

Clarification note in relation to the reporting of spatial data for Water Framework Directive (WFD) protected areas, in the context of the March 2022 reporting of the third River Basin Management Plans (RBMPs) 28 April 2022

1. PURPOSE OF THIS NOTE

The purpose of this note is to clarify the reporting requirements of spatial data in relation to protected areas under the Water Framework Directive, for the March 2022 reporting exercise. The need for this note has been identified by requests in the WFD helpdesk (wfd.helpdesk@eionet.europa.eu).

2. RELEVANT CONTENTS OF EXISTING GUIDANCE

The guidance quoted below is available on the WFD 2022 reporting resources webpage: http://cdr.eionet.europa.eu/help/WFD/WFD_715_2022

The chapter on protected areas in the WFD Reporting Guidance 2022 states the following:

5.1 Introduction

According to Article 6 and Annex IV of the WFD, Member States shall ensure the establishment of a register or registers of all areas lying within each River Basin District (RBD) which have been designated as requiring special protection under specific Community legislation for the protection of their surface water and groundwater, or for the conservation of habitats and species directly depending on water, including the protection of Natura 2000 sites and economically significant aquatic species (e.g. shellfish).

*A summary of the register of Protected Areas should be part of the RBMPs, including maps indicating the location of each Protected Area and a description of the Community, national or local legislation under which the Protected Areas have been designated. **It is expected that all Protected Areas will be reported under the Surface Water Body (SWB) and Ground Water Body (GWB) schemas, through their links to the surface and groundwater bodies¹.***

5.3.3. GIS Information

GIS information in GML file format should be reported for Protected Areas according to the specifications of the guidance for reporting spatial data (see Annex 5 GIS Guidance). If the Protected Areas are already reported under other directives (e.g. Natura 2000 Protected Areas under the Habitats Directive, bathing waters under the Bathing Water Directive, sensitive areas under the Urban Waste Water Treatment Directive or vulnerable zones under the Nitrates Directive) they do not need to be reported again under the WFD.

¹ If the Member State applies a 'whole territory' approach for Urban Waste Water Treatment and/or Nitrates Directive, it should not report surface water bodies as Protected Areas.

On the other hand the chapter on Protected areas in the WISE GIS Guidance includes the following:

Protected areas

Protected areas must be represented by polygon, polyline or point geometries: use the ProtectedArea data set, the ProtectedAreaLine data set or the ProtectedAreaPoint data set accordingly.

*Each type of Protected Area is identified using the **zoneType** value. The values 'nitrateVulnerableZone', 'sensitiveArea', 'bathingWaters' and 'drinkingWaterProtectionArea' identify areas designated under the Nitrates Directive, Urban Waste Water Treatment Directive, Bathing Waters Directive or Drinking Water Directive, respectively.*

*For other protected areas, the **zoneType** element is 'designatedWaters' and the **specialisedZoneType** element is used to further distinguish different types: 'shellfishDesignatedWater', 'freshwaterFishDesignatedWater' or 'otherProtectedArea'.*

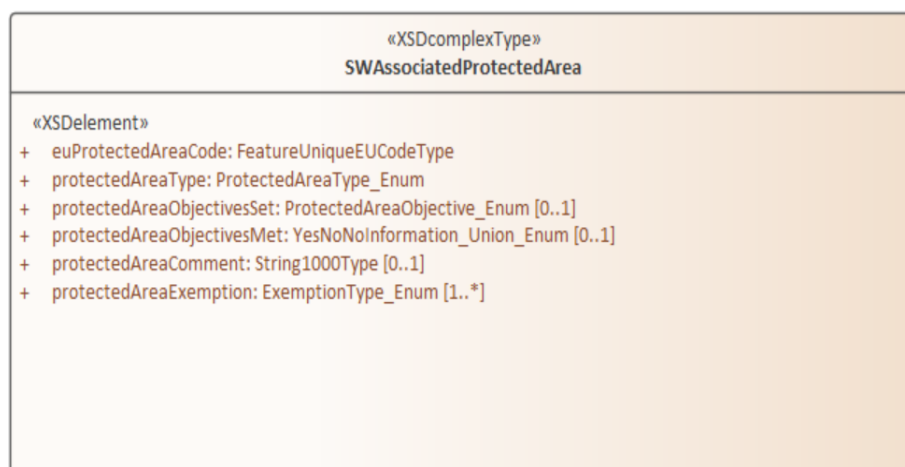
Note that areas protected under the Habitats or Birds directive are not reported in the WISE spatial data sets.

