

draft RIVER BASIN MONITORING PLAN

# CLASSIFICATION PAMPHLET

## Coastal Waterbody Dundrum Bay - Inner

22<sup>nd</sup> December 2008

## DUNDRUM BAY INNER

### Water body Information

- River Basin District: NE
- Water body type: CW8
- Water body characteristics: Euhaline, mesotidal, sheltered
- Water body area: 3.92 km<sup>2</sup>
- Heavily Modified Water Body: No

**OVERALL WATERBODY CLASSIFICATION (H/G/M/P/B): GOOD  
(PASS/FAIL): PASS**

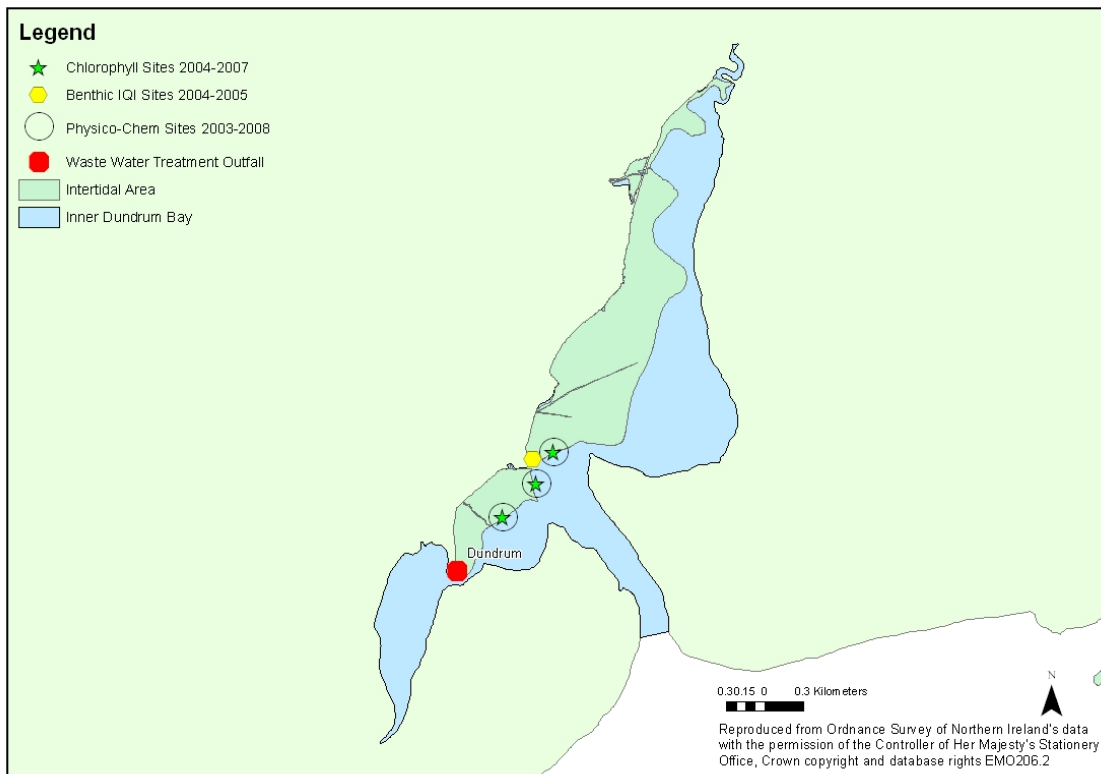


Figure showing pressures and monitoring points within Dundrum Bay Inner (Coastal Water).

