites.

Projects delivered from the WRMP will undergo Environmental Impact Assessment and HRA at a project level where necessary. This will identify any potential effects on European sites alone and in combination at a project level, as more detail emerges. Environmental Impact Assessment and HRA input to the options appraisal process will seek to avoid, reduce or mitigate potential effects.

**Drainage and Waste water Management Plans (DWMP)**

These plans are produced by each of the water companies and are assessments of risk, opportunities and options to manage sewage and rainfall over a minimum of 25years. They were published, with accompanying SEA’s and HRA’s in 2024 and will be reassessed every 5 years. The HRA’s concluded that they will have no adverse effects on the integrity of European Sites, subject to appropriate consideration of residual uncertainties at a project level.

The DWMPs set out long-term strategies for managing wastewater capacity, sewer flooding, storm overflows, and environmental discharges, including planned investment in infrastructure and nature-based solutions. RBMPs, in parallel, aim to achieve good ecological and chemical status of water bodies, including reducing pollution from point and diffuse sources, addressing nutrient enrichment, and improving aquatic habitats. As wastewater discharges and sewer systems are a key

pressure on the water environment, there is a strong functional linkage between the two frameworks.

**Water Company Drought Plans**
Drought Plans set out the operational and emergency measures water companies will implement during periods of prolonged dry weather, including temporary demand restrictions, drought permits and orders (such as increased abstraction), and supply-side interventions. RBMPs, in parallel, seek to achieve good ecological and chemical status of water bodies, including maintaining environmental flows, protecting habitats, and limiting abstraction pressures. As a result, there is a clear interaction between short-term drought management actions and longer-term environmental objectives.

Overall, the interaction between Drought Plans and RBMPs presents a balanced but potentially sensitive relationship. While there is clear potential for complementarity through demand reduction and long-term resilience planning, short-term operational responses to drought may introduce temporary environmental risks. Environmental safeguards, monitoring, and alignment between drought management measures and RBMP objectives will be required at a measure delivery level to ensure no in-combination effects.

#### 6.8.2.2 Wales Plans

**Area Statements** were published in Spring 2020 and set out the themes, priorities and actions required across 7 areas of Wales to promote the sustainable management of natural resources. The statements promote collaborative working and will be developed over coming years to work towards delivery of the **Natural Resources Policy** priorities. Themes and priorities include sustainable management of the water environment and there are many synergies with the RBMPs. The synergies are drawn out in the sector specific information on Area Statements and Water. The Statements and their HRA's will inform RBMP projects and plans and their HRA's.

The Natural Resources Policy (NRP) sets out the priorities for the SMNR as:

- Delivering nature-based solutions
- Renewable energy
- Circular economy
- Place based approach

The RBMP has been developed to support and deliver these priorities, where relevant. For example, river restoration and peatland restoration are nature-based solutions that not only benefit the ecology of those habitats but will provide multiple benefits such as water quality improvements and run-off reduction to benefit flood risk management. The measure delivery at a water body scale reflects the place-based approach and will promote collaborative working. This will be developed over RBMP4 cycle to work towards delivery of the NRP priorities. Area Statement themes and priorities include sustainable management of the water environment which complements the RBMPs. The synergies are drawn out in the sector specific information on Area Statements and Water. The delivery of nature-based solutions

and collaborative and place-based approach promoted through area statements will benefit RBMP delivery of measures and is not anticipated to result in in-combination effects.

Note that it is expected that the Climate and Nature Action Plan is expected to replace the NRP in 2028

**Future Wales: the national plan 2040** Future Wales is Welsh Governments national development framework which was adopted in February 2021. It sets the long-term spatial direction for Government policy, action and investment and for others who the Government work with. The vision is to help deliver sustainable places by supporting positive placemaking and ensuring that our spatial choices direct development to the right places, make the best use of resources, create and sustain accessible, healthy communities, protect our environment and support prosperity for all.

The framework sets out 11 outcomes that the Government aim to achieve in its 20-year life. This includes “the environmental, social and cultural value of our natural resources will be managed, maintained and enhanced, while economic benefits will be utilised sustainably and appropriately by promoting nature-based solutions and a circular economy. Across Wales better resource choices will be reflected in more sustainable places, which benefit from reductions in levels of pollution, and be healthier and more liveable.”

The RBMP measures in the appropriate assessment that are associated with water company measures are aimed at improving the status of water courses and the marine environment. Development will inevitably require infrastructure associated with water resources and wastewater treatment, but the WFD Regulations 2017 itself requires that such development will be undertaken in a manner that does not result in detriment to the ecological potential or status of waterbodies.