Data Providers reporting under WISE SoE are not required to provide the Protected Areas data sets.

Guidance on the interpretation of these requirements for the various types of protected areas is provided below.

3. SUMMARY OF THE DATA MODEL

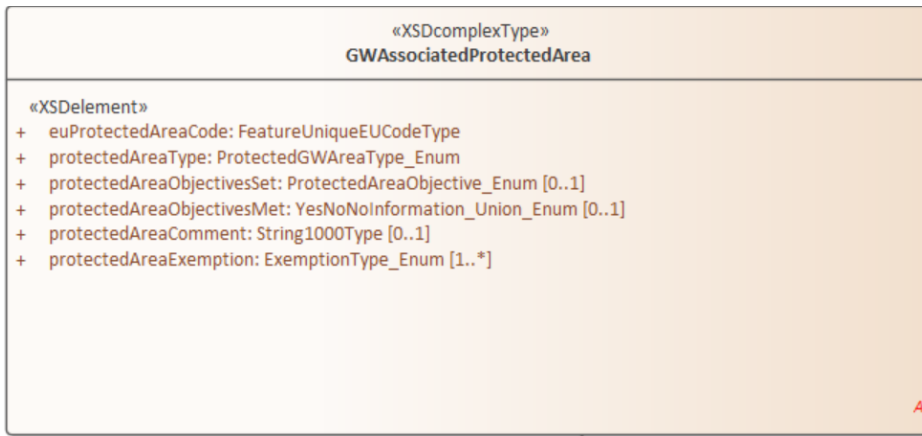
The class **SWAssociatedProtectedArea** belongs to the surface water body XML schema (SWB schema) and it is conditional on the element



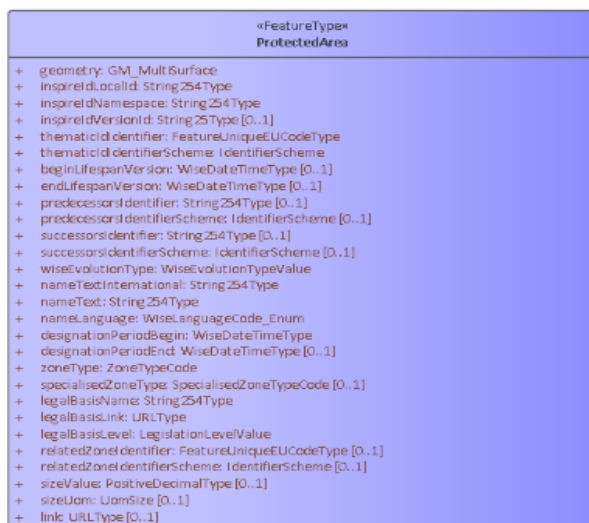
"SurfaceWaterBody/swAssociatedProtectedArea" being "Yes" (meaning the water body has an associated protected area):

The class **GWAssociatedProtectedArea** belongs to the groundwater body XML schema (GWB

