**Incomplete notes from:**

**Workshop ECOSUPPORT WP2 on May 5 at 9:30**

*Baltic Nest Institute, Kräftriket 10A, Roslagsvägen 101*

List of participants:

Bo Gustafsson and Oleg Savchuk, BNI

Kari Eilola and Markus Meier, SMHI

Ivan Kuznetsov, IOW

In addition Thorsten Blenckner (BNI) participated for an hour of discussion of interaction with WP3 activities

Points discussed were:

**Status on data for validation (1960-2007 period).** Do we have everything we need to complete this task?

Specific data sets are

Forcing data

1. Atmospheric forcing

These data are in place and delivered to partners: RCA-ERA40 25km

1. River runoff

Different data sets on river runoff are available at SMHI. BNI should send the data used at present to SMHI so that consistency between data sets in RCO-SCOBI and Baltsem are obtained.

IOW has it’s own runoff data set; Markus wished for a description of this data set.

The HELCOM compilation of runoff can be used for comparison but since it is limited to more recent years it cannot be used as forcing.

The compilation of Kattegat-Beltsea runoff shall be sent to SMHI from BNI

1. Atmospheric nutrient loads

There are some technical problems with implementation of loads in RCO-SCOBI. Otherwise the data set provided by BNI is OK.

IOW sticks with their own loads, however Ivan will try to implement Nest loads

1. Riverine/point source nutrient loads

See above

1. Boundary conditions to Skagerrak/North Sea

Compare data sets

Compare fluxes, net fluxes and possibly M(S) function type averaging comparison

1. Sea levels

Different data sets are used, but also boundary condition and model dynamics are quite different so harmonization seems unnecessary

Initial conditions

1. Sediment nutrient concentrations

Difficulties with harmonization due to the different time-scales in sediment dynamics formulations.

1. Water columns concentrations

Kari started a bit, only data for PO4

Validation data

1. Water column concentrations (time-series)
2. Water column concentrations (spatial fields)

Unified fields needs to be plotted, Kari will supply format specification and BNI will deliver fields from BED.

1. Cod reproduction volume and hypoxic area

Send data from RCO-SCOBI and existing run to WP3 for the moment.

BNI compare Brians data with BED data.

1. data set on PP Chl-a etc. Bo and Thorsten will initiate the production of a compilation suitable for model validation.

**Status on models for completing validation.** Are all models ready and able to deliver “final” outputs?

Oleg ready by June 10!

Ivan ready to deliver!

WP3 delivery August 15! One hindcast and one climate scenario.

Ecosim/Ecopath needs annual resolution T august, T spring, salinity and PP

Kari coordinates deliverable to Brian of already existing model data.

Kari coordinates paper! First draft and task list before the summer, completion during autumn.

**Status on forcing for long-term hindcast (1850-2007)**

Atmospheric forcing available

No runoff available, two data sets possible Hansson – Omstedt and Meier-Kauker

Continue to evaluate long-term reconstructed loads

Possibly analyze deposition data set further, wait for Thuila

**Status on climate scenario forcing (1960-2100)**

Two atmospheric scenarios available and delivered

QF and sea level will be delivered from SMHI

Load extrapolation from for example 1994-2008 concentrations.

Similar simple method for atmospheric loads, Markus checks out. How should with do with possible bias in control period of climate runs if we go for concentration approach?

**Validation methods** – updates or changes compared to previous report

Possibly we could include also Taylor diagrams, but correlation analysis is not suitable for all parameters and places, e.g., deep-waters with episodic variability.

**Process studies** - what needs to be resolved? For example, the discussion on sediment nutrient storage and time-scales initiated by Kari last year

Oleg will do some experiments with Baltsem during spring.

**Ensemble modeling methods** – how shall we compile and present scenarios

Discussion postponed