The framework sets the context for lower tier plans and projects, including safeguarding in relation to European sites. Therefore, no in combination effects can be predicted at this level. The main potential for in combination effects on European sites will come from lower tier plans and projects arising from the plan, so consideration will be required in their HRAs.

**Welsh National Marine Plan** supports the UK MPS vision for clean, healthy, safe, productive and biologically diverse oceans and sea.

The WNMP HRA focussed on the potential effects of sector policies promoting or supporting development on European sites. The high-level nature of the plan, meaning uncertainties in location, scale, type and timing of future activities, meant that the HRA could not identify specific effects on European sites. Uncertainties are inevitable and common in high level plans and the HRA recommended that the general policy safe guards, a requirement for project level HRA and regular review of the WNMP will ensure no adverse effect on the integrity of European sites.
The WNMP explicitly supports the achievement of Good Environmental Status (GES) under the UK Marine Strategy. Its goal is to achieve or maintain GES in coastal and marine waters, which is defined through 11 “Descriptors” covering the whole marine

environment. The policies set out in the WNMP play a key role in supporting the achievement of GES. The RBMP measures scoped into the AA, in particular WAL06 and measures that will reduce diffuse pollution, will complement the WNMP and would be unlikely to result in significant effects on European sites.

**National Strategy for Flood and Coastal Erosion Risk Management in Wales (NSFCERMW)**: in response to the Flood and Water Management Act 2010, the National FCERM Strategy (2020) aims to reduce the risks to people and communities from flooding and coastal erosion. The strategy describes the roles and responsibilities of those involved in managing the risk of flooding and coastal erosion, the approaches to managing those risks and their consequences, and the way funding for flood and coastal erosion risk management is allocated. It sets out the national approach to flood and coastal erosion risk in Wales, describing the long-term goals for managing flooding from surface water, rivers and the sea, as well as coastal erosion, and how these will be achieved.

The strategy promotes Natural Flood Management (NFM) and nature-based solutions which will have synergies with the RBMP objectives. This encourages interventions that will slow the flow of water and utilise natural flood plains with the indirect benefits this provides in reducing diffuse pollution. The strategy seeks to prevent inappropriate development on the floodplain and develop approaches to coastal adaptation which will have indirect benefits for the RBMP in maintaining and restoring coastal and fluvial habitats.

However, potential conflicts with the RBMP arise where hard engineering in fluvial and coastal environments are required to protect existing communities that are at flood risk. The HRA of the strategy concluded that its implementation could affect the integrity of European sites as a result of interventions required to protect communities. The HRA documented the alternatives considered, the imperative reasons of overriding public interest and the measures proposed to compensate for the loss of any features of European Sites. It is not anticipated that the RBMP would have any in combination effects with the strategy. The measures scoped into the AA that aim to improve fish passage, habitat and river restoration aim to restore a legacy of hard engineering, some of which was associated with FRM activities.

The strategy requires that NFM is included in the options appraisal for all projects, this coupled with the need for project level WFD Regulations 2017 Compliance Assessment and Habitats Regulations Assessment will mitigate the risk on European sites.

**Flood Risk Management Plans (FRMPs)**: are high-level planning tools that set out objectives for flood risk management across each river catchment and estuary. The second cycle of national FRMP for Wales was adopted in 2023 by NRW. It considers inland flood risk from rivers, surface water, groundwater and tidal flooding, and is designed to set the overall direction of flood risk management on a catchment basis. The plan sets the national direction and also the priorities within each region of Wales. It identifies broad flood risk management policies that are economically practical, have a potential life of 50 to 100 years, and will help NRW work with others to put them in place. The FRMPs will support and help to achieve the objectives of

the NSFCERMW and so the in-combination assessment above is also valid for the existing FRMP.

**Woodlands for Wales Strategy**: This Strategy (last updated in 2021) sets out Welsh Government's approach to sustainably manage woodland across Wales over 50years.The Strategy vision is that "Wales will be known for its high-quality woodlands that enhance the landscape, are appropriate to local conditions and have a diverse mixture of species and habitats". Achieving this vision will provide social and community benefit and contribute to a better quality environment throughout Wales.

Forestry operations have the potential to affect water quality and the hydromorphology of watercourses. However, the Woodlands for Wales Strategy requires that "all woodlands and trees are managed sustainably to high standards of environmental stewardship, safeguarding and enhancing the full range of ecosystem services through more widespread and effective application of the United Kingdom Forestry Standard and greater uptake of auditable standards such as UK Woodland Assurance Standard". The Woodlands for Wales Strategy has synergies with the RBMPs as it:

- promotes woodland creation as integral elements of land management,
- promotes urban woodlands and trees as making a contribution to water management and
- recognises the carbon storage capacity of woodlands

Measures for habitat restoration and peatland restoration are likely to be undertaken within areas of forestry and so there could be potential for in combination effects. However, there is insufficient detail on the timing and design of these projects and so in combination effects will need to be considered through the project level HRAs.

