

## **The Danish Society for Nature Conservations/Danmarks Naturfredningsforenings (DNs) comments to Draft version of International evaluation of the scientific and legal basis for nitrogen reductions in the 3<sup>rd</sup> Danish river basin management plan (version 21. Sept. 2023)**

### General remarks

*DN endorse* "The Panel assessed whether the modelling and analysis was fit for purpose, i.e. formed a sufficiently robust basis for concrete implementation of measures and significant steps forward on the way to achieving the goals of the WFD. Also, in recommendations on future work, the Panel emphasized gaps in knowledge for these future steps, rather than successive refinements of modelling tools that had already proven their value as a sufficient basis for action."

### Chapter 1 – Reference conditions, G/M boundary target, and intercalibration

#### Chapter 1 – Comments

##### DN take note

- that the RBMP3 approach rely on waterbody specific modelling of reference conditions and reduction needs rather than the former typology bound approach
- that nutrient loading can be used for ensuring consistency between nutrients and biological quality elements rather than nutrients concentrations which may vary significantly in time and codependency of other factors
- that the Panel disagrees with the view that transparency and confidence are not increased by using different approaches for calculating MAI and reference values or by alternative methods that increase uncertainty.
- That reference conditions set by the water body specific method in RBMP3 gives more stringent results for open waters and less for most enclosed waters but that the effect on HG and G/M boundaries need to be checked for being in accordance with EU Commission-approved intercalibration results as well as CIS Guidance Document No. 30.
- that if offshore concentrations are above the G/M target values, there is no way to reach the Good Environmental Status by changing Danish land-based inputs into the coastal water body.

*DN comment: That it is crucial to the success of the WFD goal of good ecological coastal status that all countries reach their goals for nutrient reduction in their coastal waters and thereby reduce their contribution to the offshore concentrations influencing not only into their own coastal waters but also neighboring countries coastal waters. Also this is a prerequisite for achieving the goals in the MSFD for the open waters.*

DN endorse the Panels overall conclusions and recommendations

### Chapter 2 – Marine models and their use in setting maximum allowable input

#### Chapter 2 – Comments

##### DN take note

- that the current approach to estimate and distribute the effort required to reach Good Environmental Status in coastal waters is now quite mature and provides decision support on a level of detail and quality that, to our knowledge, is not available in any other country.
- That models show examples that GES cannot be reached even with zero nutrient input from land – either due to inflow from adjacent waters or the coastal water being eutrophicated to an extend where neither N or P is ever limiting for the production (due to excess input from land based sources,

internal historic load) or combinations thereof. Setting relevant MAIs may therefore be impossible now but must be done in an iterative process following huge limiting efforts.

- That stakeholders have addressed concern that placing the N-MAI on the G/M boundary as a median target will result in GES only half the time and MES the other half, but that the Panel have addressed the issue only by stating: "If for some reason, a higher degree of certainty to reach Good Environmental Status would be required, it is straightforward to perform N-MAI calculation requiring indicators to reach to mid-point between Good and High status."

DN endorse the Panels conclusions and recommendations as a whole.

### Chapter 3 – Status load, Baseline effects, and effectiveness of measures

#### Chapter 3 – Comments

DN take note

- That "Compared to the models linking N-load to the coastal waters to the Biological Quality Elements, the models linking measures in the field to N-loading of the coastal waters have a smaller underlying data base and less empirical foundation. It is to be expected that, when more measures are taken or taken at larger scale, this empirical basis for modelling the effectiveness of measures will improve. The Panel is of the opinion that this constitutes one of the priority knowledge gaps in the program as a whole."
- that during the last decade, little or no reduction of N-load to coastal waters has taken place. And that the Panel concludes that it is not due to inherent ineffectiveness of the measures, but to political changes in the 2010s that have led to delay in implementation.

*DN cannot share the Panels optimism for the RBMP3 but agree that the problem is not lack of technical measures, but lack of political will and stamina having resulted in a lost decade.*

*DN also find that it must be taken into consideration, that the models have a small underlying data base, that does not and cannot reflect field management in practice, where there will be a bigger loss of nutrient.*

*It is also DN's opinion that the model used to calculate the marginal leaching should be questioned.*

*Reference is made to the fact that in connection with the Food and Agriculture Package of 2015, there was a drastic and unjustified minimization of marginal leaching from around 30 per cent. to around 20 per cent.*

### Chapter 4 –Burden distribution

#### Chapter 4 – Comments

DN take note

- that the Panel identifies consistency between MSFD and WFD targets as a point of concern and a subject for further international action in the coming years.
- That "With respect to international diplomatic action, Denmark has weakened its position by lowering unilaterally the G/M boundary values that had previously been agreed upon in intercalibration exercises. If Danish waters cannot reach a target value that lies significantly below the concentrations of inflowing open sea water, chances are high that this will be considered by other countries as a self-inflicted problem."
- That the Panel emphasizes that only in the open coastal waters, e.g. around Bornholm, transboundary pollution constitutes a decisive influence that prevents the achievement of the WFD objectives.

