

# WG 5 Introduction workshop

Preparation of next program of measures and using EU indicators for key type of measures, KTM, to measure progress





# Program

- 9.30 Introduction and presentation
- 9.45 Norway: Sunniva Hartman
- 10.00 Sweden: Niklas Holmgren
- 10.15 Finland: Milla Mäenpää & Sini Olin
- 10.30 Denmark: Stig Eggert Pedersen
- 10.45 Iceland: Ólafur A. Jónsson
- 11.00 Discussions
- 11.30 End of session





### What is KTM and KTM indicator?



#### KTM for WFD – Surface water

- 1 Construction or upgrades of wastewater treatment plants
- 2 Reduce nutrient pollution from agriculture
- 3 Reduce pesticides pollution from agriculture.
- 4 Remediation of contaminated sites (historical pollution including sediments, groundwater, soil).
- 5 Improving longitudinal continuity (e.g. establishing fish passes, demolishing old dams).
- 6 Improving hydromorphological conditions of water bodies other than longitudinal continuity
- 7 Improvements in flow regime and/or establishment of ecological flows.
- 8 Water efficiency technical measures for irrigation, industry, energy and households
- 9 Progress in water pricing policy measures for the implementation of the recovery of cost of water services from households
- 10 Progress in water pricing policy measures for the implementation of the recovery of cost of water services from industry
- 11 Progress in water pricing policy measures for the implementation of the recovery of cost of water services from agriculture
- 12 Advisory services for agriculture
- 13 Drinking water protection measures (e.g. establishment of safeguard zones, buffer zones etc)
- 14 Research, improvement of knowledge base reducing uncertainty.

- 15 Measures for the phasing-out of emissions, discharges and losses of priority hazardous substances or for the reduction of emissions, discharges and losses of priority substances.
- 16 Upgrades or improvements of industrial wastewater treatment plants (including farms)
- 17 Measures to reduce sediment loads from soil erosion and surface run-off
- 18 Measures to prevent or control the adverse impacts of invasive alien species and introduced diseases
- 19 Measures to prevent or control the adverse impacts of recreation including angling
- 20 Measures to prevent or control the adverse impacts of fishing and other exploitation/removal of animal and plants
- 21 Measures to prevent or control the input of pollution from urban areas, transport and built infrastructure
- 22 Measures to prevent or control the input of pollution from forestry
- 23 Natural water retention measures
- 24 Adaptation to climate change
- 25 Measures to counteract acidification

**New MS KTM** 



# Choose your national indicator – KTM!

Population equivalent required to be treated by construction or upgrade of waste water treatment works

Number of wastewater treatment works requiring to be constructed or upgraded

Number of new permits to be issued or updated

Number of installations associated with priority substances requiring measures to achieve objectives

Number of substances requiring restrictions or bans on uses to achieve objectives

Number of Combined Sewer Overflows to be upgraded to achieve objectives

Number of storm overflows where sediment flow to surface water will be intercepted or reduced.

Number of sustainable drainage systems required to achieve objectives

Number of installation where upgrades or improvements are required to achieve objectives

Number of revised permit required to achieve objectives

Number of sites to be remediated or where preventative actions are to be taken to achieve objectives

Number of upgraded or remediated waste disposal sites required to achieve objectives

Number of water bodies affected by measures

Number of mine discharges for which measures are required to achieve objectives

Number of aquaculture sites/facilities for which measures are required to achieve objectives

Number of water bodies affected by measures to achieve objectives

Number of upgraded storm overflows required to achieve objectives

Number of surface water interceptors and treatment facilities required to achieve objectives Area (km²) requiring regulation and/or codes of practice for use and disposal of chemicals in urbanised areas, transport and infrastructure to achieve objectives.



