RIVER BASIN MONITORING PLAN

# WATER FRAMEWORK DIRECTIVE 2ND CYCLE CLASSIFICATION SUMMARY

## 2015-2021

## Transitional Heavily Modified Water Body – Foyle Harbour and Faughan

31/05/2015

An Agency within the Department of the Environment
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| RIVER BASIN MANAGEMENT PLAN | | |
|---|---|---|
| Department of the Environment www.doeni.gov.uk Marine Environment Division | **WFD TRANSITIONAL WATER BODY CLASSIFICATION Foyle Harbour and Faughan** | |
| | **Version Date:** | 31/05/2015 |
| | **MONITORING & ASSESSMENT TEAM** | |

## FOYLE HARBOUR AND FAUGHAN (TRANSITIONAL WATER)

Water body Information

- River Basin District: NW
- Water body type: Transitional Water 2 (TW2)
- Water body code: UKGBNI5NW250040
- Water body characteristics: Partly mixed/stratified, mesotidal, sand and mud, mesohaline
- Water body area: 34.29 $km^2$
- Heavily Modified Water Body: Yes
- 2021 Classification Objective: Moderate Ecological Potential

| *2015 CLASSIFICATION* | **MODERATE ECOLOGICAL POTENTIAL** | *PASS/FAIL 2021 OBJECTIVE* | **PASS** |
|---|---|---|---|

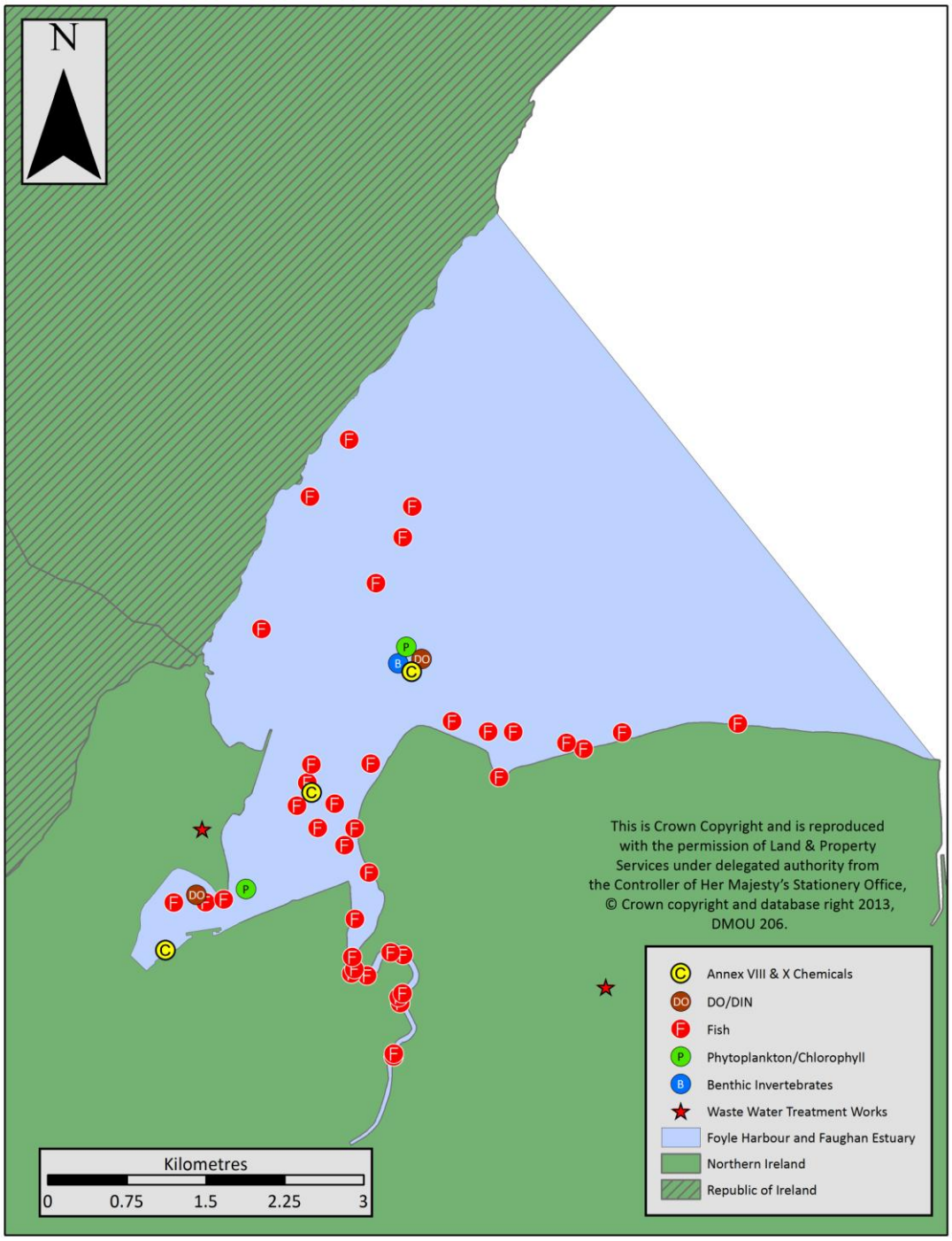


Figure 1: Waste water treatment pressures and monitoring points within Foyle Harbour and Faughan Estuary (Transitional Water).

