



Setting WFD objectives in Natura 2000 areas with hydropower plants

Swedish Agency
for Marine and
Water Management

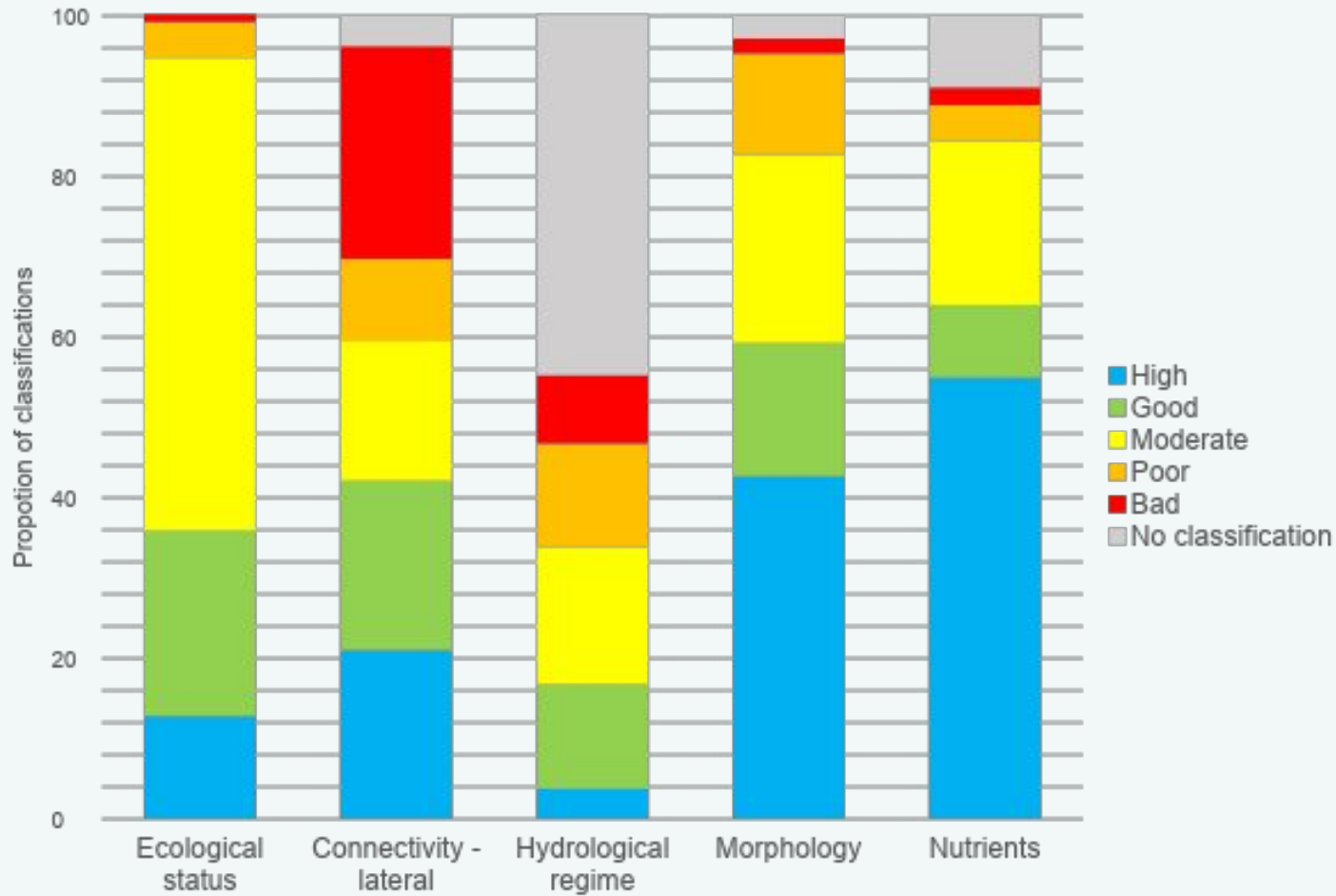


Ann-Karin Thorén, Water Management Unit

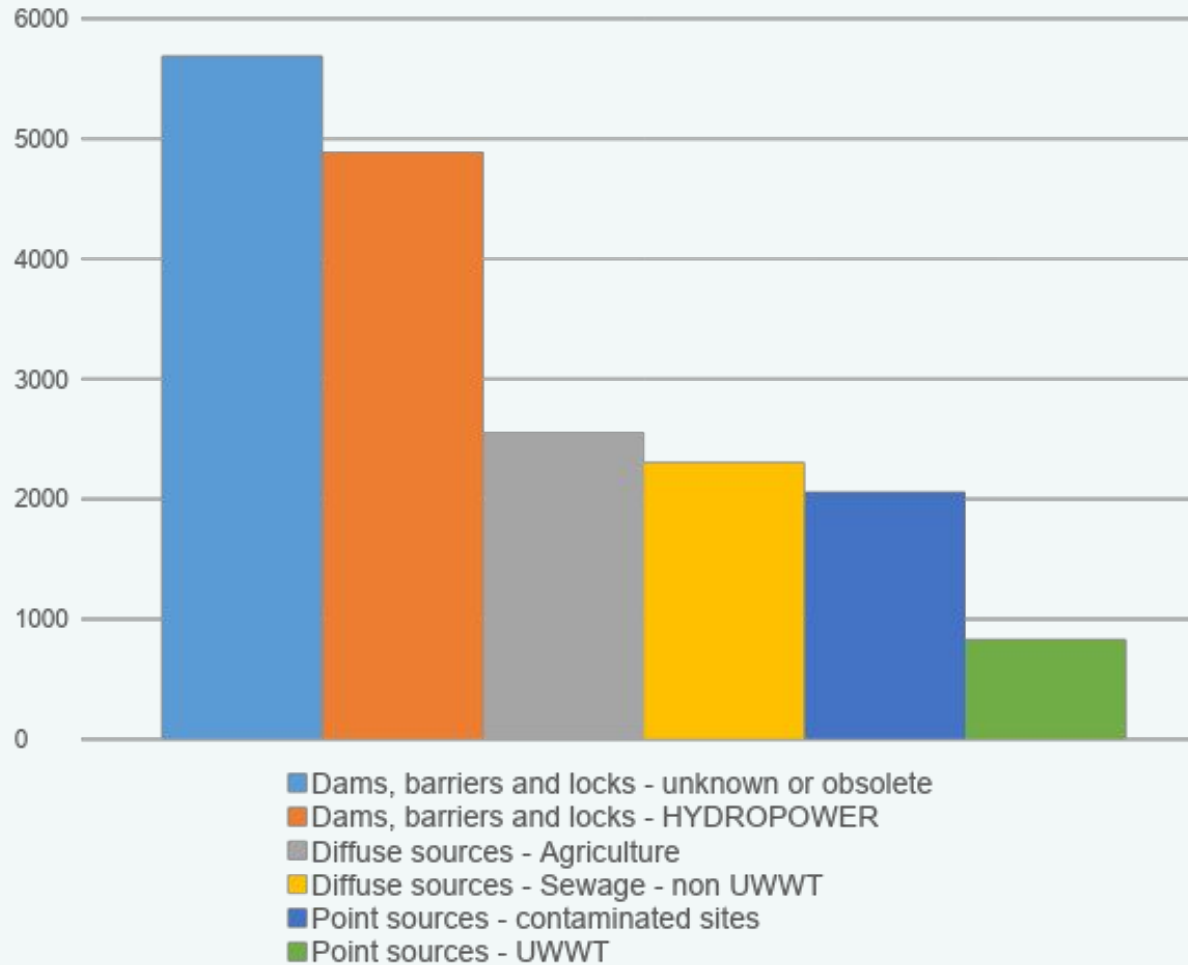
EUROPE-INBO 2022 20th International Conference for the
implementation of European water directives 26-29 September 2022
Annecy, France



WFD status in Swedish River water bodies from 3rd RBMP:s



Significant pressure in Swedish River water bodies from 3rd RBMP:s – dominating types



Data from VISS (Water Information System Sweden) 2022-01-13



Assessment of conservation status in biogeographical regions

Habitats directive (HD)

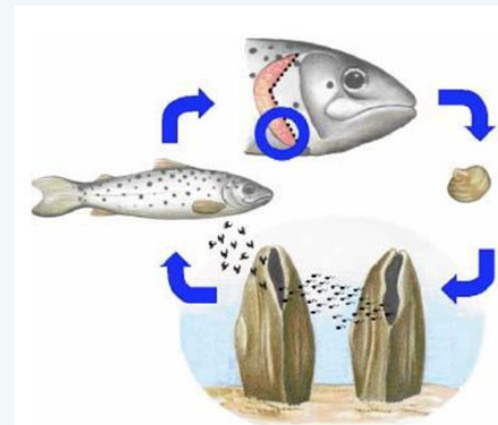
Article 17 reporting 2019

Status

- Habitat type 3210 **Fennoscandian natural rivers**
 - **Unfavourable status and deteriorating**
- Species 1029 Freshwater pearl mussel
 - **Bad status and deteriorating**