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Dundrum Bay

Version Date: 22/12/08

MARINE ASSESSMENT AND LICENSING TEAM

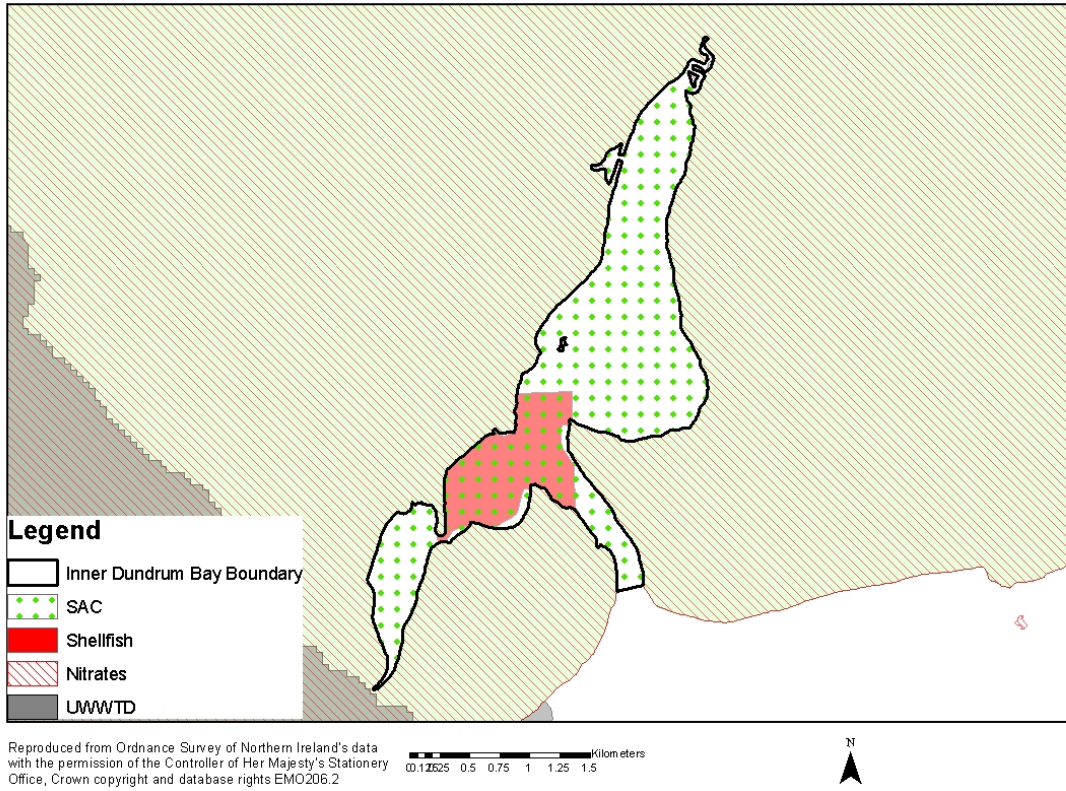



Figure illustrating protected areas within Dundrum Bay Inner (Coastal Water).

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**PARAMETERS TABLE**

(Parameters for which classification systems are available and have been used in the first round of classification. Note: for some parameters data is not yet available hence the tools have not been applied)

| <b>Ecological Quality Element</b>              |  |                                     |                     |
|--|--|-------------------------------------|---------------------|
| <b>Main Element</b>                            | <b>Sub-Element</b>                     | <b>Applied</b>                      | <b>Comment</b>      |
| <b>Plants</b>                                  | Macro Algae                            | <input checked="" type="checkbox"/> |                     |
|  | -Opportunistic Macroalgae              | <input checked="" type="checkbox"/> |                     |
|  | -Reduced Species List                  | <input checked="" type="checkbox"/> | Tool Not Applicable |
|  | Angiosperms                            | <input checked="" type="checkbox"/> |                     |
|  | Phytoplankton                          | <input checked="" type="checkbox"/> |                     |
| <b>Benthic Invertebrates</b>                   | Infaunal Quality Index                 | <input checked="" type="checkbox"/> |                     |
|  | Imposex                                | <input checked="" type="checkbox"/> | Tool Not Applicable |
| <b>Fish</b>                                    | Transitional Fish Classification Index |                                     |                     |
| <b>Physico-Chemical</b>                        | General Conditions                     | <input checked="" type="checkbox"/> |                     |
|  | -Dissolved Oxygen                      | <input checked="" type="checkbox"/> |                     |
|  | -Nutrients                             | <input checked="" type="checkbox"/> |                     |
|  | Specific Pollutants ( Annex VIII subs) | <input checked="" type="checkbox"/> |                     |
| <b>Hydromorphological Quality Elements</b>     | SEPA Rapid Designation                 | <input checked="" type="checkbox"/> |                     |
|  | TraC MIMAS                             | <input checked="" type="checkbox"/> |                     |
| <b>Chemical Status</b>                         |  |                                     |                     |
| <b>Priority Hazardous Substances (Annex X)</b> | Annex X Substances                     | <input checked="" type="checkbox"/> |                     |