Table 1: Parameters for which classification systems are available and have been used in the previous round of classification. Some biological assessment tools are not suitable for all water bodies due to habitat type.

| **Ecological Quality Element** | | | |
|---|---|---|---|
| ***Main Element*** | ***Sub-Element*** | ***Applied*** | ***Comment*** |
| **Phytoplankton** | **Chlorophyll Biomass Index** | ✓ | |
| | **Elevated Taxa Count Index** | ✓ | |
| **Benthic Invertebrates** | **Infaunal Quality Index** | ☒ | Tool Under Development: not signed off for transitional waters |
| **Fish** | **Estuarine Multimetric Fish Index** | ✓ | |
| **Physico-Chemical** | **General Conditions** | | |
| | **-***Dissolved Oxygen* | ✓ | |
| | *-Nutrients* | ✓ | |
| | **Specific Pollutants** (Annex VIII subs) | ✓ | |
| **Hydromorphological Quality Elements** | SEPA Rapid Designation | ✓ | |
| | TraC MIMAS | ✓ | |
| **Chemical Status** | | | |
| **Priority Hazardous Substances** (Annex X) | Annex X Substances | ✓ | |

Table 2: Sampling frequency for each quality element.

Monitoring Level: *Surveillance*

| Quality Elements | | Data years contributing to classification | No. of sites/samples |
|---|---|---|---|
| Phytoplankton | Chlorophyll Biomass Index | 2009-2013 | 3 sites<br>22 samples |
| | Elevated Taxa Count Index | 2011-2014 | 3 sites<br>15 samples |
| Fish | | 2014 | 38 samples |
| **Physio-chemical** | | | |
| Nutrients | | 2007-2014 | 7 sites<br>41 samples |
| Dissolved Oxygen | | 2006-2008, 2010, 2012-2015 | |
| Specific polluting substances (Annex VIII) | | 2010-2014 | |
| **Hydromorphology** | | 2007 | |
| **Water chemistry (Annex X)** | | | |
| Priority hazardous substances | | 2010-2014 | |

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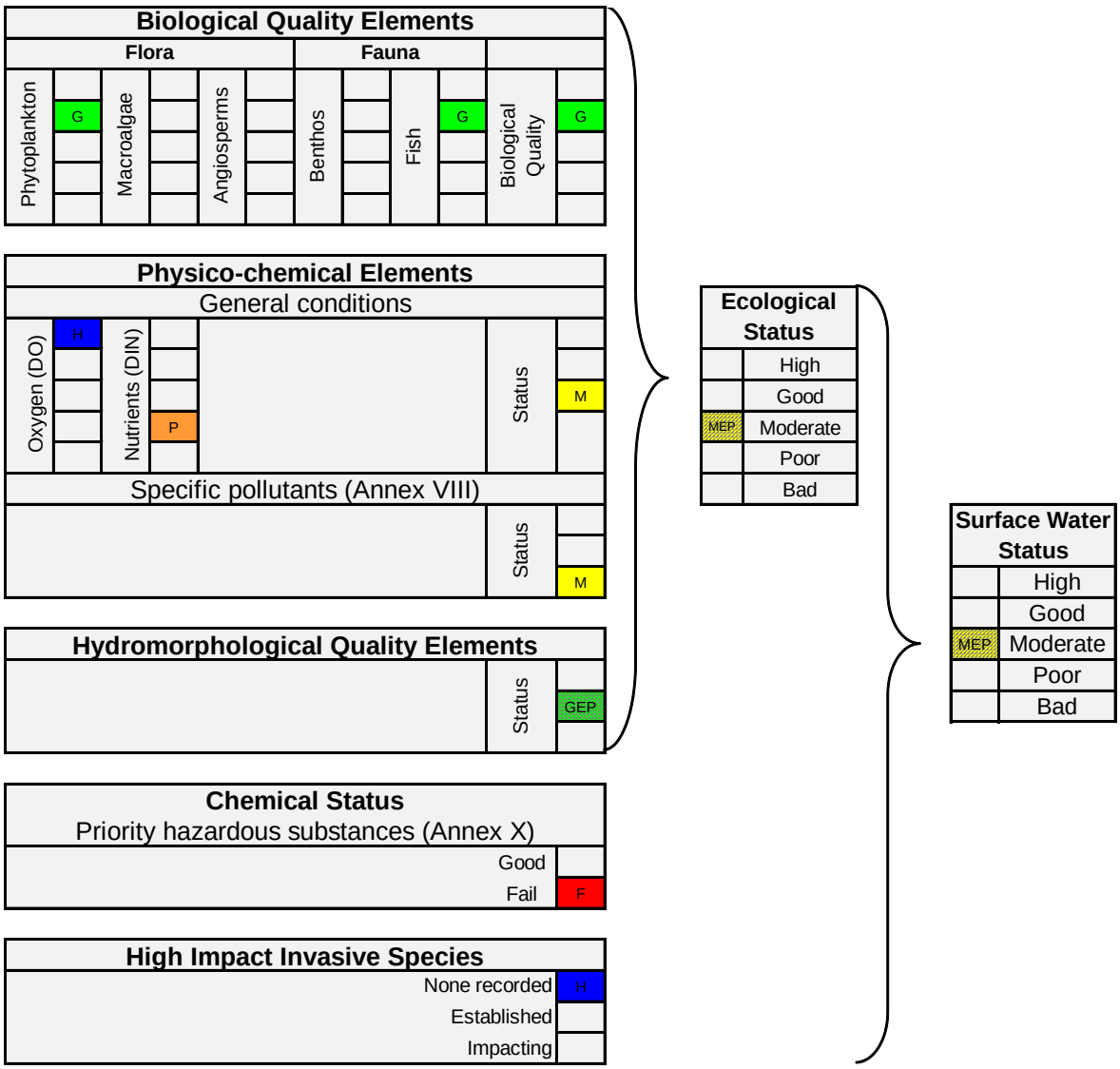


