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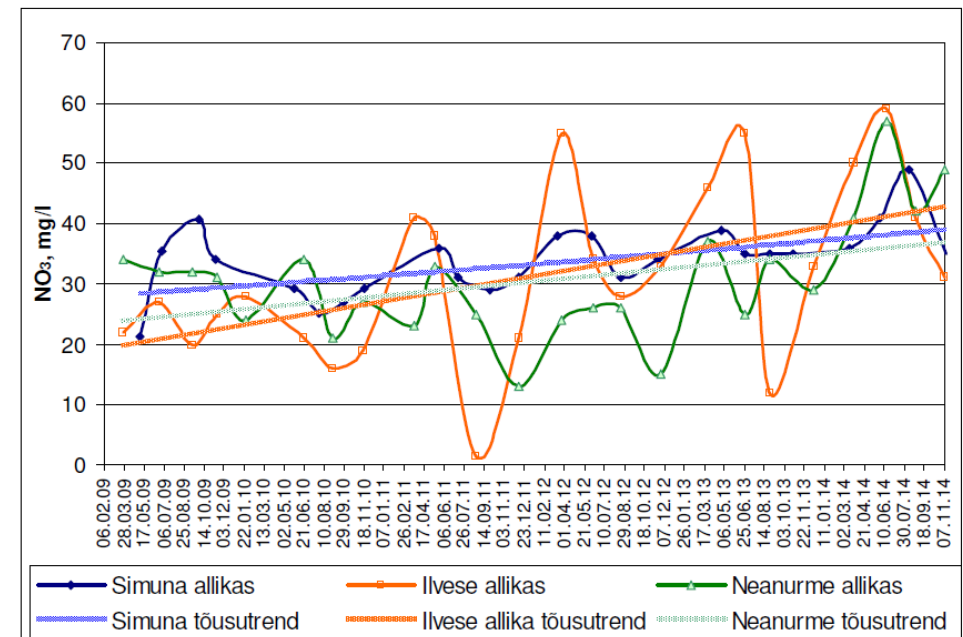
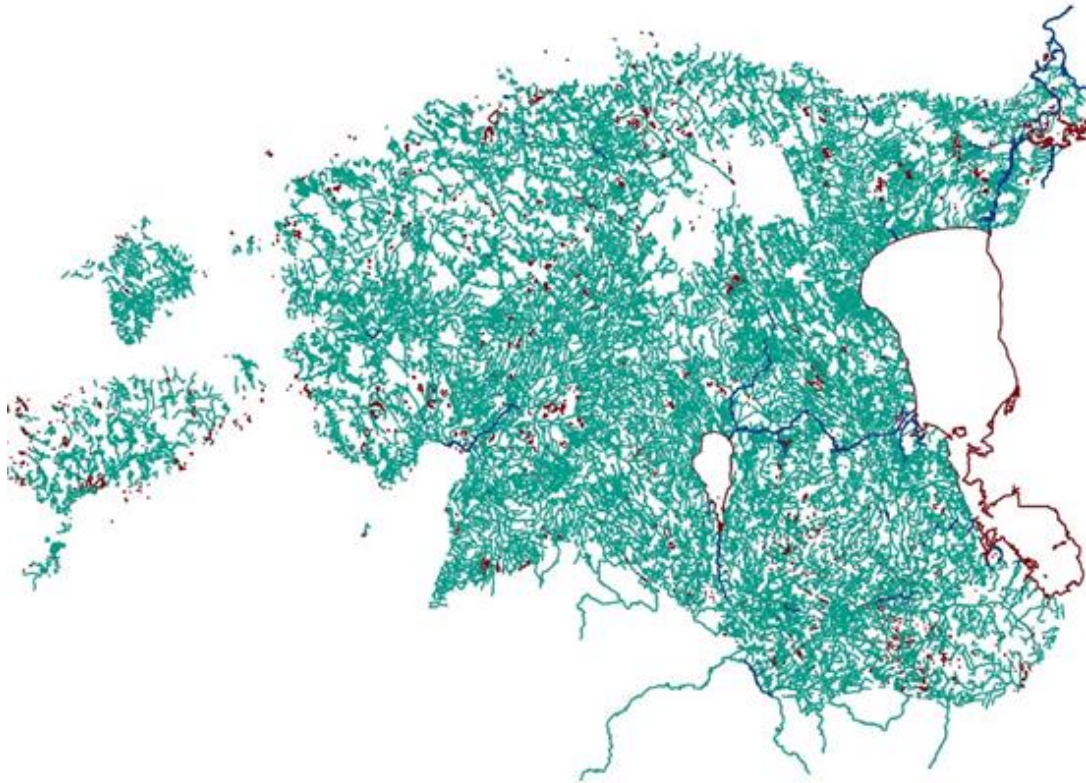


