

Assessment methodology for SPIA in HOLAS III

State and Conservation
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Overview

- How the SPIA will be conducted in HOLAS III
- Based on the same principle Halpern methodology as in HOLAS II
 - Additive model based on 18 pressure and 44 ecosystem component layers and sensitivity scores
- Developed based on the feedback from HOLAS II, CIA Scoping meeting (CIA SCOPING 1-2020) and the technical workshop (Technical CIA WS 1-2020) -> **MetDev project**
- Main development points
 - Subset analysis and more comprehensive ways to analyse the results
 - Review on the sensitivity scores
 - Development of certain data layers



Development of the SPIA online tool

- Shift towards more a diverse useage of the tool for e.g. management purposes
- Subset analysis
 - Possible to run the tool on any desired combination
- Exploring the results and linking back to underlying data
 - Exploring the results in the tool, including comparison to PL and EC layers
 - Download result raster and statistic matrix
 - Click on a cell to see the contribution of underlying pressure and ecosystem layers for the total impact
 - Possibility to select a group of cells or predefined polygons (e.g. Sub-basin) will be included
 - Possibility to explore the contribution of the underlying human activity data of pressure layers



Sensitivity score review

- Most up to date knowledge and sensitivity scores for new layers
- A review process of the sensitivity scores of HOLAS II took place over the summer 2021
 - Results and final decision at SPIA WS in August
 - New values were based on the average of old and new suggested values
 - If some other methods were used the rationale was documented
 - A few open issues on topics where the expertise of the workshop was not considered sufficient



Data related developments

- 6 new benthic habitat ecosystem components
 - Inclusion of species occurring on the more fresh end of the Baltic Salinity gradient
- 8 renewed fish layers created in PBS project
- Fine tuning of the benthic habitat layers by cutting the extent with environmental gradient layers e.g. Depth
- Improved methodology to create introduction NIS pressure layer
- Improved methodology to create the pressure layer on nutrients / eutrophication (ongoing)



Uncertainty and validation of the assessment

- Monte Carlo simulation of sensitivity scores
 - Testing to broaden the usage of the MC simulation to cover other areas of the assessment
- Improved ways to assess the uncertainty of individual layers
- Validation of such assessment is challenging but comparison to other assessment will be tested
 - Other CIA assessments
 - Status or environmental assessment layers (HELCOM and EU work)



Ongoing processes

- Sensitivity score review
 - Fish pressure layers, was discussed at ComFish workshop in late September, experts were invited to provide info by mid November
 - NIS, topic will be discussed at JTG Ballast in November
- Nutrient / Eutrophication pressure layer
 - Task group was established to work with the issue
- Results will be presented at HOD 61-2021 in December



Action requested

The Meeting is invited to:

- Endorse the proposed approach for the spatial pressure and impact assessment in HOLAS, III to be submitted to HOD 61-2021 for approval.
- Endorse the plan for the development work that is still ongoing and agree on its submission to HOD 61-2021 for approval.