Figure 2: Overall classification of Foyle Harbour and Faughan (Transitional Water)

## ANNEX A: Classification of Biological Quality Elements

**QE: Phytoplankton**

| QE Phytoplankton assessment (+data confidence): | GOOD (47.7 %) | |
|---|---|---|

**Classification metrics:**

1. Chlorophyll biomass index (Transitional Waters)
2. Elevated taxa count index:

### *1. Chlorophyll Biomass Index*

**Data store (classification):**M:\Projects 14\Phycology 2014\MM14-14 Phytoplankton and Chlorophyll\classification 15\NEW WAtERBODIES\FAUGHAN AND HARBOUR).xls

M:\Projects 14\Phycology 2014\MM14-14 Phytoplankton and Chlorophyll\classification 15\NEW WAtERBODIES\FAUGHAN AND HARBOUR ELEVATED.XLS
**Data Availability (spot & continuous samples):** Spot samples –2009, - 2014 NIEA/MD

**Thresholds:**

| | | | | *EA Proposed Transitional Boundaries* | | |
|---|---|---|---|---|---|---|
| | | High | Good | Moderate | Poor | Bad |
| 10 (5 submetrics for each zone) (2 salinity zones present) 1-25psu & >25-35psu | Face Value (passes) | 9 | 7 | 5 | 3 | <3 |
| | EQR | 0.9 | 0.7 | 0.5 | 0.3 | 0 |
| 5 (only 1salinity zone present) | Face Value (passes) | 4 | 3 | 2 | 1 | 0 |
| | EQR | 0.8 | 0.6 | 0.4 | 0.2 | 0 |

**Results:**

| EQR | Status | Data Years | No. of Sites | No. of Samples | Data Confidence |
|---|---|---|---|---|---|
| 1.0 | HIGH | 2009-2013 | 3 | 22 | 42.1 % |

**Data confidence:**
Data analysed for Confidence of Class using CUTLASS

M:\Projects 14\Phycology 2014\MM14-14 Phytoplankton and Chlorophyll\classification 15\2015TW_Phytoplankton_CofC_tool_CUTLASS_v1.8_UKTAG.xls

Data Confidence for High status 42.1% but 42.2% for Good. The calculation of EQR is based on one salinity band only due to the removal of previous sites included in this new waterbody.

## *2. Elevated Taxa Count Index*

**Waterbody Elevated Taxa Assessment**

**Thresholds:**

| Tool | Thresholds | |
|---|---|---|
| | North/Irish Sea | Atlantic |
| $I_1$ - Individual Species Count% | 500,000 (cells $l^{-1}$) | |
| $I_2$– Total Taxa Count% | $10^6$ (cells $l^{-1}$) | |

**EQR Boundaries:**

| Class | % Exceedance | EQR |
|---|---|---|
| High | 0-15 | 0.67-1.0 |
| Good | 15-30 | 0.33-0.67 |
| Moderate | 30-40 | 0.28-0.33 |
| Poor | 40-50 | 0.20-0.33 |
| Bad | >50 | 0-0.20 |