**Waterbody Classification**

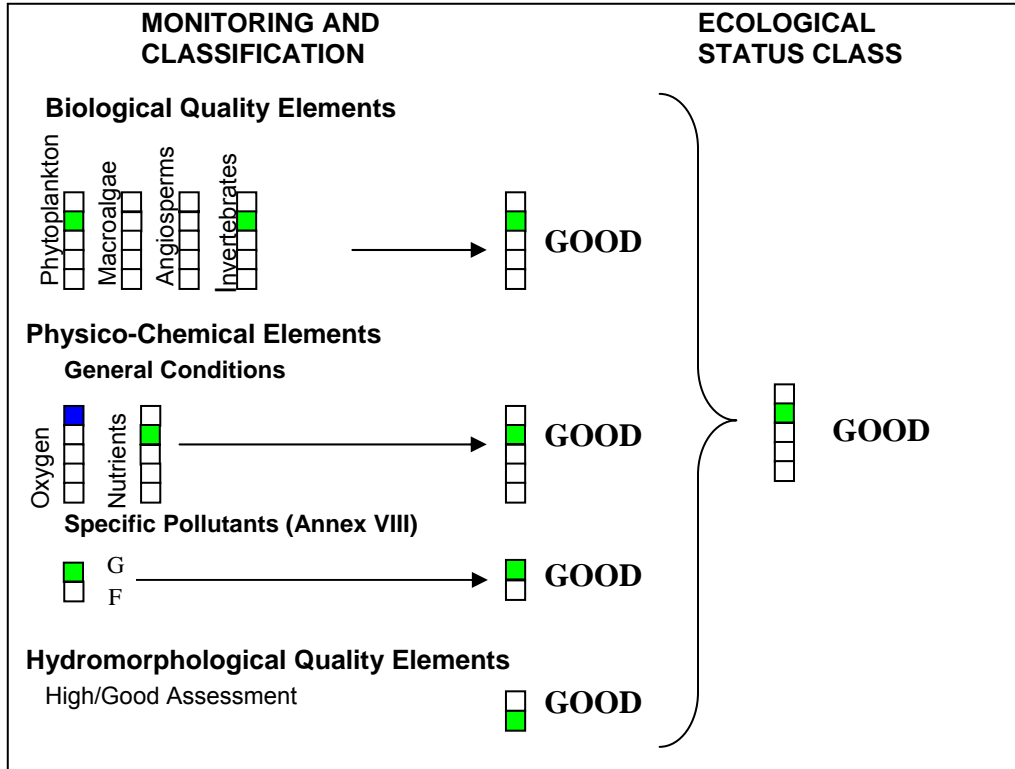


Figure showing ecological classification of Dundrum Bay Inner (Coastal Water)