Signiifca nt pressure	Indicator for pressure	Value Indicat or Gap 2015	Value Indicat or Gap 2021	ValueIn dicator Gap 2027	KTM	KTM Indicator	KTM Indicator Value2015	KTM Indicator Value2021	KTM Indicator Value2027
1.1. Point - urban waste water	Numer of waterbodies	250	180	0	KTM1 construction or upgrade of WWTP	Number of WWTPs to be constructed or upgraded	53	25	0
2.2 Diffuse - agriculture	Numer of waterbodies	600	450	200	KTM2 Reduce nutrient pollution from agriculture	Area of agricultural land covered by measures (km2) to achieve objectives	6000	3000	700





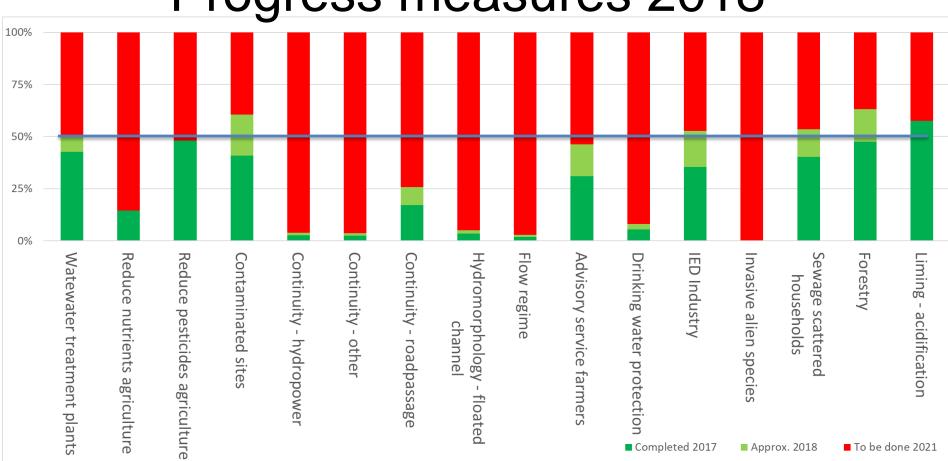
# SWEDEN: Preparation of next program of measures and using EU indicators for key type of measures, KTM, to measure progress

Niklas Holmgren, strategist South Baltic Water Authority













# Waste water treatment plants

KN28 - Number of wastewater treatment works.

Manual work – input from county administrations and database of yearly reporting.







# Reduce nutrients agriculture

KA02 - Area (km2) of agricultural land

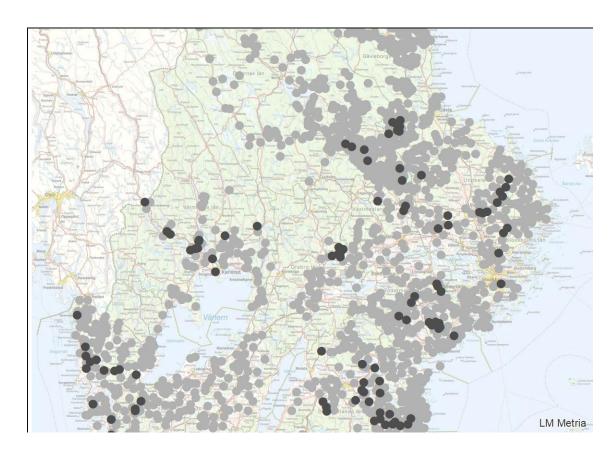
Statistics from Swedish Board of Agriculture, support measures through CAP





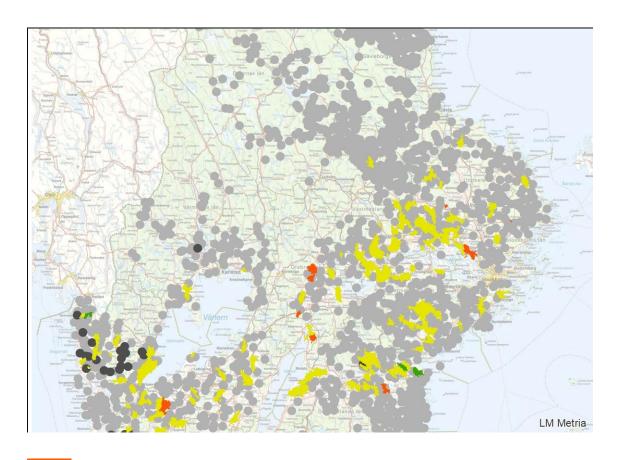
Measures	CAP 2016- 2018	2021 (ha)	% 2021	2027 (ha)	% 2027
Structure liming	(12 477)	65 404	19%	332 639	4%
Lime filter ditch	141	1 433	10%	78 033	0%
Adjusted buffer zones	136	46	297%	3 642	4%
<b>Buffer zones</b>	533	_		6 208	9%
Two step ditch	3	8	36%	268	1%
Dams	-	39	0%	1 377	0%
Wetlands	309	1 187	26%	23 493	1%
Sum	13 599	68 117	20%	445 661	3%

# Dams - phosphorous



- CAP 2016-2018
- Measures 2021 per water
- Measures 2027 per water

# Buffer zones - adjusted



Decrease
Same
Increase

- Measures 2021 per water
- Measures 2027 per water



# Reduce pesticides agriculture

KA03 - Area (km2) of agricultural land

Very few waterbodies with exceeding values.