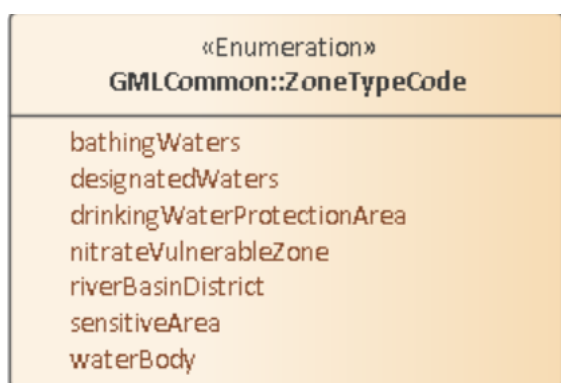
schema) and it is conditional on the element "GroundWaterBody/gwAssociatedProtectedArea" being "Yes" (meaning the water body has an associated protected area):



Finally, the GML class ProtectedArea is available to report spatial data:



In that class, the attributes ZoneTypeCode and SpecialisedZoneType allow reporting the type of protected area. Guidance on the use of these attributes is provided in the GIS guidance as reproduced in the previous section



«Enumeration» GMLCommon::SpecialisedZoneTypeCode
riverBasinDistrictSubUnit
riverWaterBody
lakeWaterBody
transitionalWaterBody
coastalWaterBody
territorialWaters
groundWaterBody
shellfishDesignatedWater
freshwaterFishDesignatedWater
otherProtectedArea
riverBathingWater
lakeBathingWater
transitionalBathingWater

All WFD protected areas associated with surface or groundwater bodies need to be reported in the XML datasets using the classes SWAssociatedProtectedArea and GWAssociatedProtectedArea. This information builds the WFD Register of Protected Areas as required by WFD Article 6.

Guidance on the use of the GML ProtectedArea class for the reporting of spatial data for each type of protected area is provided below.

4. GUIDANCE ON REPORTING OF SPATIAL DATA

4.1. Bathing water protected areas

No spatial data is required for bathing water under Bathing Water Directive 2006/7/EC.

The annual reporting under Bathing Water Directive 2006/7/EC (<http://cdr.eionet.europa.eu/help/BWD>) requires the identification of bathing waters by providing a point (longitude and latitude). As optional element, the WFD code and name of the surface water body and the River Basin District information are provided for each bathing water site (see <http://dd.eionet.europa.eu/tables/10086>).

If Member States have delineated bathing water areas and these are spatially different from WFD water bodies (or are even delineated outside WFD water bodies), they can report this information using the GML ProtectedArea schema under the WFD. As described in the GIS guidance and quoted above, the attribute 'zoneType' should be 'bathingWaters'. The reporting of this spatial information is optional.

4.2. Urban Waste Water nutrient Sensitive Areas

Reporting of spatial extent of sensitive areas is done through the regular reporting under the Urban Waste Water Treatment Directive 91/271/EEC (<http://cdr.eionet.europa.eu/help/UWWTD>). The available geographical information is displayed in the Urban Waste Water Directive map viewer (<https://www.eea.europa.eu/themes/water/european-waters/water-use-and-environmental-pressures/uwwtd/interactive-maps/urban-waste-water-treatment-maps-3>).

Sensitive areas are identified through a unique ID (attribute rcaCode in table ReceivingAreasSAMain). This ID is the one that Member States are expected to report under the WFD attributes SWAssociatedProtectedArea/euProtectedAreaCode for the associated surface water bodies. The quality assurance under the WFD reporting process will crosscheck if the ID reported as euProtectedAreaCode has been reported as a Sensitive Area and will generate an error if this is not found.

However, a special case arises in case of newly designated sensitive areas which have a transition period of 7 years under the UWWTD. If Member States have designated sensitive areas since the last reporting under Urban Waste Water Directive i.e. 2018 data, these may not yet be in the system. This means that, if the IDs for these new areas are reported under the WFD, this will generate an error because the sensitive areas would not yet be in the system. In these cases two possibilities are suggested:

- a) to include the text "New Sensitive Area not yet reported under UWWTD" in the attribute "SWAssociatedProtectedArea/protectedAreaComment" and to ignore these errors, or
- b) Report the new sensitive area under the WFD using the Protected Area GML schema.