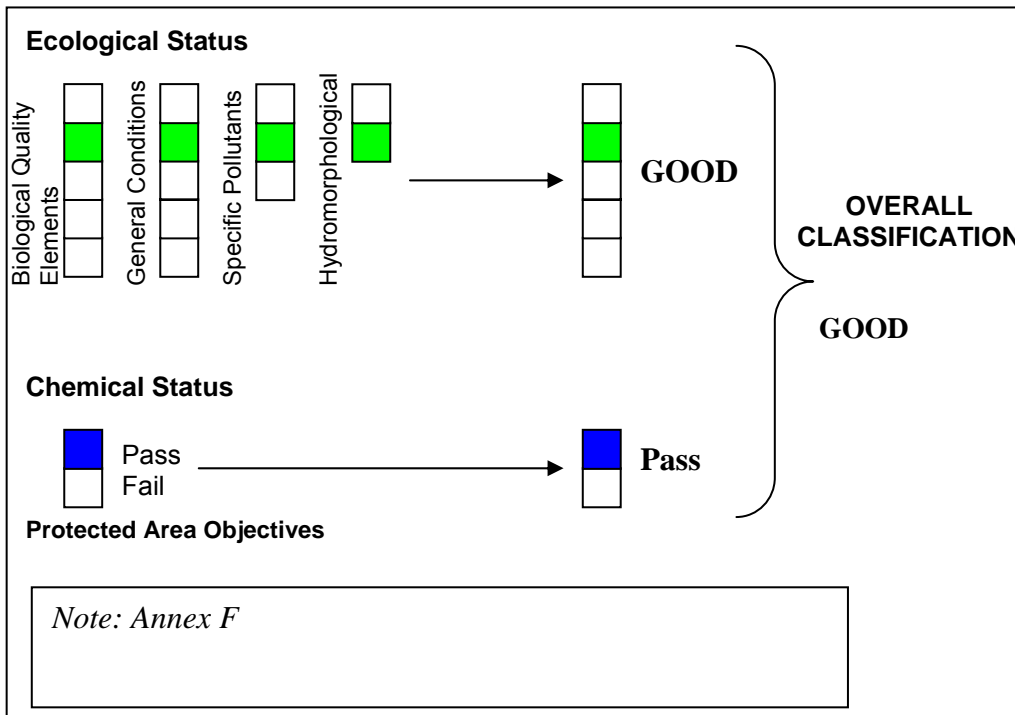


Figure showing overall classification of Dundrum Bay Inner (Coastal Water)

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**WFD COASTAL WATER BODY CLASSIFICATION  
Dundrum Bay**

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**MARINE ASSESSMENT AND LICENSING TEAM**

First River Basin Cycle (2004 – 2009)


Monitoring Level:

Surveillance

Sampling frequency for each quality element

| Quality Elements                           | Surveillance              |                        |                          |
|--|---------------------------|------------------------|--------------------------|
|  | Year<br>(if 1 in 3 yrs)   | Frequency<br>(if p.a.) | No. of<br>sites          |
| <b>Biological</b>                          |                           |                        |                          |
| Phytoplankton                              | 2004-7                    |                        | 24<br>samples<br>3 sites |
| Macroalgae                                 | Opportunistic             | ND                     |                          |
|  |                           |                        |                          |
| Angiosperms                                | Seagrass                  | ND                     |                          |
|  |                           |                        |                          |
| Benthic<br>Invertebrates                   | Infaunal Quality<br>Index | 2004-5                 | 1<br><br>1               |
| <b>Physico-chemical</b>                    |                           |                        |                          |
| Nutrients                                  | 2003-2005                 |                        | 9 samples<br>3 sites     |
| Salinity                                   | 2003-2005                 |                        |                          |
| Temperature                                | 2003-2005                 |                        |                          |
| Dissolved Oxygen (DO)                      | 2002-8                    |                        | 3                        |
| Suspended particulate matter (SPM)         |                           |                        |                          |
| Light (Kd)                                 |                           |                        |                          |
| Other polluting substances (Annex<br>VIII) | 2002-6                    | 3                      | 3                        |
| <b>Hydromorphology</b>                     |                           |                        |                          |
| <b>Water chemistry</b>                     |                           |                        |                          |
| (Annex X)                                  | 2002-6                    | 3                      | 3                        |



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## ANNEX A: Classification of Biological Quality Elements

### DUNDRUM BAY INNER

#### QE: Phytoplankton

**QE phytoplankton assessment (+ Data confidence): GOOD (L)**

Classification tools:

First round reporting now

1. Chlorophyll biomass index (90%ile)
2. Elevated taxa count index

- Data store (classification): MARINE\Water Framework Directive\DRAFT WFD CLASSIFICATION REPORTS\QE Phytoplankton\Chlla 90th Percentile\Final 90th PercentilePhytoplankton-
- Data Availability (spot & continuous samples): Phytoplankton = Chl = spot (2004-2007) NIEA

1. Chlorophyll Biomass Index - 90%ile (Chl  $\mu\text{g l}^{-1}$ )  
(Growing Season 1<sup>st</sup> Mar – 30<sup>th</sup> Sept)

Waterbody Chl. biomass assessment

GOOD (L)

Thresholds:

| Water Ref. Area |                          | Status |         |          |         |         |
|-----------------|--------------------------|--------|---------|----------|---------|---------|
|                 |                          | High   | Good    | Moderate | Poor    | Bad     |
| North/Irish Sea | Chl $\mu\text{g l}^{-1}$ | <5     | 5-10    | 10-15    | 15-20   | >20     |
|                 | EQR                      | 0 -1.0 | 1.0-0.8 | 0.8-0.6  | 0.6-0.4 | 0.4-0.2 |

Results:


| 90%ile | Status | Data Years | Data Quality | No. of daily averages | No. of Sites | No. of Samples | Data Confidence (proportion of possible months with data*) |
|--------|--------|------------|--------------|-----------------------|--------------|----------------|--|
| 6.86   | GOOD   | 2004-2007  | Low          | 8                     | 3            | 24             | 28.57%   |

\* proportion of possible months (of growing season in years assessed) for which data are available

Data confidence:

Low

- The proportion of possible months sampled and the number of spatial samples collected yielded a low confidence in data confidence. The data collected was for Shellfish Waters Legislation.

