| Statio | Station Information |               |           |            |                               |                                   |                                    |
|--------|---------------------|---------------|-----------|------------|-------------------------------|-----------------------------------|------------------------------------|
| ID*    | Type*               | Location      | Latitude* | Longitude* | Coordinate<br>System<br>Units | Coordinate<br>Reference<br>System | Coordinate<br>Collection<br>Method |
| 4      | Ocean               | Hudson<br>Bay | 62.0404   | -69.6149   | decimal<br>degrees            | Unknown                           | GPS -<br>Unspecified               |
| 9      | Ocean               | Hudson<br>Bay | 63.7288   | -79.9282   | decimal<br>degrees            | Unknown                           | GPS -<br>Unspecified               |
| 11     | Ocean               | Hudson<br>Bay | 62.865    | -78.8966   | decimal<br>degrees            | Unknown                           | GPS -<br>Unspecified               |
| 15     | Ocean               | Hudson<br>Bay | 63.1939   | -81.9189   | decimal<br>degrees            | Unknown                           | GPS -<br>Unspecified               |
| 16     | Ocean               | Hudson<br>Bay | 62.2796   | -85.906    | decimal<br>degrees            | Unknown                           | GPS -<br>Unspecified               |
| 17     | Ocean               | Hudson<br>Bay | 63.1845   | -90.0344   | decimal<br>degrees            | Unknown                           | GPS -<br>Unspecified               |
| 18     | Ocean               | Hudson<br>Bay | 63.7138   | -88.417    | decimal<br>degrees            | Unknown                           | GPS -<br>Unspecified               |
| 19     | Ocean               | Hudson<br>Bay | 61.848    | -92.1103   | decimal<br>degrees            | Unknown                           | GPS -<br>Unspecified               |
| 20     | Ocean               | Hudson<br>Bay | 61.3757   | -90.942    | decimal<br>degrees            | Unknown                           | GPS -<br>Unspecified               |
| 21     | Ocean               | Hudson<br>Bay | 60.9113   | -89.3586   | decimal<br>degrees            | Unknown                           | GPS -<br>Unspecified               |
| 22     | Ocean               | Hudson<br>Bay | 60.4233   | -94.0022   | decimal<br>degrees            | Unknown                           | GPS -<br>Unspecified               |
| 23     | Ocean               | Hudson<br>Bay | 60.923    | -91.7818   | decimal<br>degrees            | Unknown                           | GPS -<br>Unspecified               |
| 24     | Ocean               | Hudson<br>Bay | 61.6966   | -87.7641   | decimal<br>degrees            | Unknown                           | GPS -<br>Unspecified               |
| 25     | Ocean               | Hudson<br>Bay | 62.0219   | -87.0088   | decimal<br>degrees            | Unknown                           | GPS -<br>Unspecified               |

| 28 | Ocean | Hudson<br>Bay | 62.4145 | -89.8323 | decimal<br>degrees | Unknown | GPS -<br>Unspecified |
|----|-------|---------------|---------|----------|--------------------|---------|----------------------|
| 34 | Ocean | Hudson<br>Bay | 56.5062 | -86.8942 | decimal degrees    | Unknown | GPS -<br>Unspecified |
| 36 | Ocean | Hudson<br>Bay | 57.774  | -86.0311 | decimal<br>degrees | Unknown | GPS -<br>Unspecified |
| 38 | Ocean | Hudson<br>Bay | 58.7224 | -86.3045 | decimal<br>degrees | Unknown | GPS -<br>Unspecified |
| 46 | Ocean | Hudson<br>Bay | 57.5021 | -91.8162 | decimal<br>degrees | Unknown | GPS -<br>Unspecified |

#### SAMPLE VARIABLE DETAILS

| Variable Name* | Variable<br>Description         | Variable<br>Speciation | Variable<br>Sample<br>Fraction* | Variable<br>Media Type | Activity<br>Collection Type | Result Value<br>Type |
|----------------|---------------------------------|------------------------|---------------------------------|------------------------|-----------------------------|----------------------|
| Project        | BaySys                          | None                   | None                            | Other                  | n/a                         | Actual               |
| Year           |                                 | None                   | None                            | Other                  | n/a                         | Actual               |
| Month          |                                 | None                   | None                            | Other                  | n/a                         | Actual               |
| Day            |                                 | None                   | None                            | Other                  | n/a                         | Actual               |
| Station        | ID                              | None                   | None                            | Other                  | n/a                         | Actual               |
| Lat            | Latitude in<br>Decimal Degrees  | None                   | None                            | Other                  | Satellite                   | Actual               |
| Long           | Longitude in<br>Decimal Degrees | None                   | None                            | Other                  | Satellite                   | Actual               |
| Depth_m        | Water depth                     | None                   | None                            | Other                  | Field<br>Observation        | Actual               |

# Dataset Description

| Water_depth_type         | Surface, Ice-water<br>interface,<br>Subsurface   | None | None  | Seawater | Field<br>Observation | Actual |
|--------------------------|--|------|-------|----------|----------------------|--------|
|                          | chlorophyll<br>maximum   |      |       |          |                      |        |
| Sample_Type              | Water  | None | None  | Other    | Field<br>Observation | Actual |
| Sample_Volume_mL         | Sample Volume  | None | None  | Other    | n/a                  | Actual |
| Microscope_Magnification | Used microscope<br>magnification for<br>cell identification                                      | None | None  | Other    | n/a                  | Actual |
| Settled_Volume_mL        | Settled sample<br>volume in counting<br>chamber  | None | None  | Seawater | n/a                  | Actual |
| Sample                   | Number of sample<br>duplicate (T1 – T5)<br>or total cells per<br>liter for each<br>species group | None | None  | Other    | n/a                  | Actual |
| Species groups           | Number of<br>individuals<br>identified for each<br>group   | None | Whole | Organism | Field<br>Observation | Actual |