**Results (% Exceedence):**

| $I_1$ | $I_2$ | EQR | Status | Data Years | No. of Julian months | No. of phytoplankton samples | Data confidence |
|---|---|---|---|---|---|---|---|
| 26.7% | 20.0% | 0.567 | Moderate | 2011-2014 | 14 | 15 | 66.4% |

3. **Combined Chlorophyll and Elevated Count Tool for Waterbody**

Good (47.7%)

**4. Presence of High impact Species: *None***

QE: Macroalgae – tool not applicable

QE Angiosperms – tool not applicable

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## QE: Benthic Invertebrates – Foyle and Faughan (HMWB)

| **QE benthic invertebrate assessment (+ Data confidence):** | **MODERATE TUD (LOW)** | |
|---|---|---|

**Classification tools:** 1. Infaunal Quality Index (IQI)

### *1. IQI (UKTAG v01 20140228)*

**Water body IQI assessment:** **Moderate TUD (Low)**

**WFD surveillance monitoring:**

- **Data store:** **..\Foyle and faughan water body (HMWB)\Foyle and faughen water body 08-13 fauna data 0_5mm.xlsx**
- **Benthic invertebrates** UNICORN (NMMT) Database
- **Supporting Parameters** Water Quality Data Set
- **Digital images** AMAP Project folder
- **Data Availability (classification):** 1 sites, 3 & 5 reps, 4 years, Day Grab, 0.5 mm sieve, n=18.

**Boundaries (Intercalibrated NEAGIG):**

| Class | Bad | Poor | Moderate | Good | High |
|---|---|---|---|---|---|
| **IQI** | >0.0 ≤0.24 | ≥0.24 <0.44 | ≥0.44 <0.64 | ≥0.64 <0.75 | ≥0.75 |

**Results:**

| Year | Survey | Station | n | Annual Mean | Annual ± S.D | Status |
|---|---|---|---|---|---|---|
| 2010 | MM-CSEG | Kild (3), | 3 | 0.50 | 0.01 | Moderate |
| 2011 | MM-CSEG | Kild (5) | 5 | 0.65 | 0.04 | Good |
| 2012 | MM-CSEG | Kild (5) | 5 | 0.74 | 0.03 | Good |
| 2013 | MM-CSEG | Kild (5) | 5 | 0.49 | 0.13 | Moderate |
| 2014 | MM-CSEG | Kild (5) | - | - | - | - |
| 2015 | MM-CSEG | Kild (5) | - | - | - | - |
| **Overall 6 year waterbody means** | | | **4.7** | **0.60 (0.54*)** | **0.06** | **Moderate (TUD)** |

TUD – Tool Under development: IQI not signed off for transitional waters.
* IQI derived from data averaged minus Standard Deviation (see issues with tools paper).
This figure is used for classification

**Data confidence**: **Low**

- Sample analysis QA'd through NMBAQC (Good)
- Database QA'd (Good)
- No specific WFD data (single point with reps)

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## QE: Transitional Fish

| **QE transitional fish assessment (+ Data confidence):** | **GOOD (100%)** | |
|---|---|---|

**Classification tools:** Estuarine Multi-metric Fish Index (EMFI)
**Data store:**

- **Fish**: ..\..\..\..\FISH\DATA\WFDClassification\EMFIclass\EMFIii2014TH\EMFI 2014 Analysis.xlsx
- **Supporting Parameters**: Chemistry

**Data Availability:**

- WFD surveillance monitoring 2005-2014; one survey in 2005, two surveys per annum from 2006 to 2011, one (autumn) survey in 2012, 2013 and 2014. Sampling methods include seine net, fyke net, and beam trawl.

**EQR boundaries:**

| | Bad | Poor | Moderate | Good | High |
|---|---|---|---|---|---|
| EQR | <0.10 | ≥0.10; < 0.35 | ≥0.35; <0.65 | ≥0.66; < 0.92 | ≥0.92 |

**Results:**
Estuarine Multi-metric Fish Index (EMFI) – 2014 data

| Metric Number | Metric | Score |
|---|---|---|
| 1 | Species richness | 5 |
| 2 | Number of introduced species | 2 |
| 3 | Species composition | 5 |
| 4 | Species abundance | 4 |
| 5 | Dominance | 3 |
| 6 | Number of diadromous species | 4 |
| 7 | Estuarine species richness | 5 |
| 8 | Marine migrant species richness | 5 |
| 9 | Estuarine species abundance | 5 |
| 10 | Marine migrant species abundance | 5 |
| 11 | Zoobenthivore species richness | 5 |
| 12 | Piscivore species richness | 4 |
| 13 | Zoobenthivore abundance | 3 |
| 14 | Piscivore abundance | 3 |
| | **EMFI** | 58 |
| | **EQR** | 0.79 |

**Fish cont'd**

Percent Confidence of Class (bias corrected bootstrap method)

| Bad | Poor | Moderate | Good | High |
|---|---|---|---|---|
| 0.0 | 0.0 | 0.4 | 99.6 | 0.0 |

**Data confidence: High**

- Survey methodologies and protocols (High)
- Realistic type-specific reference conditions (High)
- Data QA (High)
- Statistical testing and intercalibration (High)

## ANNEX B: Classification of physico-chemical Quality Elements: General

### QE: Dissolved Oxygen

| QE Dissolved oxygen (+ data confidence): | HIGH (M) | |
|---|---|---|

Classification tools: Comparison of 5% ile against reference standards.