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## 2. Elevated Taxa Count Index

### Waterbody Elevated Taxa Assessment

- Thresholds:

| Tool  | Thresholds                               |                          |
|---|--|--------------------------|
|   | North/Irish Sea                          | Atlantic                 |
| I <sub>1</sub> - Individual Species Count (excl. Phaeocystis) (%) | 250,000 (cells l <sup>-1</sup> )         |                          |
| I <sub>2</sub> - Phaeocystis Counts (%)                           | 10 <sup>6</sup> (cells l <sup>-1</sup> ) |                          |
| I <sub>3</sub> - Total Taxa Count (%)                             | 10 <sup>7</sup> (cells l <sup>-1</sup> ) |                          |
| I <sub>4</sub> - Elevated Biomass Count (%)                       | >10 (µg l <sup>-1</sup> )                | >5 (µg l <sup>-1</sup> ) |

Waterbody Elevated count (%) = [I<sub>1</sub> (%) + I<sub>2</sub> (%) + I<sub>3</sub> (%) + I<sub>4</sub> (%) ] / 4

- 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

| I <sub>1</sub> | I <sub>2</sub> | I <sub>3</sub> | I <sub>4</sub> | Elevated Count Mean | Status | Data Years | No. of sampling occasions | No. of phytoplankton samples |
|----------------|----------------|----------------|----------------|---------------------|--------|------------|---------------------------|------------------------------|
|                |                |                |                |                     |        |            |                           |                              |

Data confidence: NO DATA



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### QE: Angiosperms – Dundrum Bay Inner

QE Angiosperm assessment: GOOD (ND)

Classification Tools: 1. Seagrass A. Taxonomic composition  
B. Shoot density  
C. Bed spatial extent

(Saltmarsh – monitored but no classification tool established for first round)

1. Seagrass

Overall Seagrass assessment: GOOD (ND)

- **WFD surveillance monitoring:**
- Data store: No data
- Data Availability (classification): No data
- **EQR Boundaries:**


| Status   | Mean Score Ranges |
|----------|-------------------|
| High     | 0.8-1.0           |
| Good     | 0.6-0.79          |
| Moderate | 0.4-0.59          |
| Poor     | 0.2-0.39          |
| Bad      | 0.0-0.19          |

#### Sub-Metric Boundaries:

##### A. Taxonomic composition

| Disturbance                 | Change in taxonomic composition | Metric score (mid-point of EQR range) |
|-----------------------------|---------------------------------|---------------------------------------|
| No detectable change        | All taxa present                | 0.9                                   |
| Slight signs of disturbance | Loss of 1/4 to 1/3 of species   | 0.7                                   |
| Moderate distortions        | Loss of 1/2 of species          | 0.5                                   |
| Major distortions           | Loss of 2/3 to 3/4 of species   | 0.3                                   |
| Severe distortions          | Loss of all species             | 0.1                                   |



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**QE: Benthic Invertebrates – Dundrum Inner**

**Overall benthic invertebrate assessment: GOOD (L)**

**Classification tools:** Infaunal Quality Index (IQI), Imposex –tool not applicable

1. *IQI (v4)*

Water body IQI assessment: The EUNIS benthic sediment classification is outside the limits for the IQI tool.

- WFD surveillance monitoring:
- Data store:
  - Benthic invertebrates: UNICORN (NMMT) Database
  - Supporting Parameters: Particle Size Analysis (PSA), Water Quality Data Set
  - Digital images: AMAP Project folder
- Data Availability (classification): 2 years, 1 sites (5 reps), Day grab (0.1m<sup>2</sup>), 1mm mesh
- Habitat max values (sub-tidal mud): 1-(AMBI/7) = 0.78, 1-Lambda' = 0.72, Taxa = 24

Boundaries (Intercalibrated NEAGIG):

| Classes    | Bad        | Poor           | Moderate       | Good           | High  |
|------------|------------|----------------|----------------|----------------|-------|
| <b>IQI</b> | >0.0 ≤0.24 | ≥0.24<br><0.44 | ≥0.44<br><0.64 | ≥0.64<br><0.75 | ≥0.75 |