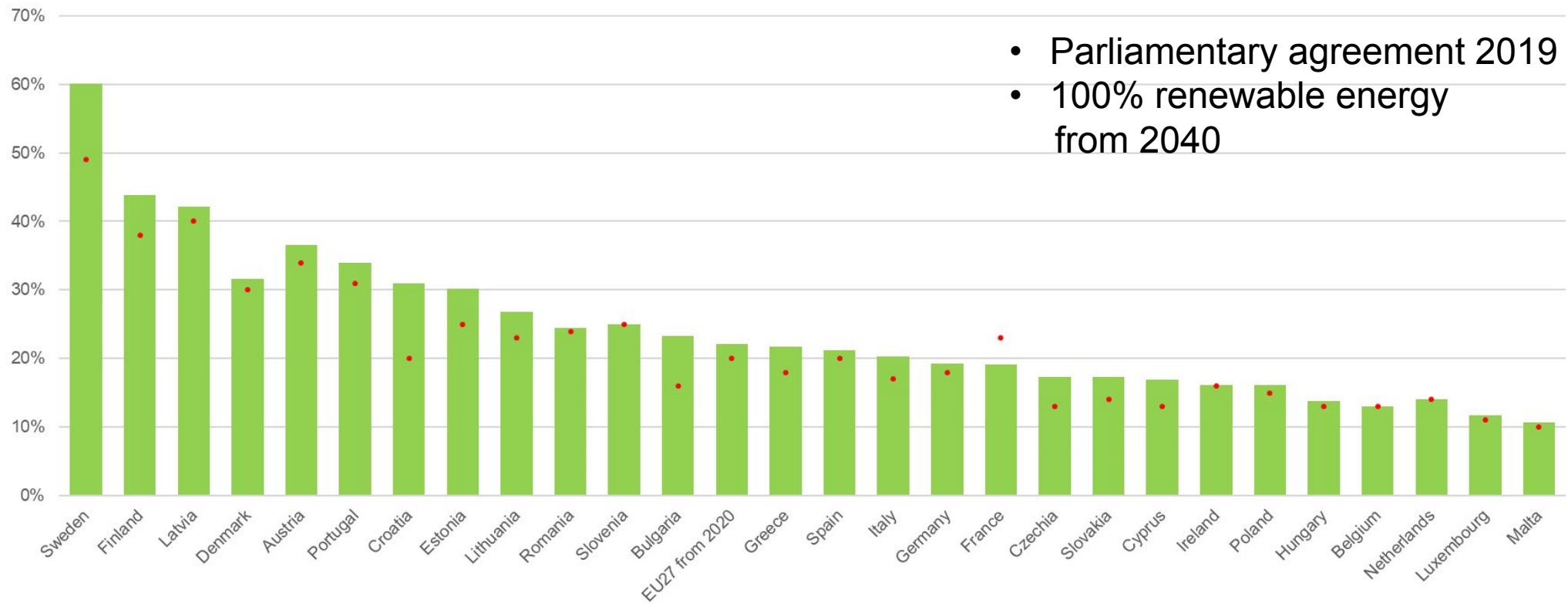
Pressures:

- Hydropower plants
- Former log driving routes
- Water extractions
- Road crosses
- Climate change