It is suggested to use (a) or (b). In any case, no double reporting of spatial data for sensitive areas is expected: the sensitive areas should be reported either under the 2022 reporting exercises under UWWTD or reporting 2022 under WFD. Both reporting exercises foresee to use the same GML ProtectedArea class so that the reporting of this information is standardised.

If the Member State applies a 'whole territory' approach for the Urban Waste Water Directive, it should not report protected areas under the WFD.

4.3. Drinking Water protected areas (Article 7 WFD)

Water bodies identified under WFD Article 7(1) are the only protected areas that are purely designated by WFD, i.e. there is no process to identify and designate these areas under other pieces of legislation, although they are relevant for drinking water supply. The Drinking Water Directive 98/83/EC refers in its Monitoring Annex II to supply zones: "*A supply zone is a geographically defined area within which water intended for human consumption comes from one or more sources and water quality may be considered as being approximately uniform*". Member States may exempt very small supplies <10m³/day or serving <50 persons. Drinking water supplies/supply zones under Directive 98/83/EC are defined for drinking water monitoring purposes referring to uniform quality, and are no geographical areas for which spatial data has to be reported.

Member States practice varies in the designation of Drinking Water protected areas:

- a) Some Member States follow literally WFD Article 7 and designate as protected areas the water bodies used for the abstraction of water intended for human consumption (and those intended for such future use). Therefore, there is no different spatial delineation of the protected areas: these are coincident with the WFD water bodies. Therefore, no additional reporting of spatial data for DW protected areas is expected in this case.
- b) Some Member States delineate the part of the water bodies which they consider are protected areas. The spatial extent of the protected areas can therefore be different, typically smaller than WFD water bodies. This is often the case in large groundwater bodies. In this case the Member State is required to report the spatial extent of the protected areas using the GML schema ProtectedArea. As described in the GIS

guidance and quoted above, the attribute 'zoneType' should be 'drinkingWaterProtectionArea'.

4.4. Fish protected areas

The Freshwater Fish Directive (2006/44/EC) was repealed by the WFD in 2013. The WFD Reporting Guidance recalls that *"according to the WFD, the level of protection should be maintained through the inclusion of the designated areas as Protected Areas under WFD"*. In addition, *"it is considered that the WFD objective of good ecological status integrates fully the objectives of the Fish Directive"*.

Some Member States maintain the transposing legislation in order to maintain the same level of protection, and still consider this an important element in the protection of water resources.

Spatial delineation of the protected areas under the Freshwater Fish Directive may or may not coincide with the delineation of the WFD water bodies. It is therefore possible to report the spatial extent of these protected areas in the GML schema ProtectedArea. As described in the GIS guidance and quoted above, the attribute 'zoneType' should be 'designatedArea' and the attribute 'specialisedZoneType' should be reported as 'freshwaterFishDesignatedWater'. The reporting of this information is optional.

4.5. Shellfish protected areas

The Shellfish Directive (2006/113/EC) was repealed by the WFD in 2013. As with the Freshwater Fish Directive, after the repeal, the WFD requires Member States to maintain the same level of protection. However, in the case of the Shellfish Directive, the WFD objective of good ecological status does not integrate fully the objectives of the Shellfish Directive. Indeed, *"microbiological standards are essential for the quality of shellfish water"*, and these are not part of the definition of ecological status. Therefore, *"it is requested to report if these standards have been set (or maintained from the shellfish water directive) and if they are met"* (WFD Reporting Guidance 2016).

Given that the Shellfish Directive is no longer in force and therefore there is no self-standing reporting mechanism to report the protected areas, it is required that the spatial extents of the protected areas are reported under the WFD using the GML schema ProtectedArea. As described in the GIS guidance and quoted above, the attribute 'zoneType' should be 'designatedArea' and the attribute 'specialisedZoneType' should be reported as 'shellfishDesignatedWater'.