- **Data Store:** ..\..\DO Classification 2012\Shortcut to DO FIELD VALUES 2006 -2010.lnk
- **Data Availability:** 2006-2008, 2010, 2012-15.
- **Data Source (spot & continuous samples):** Spot

**Thresholds:**

| WFD Status | Marine 5%ile | Objectives |
|---|---|---|
| HIGH | ≥5.7 mg/L | All life stages of salmonids and transitional fish |
| GOOD | ≥4.0 <5.7 mg/L | Presence of salmonids and transitional fish |
| MODERATE | ≥2.4 <4.0 mg/L | Most life stages of non-salmonid adults |
| POOR | ≥1.6 <2.4 mg/L | Presence of non-salmonids, poor survival of salmonids |
| BAD | <1.6 mg/L | No salmonids present, marginal survival of resident species |

**Results:**

| 5% ile DO (mg/L) | Status | Data years | Data Quality | No. of daily averages | Data Coverage (proportion of possible months with data*) |
|---|---|---|---|---|---|
| 6.39 | High | 2006-08, 2010, 2012-15 | ** | | |

* Proportion of possible months for which data are available

## QE: Nutrients – N regulation

| QE N regulation (+ Data confidence): | POOR (57%) | |
|---|---|---|

- **Data store:** **..\Transitional DIN 2015-2021.xls**
- **Data Availability:** 2007 to 2014
  DIN & salinity (Nov to Feb)
- **Data Availability (spot & continuous samples):** spot

**Thresholds:**

| Area | Salinity range | DIN (uM) Winter mean H/G | DIN (uM) Winter mean G/M | DIN (uM) Winter mean M/P |
|---|---|---|---|---|
| Transitional<br><br>(at salinity 25) | 5-25 | 20-30 | 30-45 | 45-67.5 |

**Results:**

| Mean Winter DIN (uM) (normalised to salinity 25) | Winter DIN<br><br>Daily average (n) | No. of samples (n) | No. of sites | Data Years | Data Quality | Status |
|---|---|---|---|---|---|---|
| 65.07* | | 41 | 7 | 2007 to 2014 | Database not yet QA'd | **POOR** |

*Average DIN used as $r^2$ value of regression model is less than 0.75

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## ANNEX C: Classification of physico-chemical quality elements: Other specific Pollutants

| **Specific pollutants assessment (+data confidence)** | **MODERATE** | |
|---|---|---|

**Classification tools**: Comparison with EQS levels.

**Data assessed for 2013 Update:**

**Specific Pollutants:**

| Suite | Parameter | Data Availability |
|---|---|---|
| Trace Metals | Chromium | CSEG 2012 |
| Trace Metals | Iron | CSEG 2012 |
| Trace Metals | Copper | CSEG 2012 |
| Trace Metals | Zinc | CSEG 2012 |
| Trace Metals | Arsenic | CSEG 2012 |
| Trace Organics (OPONS) | Dimethoate | DEC 2010 – JUN 2011 |
| Trace Organics (OPONS) | Diazinon | DEC 2010 – JUN 2011 |
| Trace Organics (OPONS) | Fenitrothion | DEC 2010 – JUN 2011 |
| Urea Herbicides | Linuron | AUG 2011 – JUN 2012 |
| Nutrients (Winter Nutrients) | Unionised Ammonia (at pH8) | WIN NUTS 2012-2013 |
| Candidate Specific pollutant | Glyphosate | JAN 2013 |

**Other Pollutants – DSD list 2 (with existing EQS):**

| Suite | Parameter | Data Availability |
|---|---|---|
| Trace Metals (DSD list 2) | Vanadium | CSEG 2012 |
| Trace Organics (OPONS) | Mevinphos | DEC 2010 – JUN 2011 |
| Trace Organics (OPONS) | Triazaphos* | DEC 2010 – JUN 2011 |
| Trace Organics (OPONS) | Dichlorvos | DEC 2010 – JUN 2011 |

Triazaphos* LOD above the EQS.

*Further data is available but cannot be used for classification until assessment of 2011 Culmore and Strabane WWTW trace organics monitoring data is completed.