Results


| Year                | Survey | Station | n | Mean        | ± S.D | Status      |
|---------------------|--------|---------|---|-------------|-------|-------------|
| 2004                |        | DB1     | 5 | 0.70        | 0.07  | GOOD        |
| 2005                |        | DB1     | 5 | 0.70        | 0.03  | GOOD        |
| <b>Overall Mean</b> |        |         |   | <b>0.70</b> |       | <b>GOOD</b> |

Data confidence:

Low

Alien taxa present:

|   |             |
|---|-------------|
| <i>Eriocheir sinensis</i> (Chinese mitten crab) | Not present |
| <i>Crepidula fornicata</i> (Slipper limpet)     | Not present |
|   |             |
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## ANNEX B: Classification of physico-chemical Quality Elements: General

### Dissolved Oxygen

|                                 |                 |
|---------------------------------|-----------------|
| <b>Waterbody DO assessment:</b> | <b>HIGH (H)</b> |
|---------------------------------|-----------------|

Classification tools: Comparison of 5% ile against reference standards

- Data store: \\marine on ehslis2k \Water Framework Directive\DRAFT WFD CLASSIFICATION REPORTS\Dissolved Oxygen
- Data Availability: 2002 to 2008
- Data Availability (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*) |
|------------------|--------|------------|--------------|-----------------------|--|
| 7.03             | HIGH   | 02 to 08   | **           | 19                    | 24.7%  |

\* Proportion of possible months for which data are available

\*\*Data Quality

- Instruments subject to regular calibration checks and quality assurance programme, but databases not QA'd.
- HIGH = 11 (daily averages) x n (no. of assessment years in reporting cycle)

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## Nutrients – Winter DIN

### Winter DIN assessment

**Good (L)**

- Data store:  
\\marine on ehslis2k \Water Framework Directive\Nuala-Lesley Nutrients\DIN for Classification\Coastal Water
- Data Availability: 2003 to 2005, DIN & salinity (November to February)
- Data Availability (spot & continuous samples):  
spot
- N regulation thresholds:

| Area                        | Salinity range | DIN (uM) Winter mean H/G | DIN (uM) Winter mean G/M | DIN (uM) Winter mean M/P | DIN (uM) Winter mean P/B |
|-----------------------------|----------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Coastal<br>(at salinity 32) | 30-34.5        | 12-18                    | 18-30                    | 30-40.5                  | >40.5                    |

### Results:

| Mean Winter DIN (uM) (normalised to salinity 32) | Winter DIN Daily average (n) | No. of samples (n) | No. of sites | Data Years  | Data Quality          | Status |
|--|------------------------------|--------------------|--------------|-------------|-----------------------|--------|
| 13.08  | 3                            | 9                  | 3            | 2003 - 2005 | Database not yet QA'd | Good   |

### Data confidence:

Low

- Database not QA'd.

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**ANNEX C: Classification of physico-chemical quality elements: Specific Pollutants (Annex VIII)**

**Overall specific pollutants assessment** **PASS (L)**

Annex VIII: Overall Compliance Pass

Annex VIII: Pass/Fail Pass

Classification tools: Comparison with EQS levels

Data Availability: 2002-2006 Shellfish Waters Monitoring.

Data confidence: Low until 2008 data incorporated.

**Dundrum Bay**

| ANNEX VIII     | Value |       |       |      |      | EQS ug/l | Ecological Status |
|----------------|-------|-------|-------|------|------|----------|-------------------|
|                | 2002  | 2003  | 2004  | 2005 | 2006 |          |                   |
| 111_tri        | ND    | ND    | ND    | ND   | ND   |          |                   |
| 112_tri        | ND    | ND    | ND    | ND   | ND   |          |                   |
| 24_D           | ND    | ND    | ND    | ND   | ND   |          |                   |
| 2_chloro       | ND    | ND    | ND    | ND   | ND   |          |                   |
| 4_chloro_3     | ND    | ND    | ND    | ND   | ND   |          |                   |
| ammonia        | ND    | ND    | ND    | 0.74 | 0.99 | 21       | GH                |
| As             | 1.017 | 1.195 | 1.283 | 1.12 | ND   | 25       | GH                |
| Bentazone      | ND    | ND    | ND    | ND   | ND   |          |                   |
| biphenyl       | ND    | ND    | ND    | ND   | ND   |          |                   |
| boron          | ND    | ND    | ND    | ND   | ND   |          |                   |
| chlorine       | ND    | ND    | ND    | ND   | ND   |          |                   |
| chloronit      | ND    | ND    | ND    | ND   | ND   |          |                   |
| chloronit_calc | ND    | ND    | ND    | ND   | ND   |          |                   |
| Cr             | ND    | ND    | ND    | ND   | 0.1  | 0.6      | GH                |
| Cu             | 1.073 | 1.726 | 0.552 | 0.46 | 1.28 | 5        | GH                |
| Cy             | ND    | ND    | ND    | ND   | ND   |          |                   |
| Cyfluthrin     | ND    | ND    | ND    | ND   | ND   |          |                   |
| cyper          | ND    | ND    | ND    | ND   | ND   |          |                   |
| diazinon       | ND    | ND    | ND    | ND   | ND   |          |                   |
| dichlorvos     | ND    | ND    | ND    | ND   | ND   |          |                   |