4.6. Nitrates vulnerable zones

Directive 91/676/EC requires Member States to designate Nitrates vulnerable zones (NVZ), which are areas that drain into waters that are polluted by nutrients from agriculture or are at risk of pollution.

Member States may, instead of designating NVZ, opt to apply their nitrate action programme

throughout the entire territory. Austria, Denmark, Finland, Germany, Ireland, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Romania, Slovenia and the Region of Flanders have followed this approach. In the UK, this is also the case for Northern Ireland.

Reporting of Nitrate Vulnerable Zones is done under the Nitrates Directive 91/676/EEC reporting process (<http://rod.eionet.europa.eu/obligations/106>).

A European dataset and map is available from JRC (currently at <http://fate-gis.jrc.ec.europa.eu/geohub/MapView.aspx?id=2>² but likely to change shortly after the 2016

A European dataset and map is available from JRC (currently at <http://fate-gis.jrc.ec.europa.eu/geohub/MapView.aspx?id=2> but likely to change shortly after the 2016 reporting).

The definition of the reporting requirements for NVZs does not include a unique ID for each zone (<http://dd.eionet.europa.eu/tables/7762>). The attribute ZoneID is optional and the guidance does not provide a standardised syntax for the ID. Therefore, it is not possible to cross-check the IDs reported under the WFD for NVZs with the information reported under the Nitrates Directive.

For the period 2016 – 2019, a revised guidance was made available to the Member States beginning 2020. The database on the geographical information of Nitrate Vulnerable Zones is hosted by JRC. Templates have been developed by JRC based on the recommendations made in the Water Framework Directive³. For the period 2016-2019 Member States were expected to submit their reports by June 2020. Only five Member States respected this deadline. For 18 Member States and the United Kingdom missing or corrected information was submitted only in 2021. The complete set of information was only available to the Commission end of February 2021.

In the context of the WFD and Nitrates Directive reporting, the following guidance is provided:

- Member States should identify each NVZ with a unique EU code. This should be reported for each associated water body under the relevant WFD XML schemas SWAssociatedProtectedArea/euProtectedAreaCode or GWAssociatedProtectedArea/euProtectedAreaCode.
- The same code reported under the WFD should then be reported under the Nitrates Directive reporting in the spatial dataset. Specific guidance will be provided for the Nitrates Directive reporting in this respect.

If the Member State applies a 'whole territory' approach for the Nitrates Directive, it should not report protected areas under the WFD.

In any case, no reporting of spatial data for NVZs is expected under the WFD. Spatial data for NVZs should have been reported in the 2020 reporting exercise under the Nitrates Directive.

² This is expected to be public by September 2021

³ Common Implementation Strategy for the WFD (2000/60/EC); Guidance document n°9 'Implementing the GIS elements of the WFD (EC 2003 ISBN 92-894-5129-7)

4.7. Habitats and Birds Directives protected areas

Reporting of protected sites is done under the Habitats and Birds reporting processes for Natura 2000 sites (<http://rod.eionet.europa.eu/obligations/274> and <http://rod.eionet.europa.eu/obligations/616>). The information available is displayed in the Biodiversity Information System for Europe (BISE, see Natura 2000 viewer <http://natura2000.eea.europa.eu/>). Member States are expected to identify the water dependent protected areas associated with water bodies under the WFD schema classes SWAssociatedProtectedArea and GWAssociatedProtectedArea. This is done by reporting the Habitats and Birds Directive site code in the attribute euProtectedAreaCode. The WFD reporting process will automatically cross-check if the site ID is on the list of reported Natura 2000 areas. If this is not the case, the system will generate an error.

Where Member States identify water dependent protected areas among nationally designated areas, this can be indicated by reporting the CDDA SITE_CODE in the attribute euProtectedAreaCode. The WFD reporting process will automatically cross-check if the site ID is on the relevant EIONET's vocabulary. If this is not the case, the system will generate an error.

No reporting of spatial data regarding Natura 2000 or nationally designated (CDDA) protected areas is expected under the WFD.