The **Sustainable Farming Scheme** is designed to support land managers in Wales in the sustainable production of high-quality food, help improve productivity, and adapt to the impacts of climate change. The SFS consists of Universal, Optional and Collaborative layers to achieve these aims. Land managers will receive a Universal payment for completing a set of Universal Actions. Examples of Universal Actions include: Soil health, Integrated Pest Management, Habitat Maintenance, Tree and Hedgerow maintenance and planting etc.

The Universal layer underwent HRA as universal actions can be undertaken when relevant on European sites. The HRA proposed embedded mitigation within the scheme that would provide protection to the water environment. For example, Universal Action 6: Create temporary habitat on improved land, recommends that any such action requiring cultivation within a catchment of a lake or within 100m of any river or other water dependent European site. The application of the proposed mitigation, as set out in the HRA of the Universal Layer of the SFS concluded no adverse effect on European site integrity. The mitigation is aimed at protecting the water environment and is considered to be complementary with the RBMP4.

A **Nutrient Management Plan** is in place for the Dee, as a SAC river. It focuses on the reduction of diffuse pollutants (nitrogen, phosphorous and sediment) and to facilitate new development to achieve nutrient neutrality. The NMP also aims to deliver wider benefits through nature-based solutions such as constructed wetlands, riparian buffer strips and SuDS.

#### 6.8.2.3 English Plans

**Environmental Improvement Plan**
The Environmental Improvement Plan 2025 (EIP25) sets out the UK Government's framework for delivering the legally binding environmental targets established under the Environment Act 2021, building on the 25 Year Environment Plan. It focuses on improving air and water quality, enhancing biodiversity, reducing waste, and mitigating climate impacts through cross-sector action, regulatory reform, and investment in nature-based solutions. The RBMP therefore aligns with the objectives of the Plan and is unlikely to result in in combination effects.

**Agricultural Transition Plan**
The Agricultural Transition Plan 2024 sets out a plan to support sustainable agriculture, by introducing payments linked to improving the environment, improving animal health and welfare, and reducing carbon emissions. These new payment schemes can make a significant positive impact on the water quality and resources of a catchment. There is potential for positive effects arising from the combination of the RBMP and the measures within the Agricultural Transition Plan.

**Land Use Framework**
The Land Use Framework 2026 is a national strategic policy designed to optimise how land is utilised across England. It balances competing demands such as housing delivery, renewable energy, nature recovery, and agricultural production to ensure multiple benefits from limited land resources.

There is potential for positive cumulative effects arising from the promotion of resilience and multi-functional landscapes, better collaboration between organisations, and the promotion of nature-based solutions are all likely to enhance and promote delivery of RBMP objectives.

**Planning and Infrastructure Act**
The Planning and Infrastructure Act 2025 is a landmark piece of UK legislation enacted to accelerate house building and fast track Nationally Significant Infrastructure Projects (NSIP). It aims to support economic growth and clean energy by streamlining consenting processes. It introduces: the Nature Restoration Fund which enables developers to pay into a central fund to deliver nature restoration and habitat improvements at scale; environmental delivery plans; and reintroduces spatial development strategies.

There is potential for both positive and negative effects with the RBMP as developers will likely fund catchment scale water and habitat restoration projects in line with RBMP objectives, but there may also be localised negative effects where large developments proceed with nature restoration delivered elsewhere in the RBD.

There is insufficient detail on the timing and design of these NSIP and so in combination effects will need to be considered through the project level HRAs.

**National Planning Policy Framework (NPPF)**
The draft RBMP aims to improve water body status, reduce pollution (including nutrients and chemicals), enhance aquatic ecosystems, and promote sustainable water use. In parallel, the NPPF facilitates homes, commercial development, and supporting infrastructure, while requiring sustainable development and spatial development strategies. Together, these frameworks can generate positive effects, particularly where development is aligned with RBMP objectives. For example, NPPF policies on sustainable drainage systems (SuDS), water efficiency, and biodiversity net gain can support RBMP goals by reducing surface water runoff, improving water quality, and enhancing ecological networks. Similarly, the promotion of green infrastructure and nature-based solutions under both frameworks can reinforce ecosystem resilience and deliver multiple benefits.