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|              |  |       |       |          |          |                             |    |
|--------------|--|-------|-------|----------|----------|-----------------------------|----|
| dimethoate   | ND   | ND    | ND    | ND       | ND       |                             |    |
| fenitrothion | ND   | ND    | ND    | ND       | ND       |                             |    |
| Fe           | ND   | ND    | ND    | ND       | ND       |                             |    |
| linuron      | ND   | ND    | ND    | ND       | ND       |                             |    |
| malathion    | ND   | ND    | ND    | ND       | ND       |                             |    |
| Mn           | ND   | ND    | ND    | ND       | ND       |                             |    |
| mecoprop     | ND   | ND    | ND    | ND       | ND       |                             |    |
| permethrin   | ND   | ND    | ND    | ND       | ND       |                             |    |
| phenol       | ND   | ND    | ND    | ND       | ND       |                             |    |
| toluene      | ND   | ND    | ND    | ND       | ND       |                             |    |
| Vn           | ND   | ND    | ND    | ND       | ND       |                             |    |
| xylenes      | ND   | ND    | ND    | ND       | ND       |                             |    |
| Zn           | 3.061  | 5.383 | 1.352 | 0.9<br>6 | 3.5<br>3 | 40                          | GH |
| <b>G</b>     | Good   |       |       |          |          | Mean includes LOD data      |    |
| <b>F</b>     | Fail   |       |       |          |          | Mean based on actual values |    |
| <b>GH</b>    | Good or better and is normally treated as high |       |       |          |          |                             |    |
| <b>M</b>     | Moderate                                       |       |       |          |          |                             |    |


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## ANNEX D: Hydromorphological quality elements

|  |             |
|--|-------------|
| <b>Overall hydromorphology assessment:</b> | <b>Good</b> |
|--|-------------|

### Classification tools:

1. TRaC Hydromorphology metrics
2. MIMAS

|   |  |                      |          |
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**ANNEX E: Chemical Status – Annex X Chemicals**

|  |                 |
|--|-----------------|
| <b>Overall water chemistry assessment:</b> | <b>PASS (L)</b> |
|--|-----------------|

|                                    |      |
|------------------------------------|------|
| <b>Annex X: Overall Compliance</b> | PASS |
| <b>Annex X: Pass/Fail</b>          | PASS |