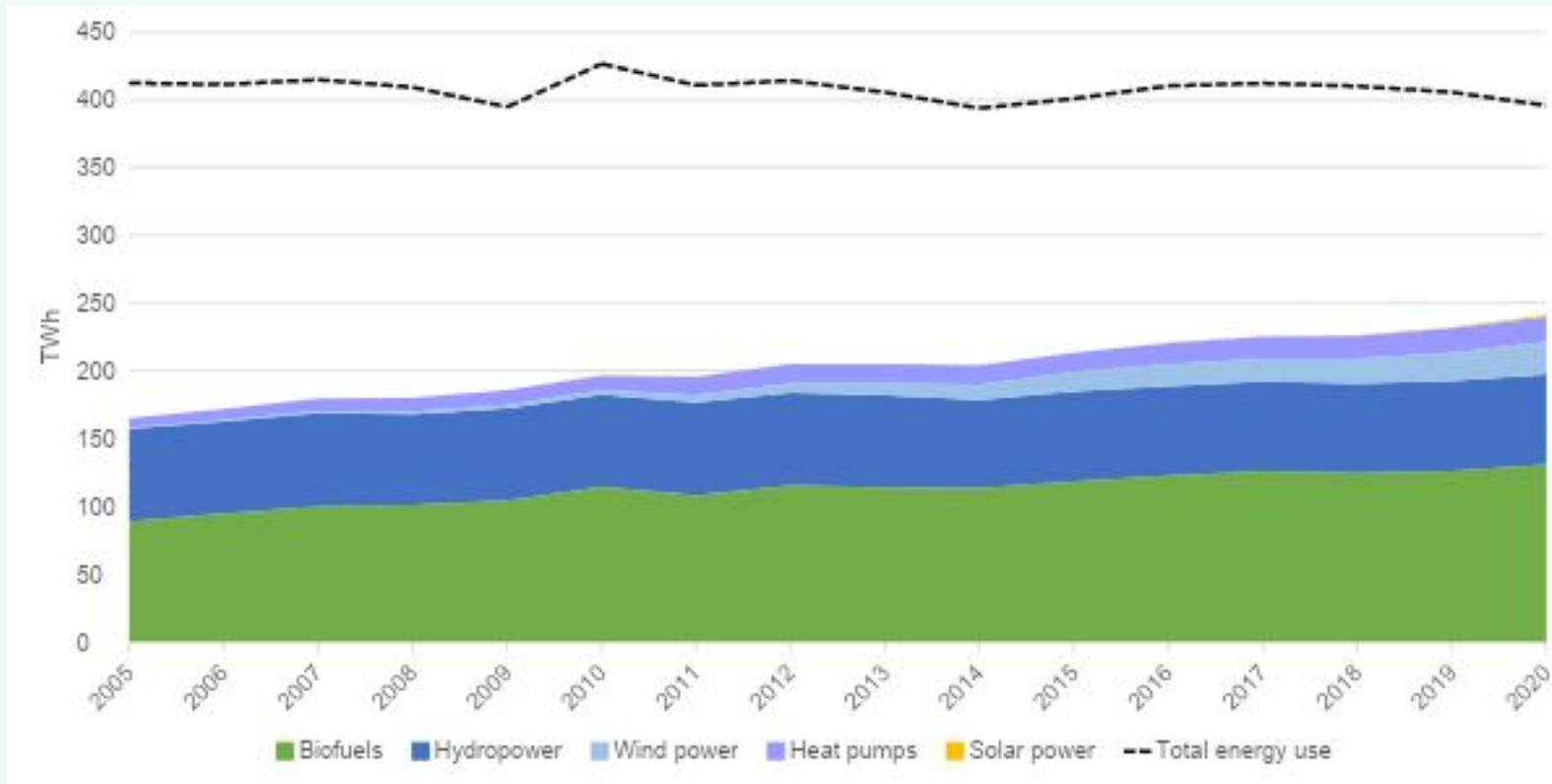


Salmon and freshwater pearl mussel
Typical species in Fennoscandian natural rivers

Overall share of energy from renewable sources, 2004-2019 (%) - Directive 2009/28/EC



Energy from renewable sources, Directive 2009/28/EC - 2004-2019 - Sweden



- Electricity from hydropower is projected to continue to increase slightly to 2040
 - No new hydropower plants
 - Higher production efficiency

Swedish national plan for sustainable hydropower

Swedish Agency
for Marine and
Water Management

- Decided by Swedish government 2020
- Permits revised according to the objectives of
 - Water framework directive
 - Habitats directive (N2000)
- ≈ 2 000 hydropower plants
- ≈ 450 N2000 areas
- Hydropower plants revised in groups at river basin level (ca 200 groups)
- Time period 2022 – 2040



Balancing protection of water ecosystems and the need of increased renewable electricity

- Maximum loss of electricity production 1,5 TWh distributed over river basins
 - Guidelines to water district authorities when characterising HMWB and setting WFD objectives
- Exemptions article 4 WFD must not compromise HD objectives
- Exemption article 6.4 in HD likely needed to be applied
 - Can only be decided by the government
- Compensatory measures likely needed to ensure no further loss of habitats and species




The hydropower plant Stornorrfors
in River Umeälven
impacting on the N2000 area of Vindelälven



Thank you for your attention

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