However, there is also potential for negative effects arising from the scale and distribution of development promoted through the NPPF. Increased urbanisation, infrastructure expansion, and agricultural change associated with growth can lead to greater water demand, increased wastewater discharges, diffuse pollution, and physical modification of water bodies. Where these pressures coincide spatially or temporally, they may undermine RBMP objectives, particularly in already stressed or sensitive catchments. There is insufficient detail on the timing and design of these projects and so in combination effects will need to be considered through lower tier plan or project HRAs.

**English National Flood and Coastal Erosion Risk Management Strategy**
The Strategy sets out a long-term framework for managing flood and coastal erosion risk in England, promoting the use of NFM, resilience measures, and adaptive planning in response to climate change. RBMPs, in parallel, focus on achieving good ecological and chemical status of water bodies, including improving water quality, restoring habitats, and supporting sustainable hydrological regimes. Both frameworks therefore emphasise integrated catchment management and the restoration of natural processes, creating strong alignment in objectives and delivery mechanisms.

This alignment is likely to generate positive effects, particularly where interventions deliver multiple environmental benefits. For example, measures such as floodplain reconnection, wetland creation, river restoration, and sustainable land management can simultaneously reduce flood risk (FCERM objectives) and enhance water quality, biodiversity, and ecological status (RBMP objectives). The shared focus on nature-based solutions and climate adaptation also supports increased ecosystem resilience, carbon sequestration, and wider environmental enhancement at a landscape scale.

However, there is potential for localised negative effects or trade-offs, depending on how specific measures are implemented. For instance, certain engineered flood and coastal defence schemes may result in hydromorphological changes, habitat loss, or coastal squeeze, which could conflict with RBMP objectives if not carefully designed and mitigated. Similarly, sediment management or coastal realignment measures

may alter physical and ecological conditions in ways that require careful balancing with water body status goals. There is insufficient detail on the timing and design of these projects and so in combination effects will need to be considered through lower tier plan or project HRAs.

#### 6.8.2.4 Conclusion of In Combination Assessment of Plans

Relevant UK and national (England and Wales) plans have been reviewed at a high level to determine whether there are any likely significant 'in combination' effects. The plans all share the need to sustainably manage natural resources such as water and seek to adapt in light of our changing climate. This review has not indicated any potential or likely in combination effects. However, the scale of assessments of these strategic plans is high level and the timing, location and methods of delivery is uncertain. Each strategic HRA defers to a project level and it is recommended that integrated planning of projects affecting the same waterbodies and working collaboratively would be beneficial in reducing effects on European sites and delivering wider benefits.

## 6.6 Conclusions of the appropriate assessment (considering alone and in combination outcomes)

A total of 21 Welsh national measures, 15 Welsh Water body measure types and 16 English Detailed action types, were considered as part of the Appropriate Assessment for the Dee RBD as outlined above and as presented in Annex 7 and 8 (Welsh Water body measures AA datasheets and English Detailed action types AA consideration) and Annex 8 and 9 (impact pathways and generic mitigation).

For all the above measures, there are real and credible pathways for effect that could occur, but at this level of plan we do not have the detail available to say where, how or when effects might occur. It is therefore considered appropriate (for most measures) to defer the HRA to lower tier plans and projects, where a greater level of detail will be available to inform the HRA, mitigation and compensation.

Consideration of the types of impact pathway likely to occur and high-level avoidance and mitigation measures is presented in Section 6.5 and 6.6 (supplementary information regarding impact pathways and generic mitigation being provided in Annex 8 and Annex 9). The mitigation is not intended to be comprehensive, and it is very likely that there will be other impacts and therefore other mitigation that will be required which it is not possible to identify at plan level because the nature, timing, duration, scale or location is not yet known. This detail is deferred to the HRA of lower tier plans, programmes and projects. In combination assessment should also form part of this HRA at a local project/plan review level.

For all Welsh (national and Water body type measures) and English (Detailed action types) measures, there is confidence that measures, lower tier plans, programmes and projects can be developed and delivered implementing the generic mitigation outlined in Section 6.5 and 6.6 and Annex 8 and 9 and considering local in combination impacts, without causing an adverse effect on site integrity for any European sites, or alternative proposals can be sought, alone or in combination.

# 7. References


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## Supplementary Material (Available upon request)

**Annex 1. Pre-screening justification for national measures – Wales**
**Annex 2. Pre-screening justification for Water body measure types – Wales**
**Annex 3. English Data Measure Standards pre-screening – England**
**Annex 4. LSE screening justification for national measures – Wales**
**Annex 5. LSE screening justification for Water body measure types – Wales**
**Annex 6. English Data Measure Standards LSE justification – England**
**Annex 7. Water body measure types AA data sheets – River Dee RBD (Wales)**
**Annex 8. English Detailed action types AA summary – River Dee RBD (England)**
**Annex 9. Impact Pathways and Generic Mitigation – Dee**