**Link to Data, Assessment and EQSs**

**G:\MARINE\Water Framework Directive\WFD ANNUAL CLASSIFCATION UPDATE 2013\Chemistry**

**Data assessed for 2014 Update:**

| Suite | Parameter | Data Availability |
|---|---|---|
| Trace Metals | Chromium | CSEG 2013 |
| Trace Metals | Iron | CSEG 2013 |
| Trace Metals | Copper | CSEG 2013 |
| Trace Metals | Zinc | CSEG 2013 |
| Trace Metals | Arsenic | CSEG 2013 |

**Other Pollutants – DSD list 2 (with existing EQS):**

| Suite | Parameter | Data Availability |
|---|---|---|
| Trace Metals (DSD list 2) | Vanadium | CSEG 2013 |
| Trace Metals (DSD list 2) | Boron | CSEG 2013 |

No EQS failures

**Link to Data, Assessment and EQSs:**

**..\..\Data**

**Data assessed for 2015 Update:**

| Suite | Parameter | Data Availability |
|---|---|---|
| Trace Organics | Permethrin | June 2013 – June 2014 |
| Trace Organics | Cypermethrin | June 2013 – June 2014 |
| Trace Organics | Toluene | Nov 2013 – Sept 2014 |
| Trace Organics | Xylene | Nov 2013 – Sept 2014 |
| Trace Metals | Chromium | Sept 2014 – Dec 2014 |
| Trace Metals | Iron | Sept 2014 – Dec 2014 |
| Trace Metals | Copper | Sept 2014 – Dec 2014 |
| Trace Metals | Zinc | Sept 2014 – Dec 2014 |
| Trace Metals | Arsenic | Sept 2014 – Dec 2014 |

**Other Pollutants – DSD list 2 (with existing EQS):**

| Suite | Parameter | Data Availability |
|---|---|---|
| Trace Metals (DSD list 2) | Vanadium | Sept 2014 – Dec 2014 |
| | | |

**EQS failures:**

**Cypermethrin**

**Link to Data, Assessment and EQSs:**

**G:\MARINE\Water Framework Directive\WFD ANNUAL CLASSIFICATION UPDATE 2015\2015 QE sheets**

## ANNEX D: Hydromorphological quality elements

| Overall hydromorphology assessment | HMWB-GEP | |
|---|---|---|

**Classification tools:**

1. TRaC Hydromorphology metrics
2. MIMAS

**Alternative approach assessment (CIS guidance 2006):** Good Ecological Potential

## ANNEX E: Chemical Status

| Priority hazardous substances (+data confidence) | FAIL (L) | |
|---|---|---|

**Classification tools**: Comparison with EQS levels.

| | |
|---|---|
| Annex X: Overall Compliance | Fail |
| Annex X: Pass/Fail | Fail |

**Data Assessed for 2013 Update:**

| Suite | Parameter | Data Availability |
|---|---|---|
| Trace Metals | Nickel | CSEG 2012 |
| Trace Metals | Cadmium | CSEG 2012 |
| Trace Metals | Lead | CSEG 2012 |
| Trace Metals | Mercury | CSEG 2012 |
| Trace Organics (OPONS | Atrazine | DEC 2010 – JUN 2011 |
| Trace Organics (OPONS) | Chlorfenvinphos | DEC 2010 – JUN 2011 |
| Trace Organics (OPONS) | Chlorpyrifos | DEC 2010 – JUN 2011 |
| Trace Organics (OPONS) | Simazine | DEC 2010 – JUN 2011 |
| Urea Herbicides | Isoproturon | AUG 11 – JUN 12 |
| Urea Herbicides | Diuron | AUG 11 – JUN 12 |
| PAH | Anthracene | DEC 2010 – JUN 2011 |
| PAH | Fluoranthene | DEC 2010 – JUN 2011 |
| PAH | Naphthalene | DEC 2010 – JUN 2011 |
| PAH | Benzo (a) pyrene | DEC 2010 – JUN 2011 |
| PAH | *Benzo(b)fluoranthene | DEC 2010 – JUN 2011 |
| PAH | *Benzo(k)fluoranthene | DEC 2010 – JUN 2011 |
| PAH | *Benzo(g,h,i)perylene | DEC 2010 – JUN 2011 |
| PAH | *Indeno(1,2,3 cd) pyrene | DEC 2010 – JUN 2011 |

*AA - EQS = Sum of Benzo(b)fluoranthene and Benzo(k)fluoranthene = 0.03ug/l (No Marine MAC – EQS)
*AA - EQS = Sum of Benzo(g,h,i)perylene and Indeno(1,2,3 cd) pyrene = 0.002ug/l (No Marine MAC – EQS)

**EQS Failures:**

AA – EQS failure for the sum of Benzo(g,h,i)perylene and Indeno(1,2,3 cd) pyrene.
**Calculated mean = 0.0023 ug/l**

There is low confidence as the EQS is an annual average and the mean is calculated with only 3 months of monitoring data (Dec 10, Jan 11 and Jun 11).
There is no marine maximum allowable concentration (MAC) for comparison.