Ask each environmental office at municipality if supervision of farms regarding pesticides have been done.





#### Contaminated sites

- KN30 Number of water bodies required to be covered by measures to achieve objectives
- Statistics through Swedish EPA and county administrations.







# Longitudinal continuity

- Hydropower NAP NEW!
- Other Counties
- Roadpassage Swedish Transport Administration







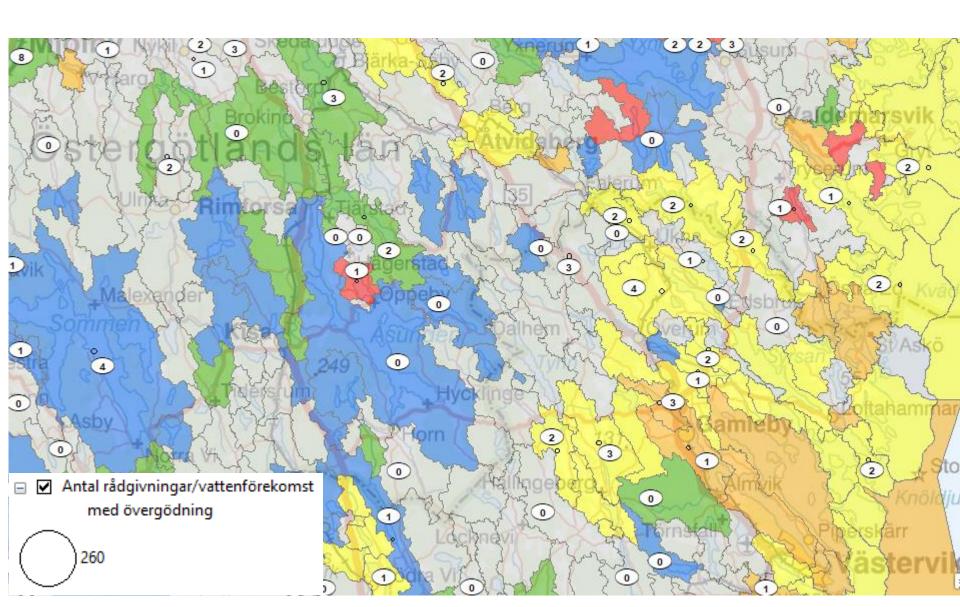
# Advisory service agriculture

 KN01 - Number of advisory services required to achieve objectives

Statistics delivered through Swedish Board of Agriculture.



# Advisory visits and nutrient status



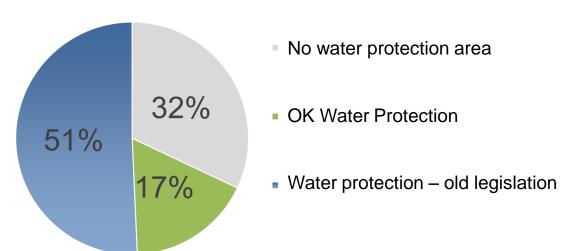


# Drinking water protection

ÖSTRA MÄLAREN Vattenskyddsområde Water protection area Vid olycka (112

 KN07 - Number of drinking water protection zones required to achieve objectives

Statistics partly delivered through different sources – problem with secrecy of positions on water sources







# Sewage scattered households

KN26 - Number of sustainable drainage systems

Statistics used from HELCOM modeling of eutrophication PLC6-7





# Forestry

KO99 - Other indicator.

Percentage transport at disforestation having negative impact on waterbodies.

Statistics delivered by Swedish Forest Agency.







# Liming - acidification

- KN33 Number of water bodies that need to be limed to achieve objectives
- Reported through National database of liming, county administrations.







#### Lessons learned

- Include more KTM indicators
- Not area agriculture land amount of phosohorous instead
- Use KTM indicators for communication of progress with stakeholders
- Use "number of waterbodies" in less comprehensive KTM



# Thanks for listening! niklas.holmgren@lansstyrelsen.se