DN endorse the Panels conclusions and recommendations

## Chapter 5 – Seasonality

### Chapter 5 – Comments

#### DN take note

- That “Only in three out of 18 investigated water bodies, the diffuse loading is less than 70 per cent of the total summer loading (table 6-2 in Erichsen et al. 2021). Addressing point sources may therefore only make sense in a few well-selected water bodies.”
- That it is highly unlikely to find significant alternatives to a strategy of decreasing diffuse loading and that “The Panel is convinced that maximal effectivity of these local initiatives can be obtained if they can concentrate on the planning and execution of concrete measures within clearly defined, and well monitored objectives to be reached in fixed time periods.”

DN endorse the Panels conclusions and recommendations.

## Chapter 6 – Phosphorus efforts

### Chapter 6 – Comments

DN endorse the Panels conclusions and recommendations.

## Chapter 7 – Pressures and stressors other than nitrogen

### Chapter 7 – Comments

#### DN take note

- That “The pressures from sand extraction, dumping, dredging, physical structures and hazardous substances on the biological quality elements (Chl-a and eelgrass) can be modelled to a relatively high degree with existing tools. It is found that the impacts of these pressures are mostly limited in mass, space and time and that their impacts are therefore of smaller scale than the impacts of N-and P-load as long as the impacts are within the orders of magnitude that have been experienced until now.
- That the pressures fishery, ship traffic, plastic and invasive species was “...evaluated based on expert judgement. The most important of the pressures was physical disturbance from fishery. Nevertheless, the pressure from fishery is secondary compared to nutrient load, although fishery cannot be modelled to the degree of validity of the N-and P-models. Furthermore, fishery has mainly a local impact, especially on eelgrass.”
- That the Panel agrees with COWI and NIRAS that no evidence has been found or brought forward showing that the need for nutrient reduction is dependent on the level of other stressors. Therefore, no change in the priority scheme is required.

DN endorse the Panels conclusions and recommendations.

## Chapter 8 – Possibilities for further use of exemptions

### Chapter 8 – Comments

#### DN take note

- Of the significant effort and analysis from the Panel to explore the possible use of exemptions in the Danish RBMP3
- That the Panel is not in agreement with COWI and NIRAS in their judgement on room for maneuvering for exemptions, *BUT DN also want to add that legal interpretation of the WFD is not an exact discipline and must await clarifying rulings from ECJ. And it still remains to be seen how stringent the EU Commissions standpoint are:*

*" After 2027, the possibilities for exemptions are reduced, as time extensions under Article 4(4) can only be authorized in cases where all the measures have been put in place but the natural conditions are such that the objectives cannot be achieved by 2027." (2019 EU Commission fitness check).*

- That the Panel refer to extensive uses of exemptions in Sweden and Germany for open coastal waters but have no reflections on whether that can be justified nor accepted by the EU Commission under the general preconditions for the WFD that the precautionary principle must be upheld, and no deterioration allowed.
- That the Panel emphasize that exemptions as well as the justifications for using them should be used for single waterbodies
- That use of the exemption does not entitle Denmark to manage a water body merely to maintain the status quo. *DN wish to point to the fact that the overall trend for the state of coastal waters has moved from moderate towards bad during the last RBMP period.*

DN endorse the Panels conclusions and recommendations.

## Chapter 9 – General conclusions

### Chapter 9 – Comments

*DN notice that the Panel recommends taken advantage of the local/regional efforts in Kystvandrådene to streamline the use of implementation options the Panel stresses that the local knowledge should be incorporated within firm, nationally consistent, constraints and reduction targets to be effective. DN see this recommendation as a warning not to continue relying on voluntary means and no time frames to reach the goal.*

*DN also notice that even though during the 2010s almost a decade has been lost, in which no N-load reduction has been realized, effective measures are available and only need firm political will to be decided and implemented during the VMP3 period.*

*The panel points out that there is little or no evidence that reducing other stressors, rather than reducing nutrients, can achieve good ecological status. DN's agree that there is no such evidence and calls on the panel to emphasize this point in its final reporting.*

*As DN has also emphasized above, it is important that the sub-model regarding the marginal washout in the N model is analyzed in more detail and updated. DN has therefore also taken note of the panel's call for an update of the N model and suggests to the panel that it underlines the importance of speeding up this work.*

*It is obvious for the Panel (as it has also been for a long time for most stakeholders in Denmark) that achieving Good Environmental Status in all Danish waters by 2027 will not be possible and that exemptions at least for the time line (Art.4.4) will be necessary due to natural causes, but that it can in no way lead to the abandonment of well-defined plans to significantly improve the water quality in Danish waters, with a clear time path to achieving these goals as demanded by the WFD and its guidelines. Use of exemptions for less stringent objectives (Art. 4.5) seems to DN more dubious and with little potential taking into account that the knowledge base (as developed during RBMP1 and RBMP2) so far indicate that more time for improvement is justified for natural causes (especially for lakes and coastal waters) but not for setting less stringent targets than GES. In DN's view arguments concerning cost-effectiveness of measures and socio-economic acceptance still needs clarification and justification as basis for use of exemptions in each single waterbody.*

*The Panel finally state, that it sees room for maneuvering in the use of exemptions, which offer more flexibility than previously estimated. DN encourages the panel to elaborate on what kind of flexibility it*

*deems possible considering a negative trend of the ecological state of the coastal waters during the last RBMP period and taking into the account the precautionary principle and the no deterioration demand in the Water Framework Directive as well as other directive obligations.*

October 2. 2023

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