**Link to Data, Assessment and EQSs**

**G:\MARINE\Water Framework Directive\WFD ANNUAL CLASSIFCATION UPDATE 2013\Chemistry**

**Data Assessed for 2014 Update:**

| Suite | Parameter | Data Availability |
|---|---|---|
| Trace Metals | Nickel | CSEG 2013 |
| Trace Metals | Cadmium | CSEG 2013 |
| Trace Metals | Lead | CSEG 2013 |
| Trace Metals | Mercury | CSEG 2013 |

**No EQS failures**

**Link to Data, Assessment and EQSs**

**..\..\Data**

**Data Assessed for 2015 Update:**

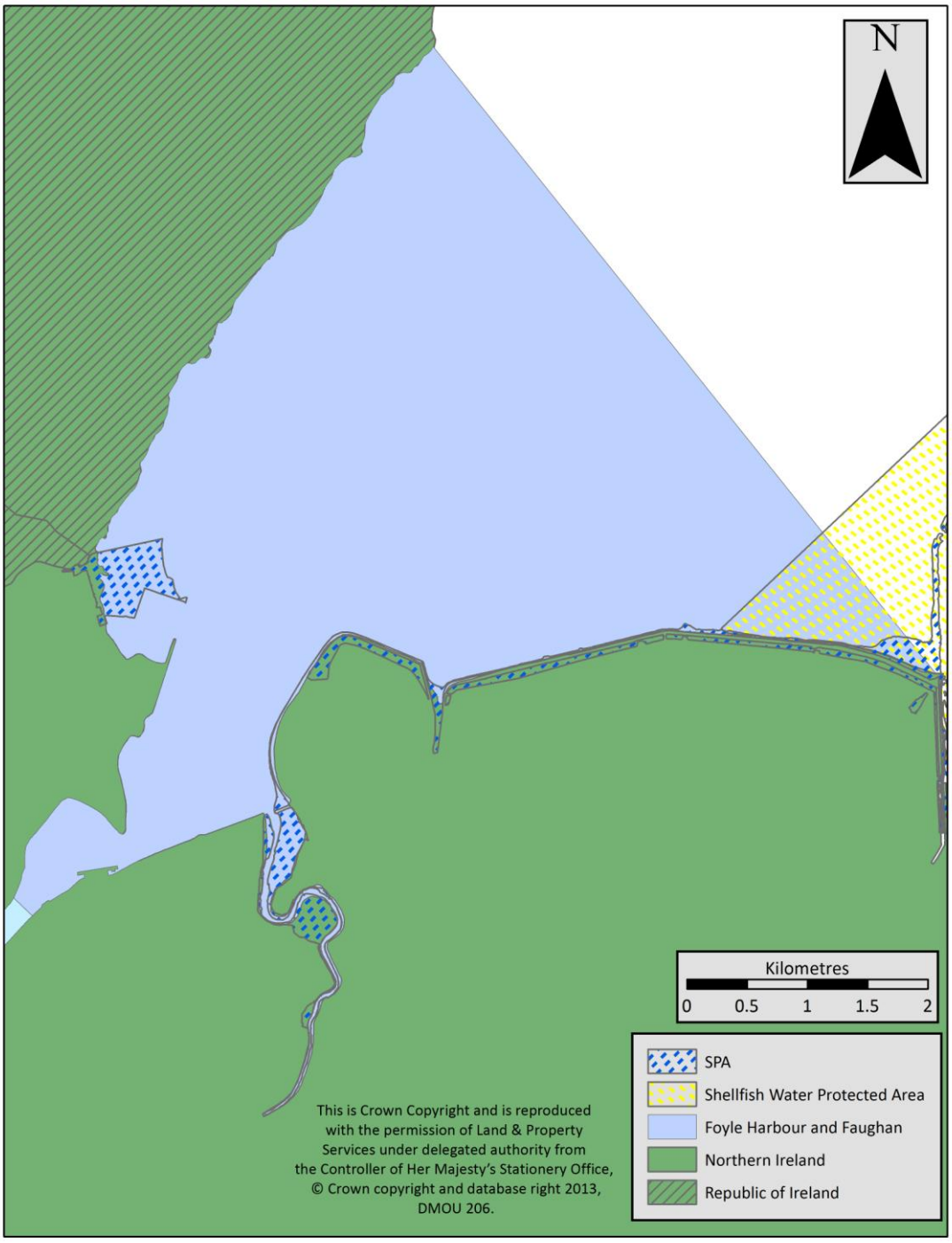
| Suite | Parameter | Data Availability |
|---|---|---|
| Trace Metals | Nickel | Sep 2014 – Dec 2014 |
| Trace Metals | Cadmium | Sep 2014 – Dec 2014 |
| Trace Metals | Lead | Sep 2014 – Dec 2014 |
| Trace Metals | Mercury | Sep 2014 – Dec 2014 |
| Trace Organics | Benzene | Nov 2013 – Sept 2014 |
| Trace Organics | Nonylphenol | April 2014 – Dec 2014 |
| Trace Organics | Octylphenol | April 2014 – Dec 2014 |

**No EQS failures**

**Link to Data, Assessment and EQSs**

**G:\MARINE\Water Framework Directive\WFD ANNUAL CLASSIFICATION UPDATE 2015\2015 QE sheets**

## ANNEX F: Protected Areas




Protected areas within Foyle Harbour and Faughan Estuary (Transitional Water).