**Classification tools:**            1. Comparison with EQS levels

**Data availability:** 2002-2006 Shellfish Waters Monitoring.

**Data confidence:**    Low until 2008 data incorporated.

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Dundrum Bay

| ANNEX X          | Value  |        |        |        |        | EQS   | Chemical Status | Ecological Status |
|------------------|--------|--------|--------|--------|--------|-------|-----------------|-------------------|
|                  | 2002   | 2003   | 2004   | 2005   | 2006   |       |                 |                   |
| 12 Dichloro      | ND     | ND     | ND     | ND     | ND     |       |                 |                   |
| anthracene       | ND     | ND     | ND     | ND     | ND     |       |                 |                   |
| atrazine         | ND     | ND     | ND     | ND     | ND     |       |                 |                   |
| benzene          | ND     | ND     | ND     | ND     | ND     |       |                 |                   |
| benzo            | ND     | ND     | ND     | ND     | ND     |       |                 |                   |
| benzo a          | ND     | ND     | ND     | ND     | ND     |       |                 |                   |
| Cadmium          | 0.0346 | 0.1614 | 0.0715 | 0.021  | 0.024  | 0.2   | G               | GH                |
| Chlorfenvos      | ND     | ND     | ND     | ND     | ND     |       |                 |                   |
| Chlorpyr         | ND     | ND     | ND     | ND     | ND     |       |                 |                   |
| Dichloro         | ND     | ND     | ND     | ND     | ND     |       |                 |                   |
| Diuron           | ND     | ND     | ND     | ND     | ND     |       |                 |                   |
| endosulphan      | ND     | ND     | ND     | ND     | ND     |       |                 |                   |
| floranthene      | ND     | ND     | ND     | ND     | ND     |       |                 |                   |
| hcb              | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.01  | G               | GH                |
| hcbd             | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | 0.1   | G               | GH                |
| hch              | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.002 | G               | GH                |
| hch calc         | ND     | ND     | ND     | ND     | ND     |       |                 |                   |
| Hg               | <0.05  | 0.0048 | <0.01  | 0.01   | ND     | 0.05  | G               | GH                |
| Indeno           | ND     | ND     | ND     | ND     | ND     |       |                 |                   |
| ISP              | ND     | ND     | ND     | ND     | ND     |       |                 |                   |
| Napthalene       | ND     | ND     | ND     | ND     | ND     |       |                 |                   |
| Ni               | 0.367  | 0.313  | 0.3092 | 0.30   | 0.38   | 20    | G               | GH                |
| Nonyl            | ND     | ND     | ND     | ND     | ND     |       |                 |                   |
| Octyl            | ND     | ND     | ND     | ND     | ND     |       |                 |                   |
| Pb               | 0.281  | <0.5   | 0.128  | 0.117  | 0.042  | 7.2   | G               | GH                |
| pcp              | ND     | ND     | ND     | ND     | ND     |       |                 |                   |
| simazine         | ND     | ND     | ND     | ND     | ND     |       |                 |                   |
| TBT              | ND     | ND     | ND     | ND     | ND     |       |                 |                   |
| TCB              | ND     | ND     | ND     | ND     | ND     |       |                 |                   |
| TCB calc         | ND     | ND     | ND     | ND     | ND     |       |                 |                   |
| trichloromethane | ND     | ND     | ND     | ND     | ND     |       |                 |                   |
| trifluralin      | ND     | ND     | ND     | ND     | ND     |       |                 |                   |

|           |
|-----------|
| <b>G</b>  |
| <b>F</b>  |
| <b>GH</b> |
| <b>M</b>  |

Good  
Fail  
Good or better and is normally treated as high  
Moderate

Mean includes LOD data  
Mean based on actual values


|   |  |
|---|--|
| draft RIVER BASIN MANAGEMENT PLAN   |  |
|  | WFD COASTAL WATER BODY CLASSIFICATION<br>Dundrum Bay |
|   | Version Date: 22/12/08                               |
|   | MARINE ASSESSMENT AND LICENSING TEAM                 |

### ANNEX F: Protected Area Objectives

| Water body    | Protected area | Designation      | Status  | Reason for non-compliance  |
|---------------|----------------|------------------|---|--|
| Dundrum Inner | Murlough       | SAC              | Favourable  |  |
| Dundrum Inner | Dundrum Inner  | Saltmarsh        | Unfavourable  | Vegetation composition - indicators of negative change ( <i>Spartina</i> ) |
| Dundrum Inner | DB2            | Shellfish Waters | Compliant. Single sample exceedance in cadmium, 2003. |  |

#### Nitrates Directive

Until 1 January 2007, Northern Ireland had designated seven NVZs on the basis of elevated nitrate levels in groundwaters. These NVZs were very small and covered less than 1% of Northern Ireland's area. However, Northern Ireland also has a widespread problem of eutrophication of surface waters and a large proportion of this nutrient enrichment is attributable to agriculture. Following extensive consultation, the total territory of Northern Ireland was established as the area to which an action programme would be applied under the Protection of Water Against Agricultural Nitrate Pollution Regulations (Northern Ireland) 2004 with effect from 29 October 2004.

|   |   |          |
|---|---|----------|
|  | <b>WFD COASTAL WATER BODY CLASSIFICATION</b><br>Dundrum Bay |          |
|   | <b>Version Date:</b>  | 22/12/08 |
|   | <b>MARINE ASSESSMENT AND LICENSING TEAM</b>                 |          |

### Glossary

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