#### DATA FILE DETAILS

| Column Name*             | Unit | Description  | Statistic |
|--------------------------|------|--|-----------|
|                          |      |  | Applied   |
| Depth_m                  | m    | Water depth  |           |
| Water_depth_type         |      | Surface, Ice-water interface,<br>Subsurface chlorophyll maximum                        |           |
| Sample_Type              | none | Water  |           |
| Sample_Volume_mL         | mL   | Sample Volume  |           |
| Microscope_Magnification |      | Used microscope magnification for cell identification                                  |           |
| Settled_Volume_mL        | mL   | Settled sample volume in counting chamber  |           |
| Sample                   | none | Number of sample duplicate $(T1 - T5)$ or total cells per liter for each species group |           |
| Species groups           | none | Number of individuals identified for each group  |           |

| CanWIN Short Code | Definition   | User Code                       |
|-------------------|--|---------------------------------|
|                   | Above Detection Limit  |                                 |
| ADL               |  |                                 |
| BDL               | Below Detection Limit  |                                 |
| \$                | Incorrect sample container   |                                 |
| EFAI              | Equipment failure, sample lost   |                                 |
| FEF               | Field equipment failed   |                                 |
| FEQ               | Field Equipment Questionable   |                                 |
| FFB               | Failed. Field blank not acceptable.  |                                 |
| FFD               | Failed. Field Duplicate.   |                                 |
| FFS               | Failed. Field spike not acceptable.  |                                 |
| Н                 | Holding time exceeded  |                                 |
| ISP               | Improper sample preservation   |                                 |
| ITNA              | Incubation time not attained   |                                 |
| ITNM              | Incubation temperature not maintained  |                                 |
| JCW               | Sample container damaged, sample lost  |                                 |
| NaN               | Value is missing and reason is not known                                       |                                 |
| NC                | Not collected  |                                 |
| ND                | Not detected   | Correct QF for Zeros in dataset |
| NR                | Sample taken/measured on site but  |                                 |
|                   | information in this field not recorded   |                                 |
| NS                | Sample collected but not submitted   |                                 |
| OC                | Master Coordinate List Used  |                                 |
| Р                 | Analysis requested and result pending  |                                 |
| prob_good         | probably good value. Data value that is  |                                 |
|                   | probably consistent with real phenomena  |                                 |
|                   | but this is unconfirmed or data value<br>forming part of a malfunction that is |                                 |
|                   | considered too small to affect the overall                                     |                                 |
|                   | quality of the data object of which it is a                                    |                                 |
|                   | part.  |                                 |
| prob_bad          | probably bad value. Data value recognised                                      |                                 |
|                   | as unusual during quality control that forms                                   |                                 |
|                   | part of a feature that is probably   |                                 |
| Internelated      | inconsistent with real phenomena.  |                                 |
| Interpolated      | This value has been derived by interpolation from other values in the data     |                                 |
|                   | object.  |                                 |
| Q                 | Below limit of quantification (LOQ). The                                       |                                 |
|                   | value was below the LOQ of the analytical                                      |                                 |
|                   | method. The value in the result field is the                                   |                                 |
|                   | limit of quantification (limit of detection)                                   |                                 |
| TAT               | for the method.  | Now ondered ded her LCN         |
| LAF               | Lab Analysis Failure (value cannot be trusted due to detected lab instrument   | New code added by LCM           |
| 4                 | unside que lo delected lab ilistituillelle                                     |                                 |

### Table 1. Code list

| failure (e.g. contamination) during sample |  |
|--|--|
| processing                                 |  |

| Statistics Applied       | Description  |
|--------------------------|--|
| 30DADMean                | Thirty-day average daily mean  |
| 7DADM                    | Seven-day average daily maximum  |
| 7DADMean                 | Seven-day average daily mean   |
| 7DADMin                  | Seven-day average daily minimum  |
| Coefficient of variation | The ratio of the standard deviation $\sigma$ to the mean, $\mu$ .  |
| Daily Geometric Mean     | Provides a number that is more representative of the median and helps reduce the effect of a few extreme values.                   |
| Daily Maximum            | The largest value of a set, each period of a day cycle   |
| Daily Minimum            | The smallest value of a set, each period of a day cycle  |
| Hourly Maximum           | The largest value of a set, each period of an hour cycle   |
| Hourly Minimum           | The smallest value of a set, each period of an hour cycle  |
| MatLab script            | Provide the MatLab script or the link to it  |
| Mean                     | The sum of all the numbers in the set divided by the amount of numbers in the set  |
| Median                   | The middle point of a number set, in which half the numbers are above the median and half are below.                               |
| None                     | None   |
| R script                 | Provide the R script or the link to it   |
| Standard Deviation       | This describes the spread of values in the sample  |
| Standard Error           | The standard deviation of the sample mean, $\bar{x}$ , which describes its accuracy as an estimate of the population mean, $\mu$ . |

## Table 2. Options for Statistics Applied