The following Protected Areas are situated either wholly or partly within the Foyle Harbour and Faughan water body:

**Natura 2000 sites (Habitats Directive and Birds Directive):**

| Site Name | 2014 Condition Status | Designated Water Dependant habitat/species | Feature(s) not meeting objective | Reason for not meeting objective |
|---|---|---|---|---|
| Lough Foyle SPA | Unfavourable | Bar tailed godwit; Whooper swan; Light bellied brent goose; water bird assemblage | | |

**Shellfish Water Protected Areas:**

| Shellfish Water Protected Area | Met Guideline Microbiological Standard* in 2014 |
|---|---|
| Longfield Bank | No (n=22) |

*75% of samples contain ≤230 *E. coli* /100ml of shellfish flesh and intervalvular liquid

## ANNEX G: High Impact Invasive Species

| QE High Impact Invasive Species assessment | | HIGH |
|---|---|---|

**Ecoregion 17 Marine High Impact Invasive Species List**

| Phylum | Species | P | E | I | Record |
|---|---|---|---|---|---|
| *Chordata* | *Didemnum* spp. | | | | |
| *Chordata* | *Styela clava* | | | | |
| *Crustacea* | *Eriocheir sinensis* | | | | |
| *Mollusca* | *Crassostrea gigas* | | | | |
| *Mollusca* | *Crepidula fornicata* | | | | |
| *Phaeophyceae* | *Sargassum muticum* | | | | |
| *Angiosperms* | *Spartina anglica* | | | | |

P= Present; E= Established; I= Impacting

NB Established populations of high impact species automatically downgrade overall surface water classification from ‘high’ to ‘good’.

Record should be inputted as follows. PO= personal observation outside of surveys; W= WFD survey; M= museum / institute records.

## Glossary

| | |
|---|---|
| **AFBI** | Agri-Food and Biosciences Institute (under contract to NIEA) |
| **AMBI** | AZTI Marine Biotic Index |
| **Annex 10** | Annex 10 Priority Hazardous Substances |
| **Annex 8** | Annex 8 Specific Pollutants |
| **Article 5** | Characterisation, typology, pressures and impacts analysis |
| **ASSI** | Area of Special Scientific Interest |
| **CIS** | Common Implementation Strategy |
| **DIN** | Dissolved Inorganic Nitrogen |
| **DO** | Dissolved Oxygen |
| **EQR** | Ecological Quality Ratio |
| **EQS** | Ecological Quality Status |
| **EUNIS** | European Nature Information System |
| **FSL** | Full Species List |
| **GEP** | Good Ecological Potential |
| **$_{G}$H** | Good/High |
| **H/G/M/P/B** | High/Good/Moderate/Poor/Bad (Classification Status) |
| **H/M/L** | High/Medium/Low (Confidence) |
| **HMWB** | Heavily Modified Water Body |
| **IQI** | Infaunal Quality Index |
| **IRBD** | International River Basin District |
| **LOD** | Limit of Detection |
| **MBT** | Macroalgal Blooming Tool |
| **MEP** | Moderate Ecological Potential |
| **NB** | Neagh Bann |
| **ND** | No data |
| **NE** | North Eastern |
| **NEAGIG** | North Eastern Atlantic Geographical Intercalibration Group |
| **NIEA** | Northern Ireland Environment Agency |
| **N-regs** | Nitrogen Regulation |
| **NVZ** | Nitrate Vulnerable Zone |
| **NW** | North Western |
| **Physico-chem** | Physical and chemical monitoring |
| **RSL** | Reduced Species List |
| **SAC** | Special Area of Conservation |
| **SEPA** | Scottish Environment Protection Agency |
| **SPA** | Special Protected Area |
| **TNA** | Tool Not Applicable |
| **TraC MImAS** | Transitional and Coastal Morphology Impact Assessment System |
| **TUD** | Tool Under Development |
| **UKAS** | United Kingdom Accreditation Service |
| **UKTAG** | United Kingdom Technical Advisory Group for Water Framework Directive |
| **UNICORN** | Database for marine organisms. |
| **UWWTD** | Urban Waste Water Treatment Directive (91/271/EEC) |
| **VDSI** | Vas Deferens Sequence Index |
| **WFD** | Water Framework Directive |