GreenAgri

Restrictions and requirements for the use of organic fertilizers in Estonia

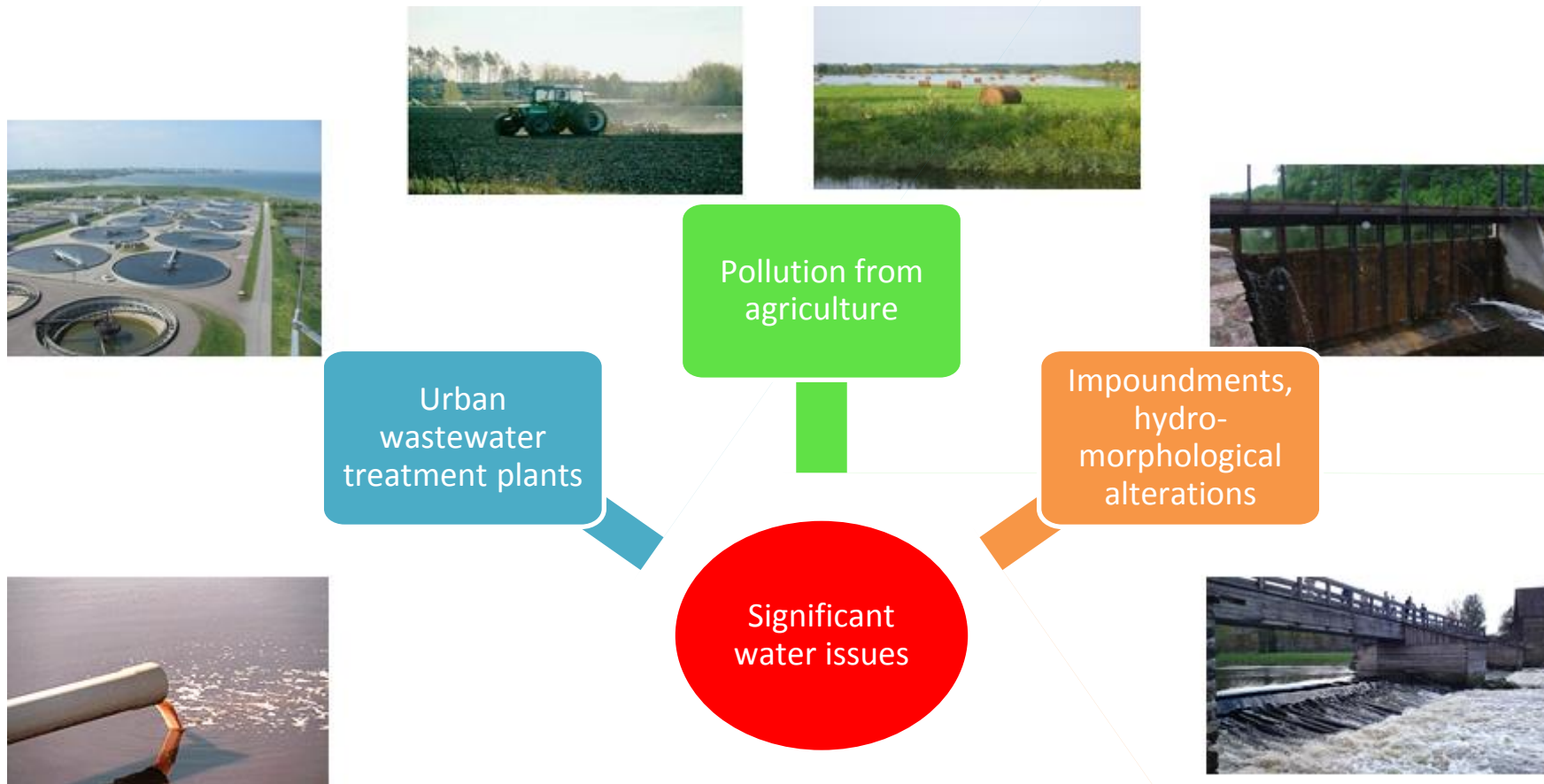
Rene Reisner
16.02.2016

Water vs agriculture

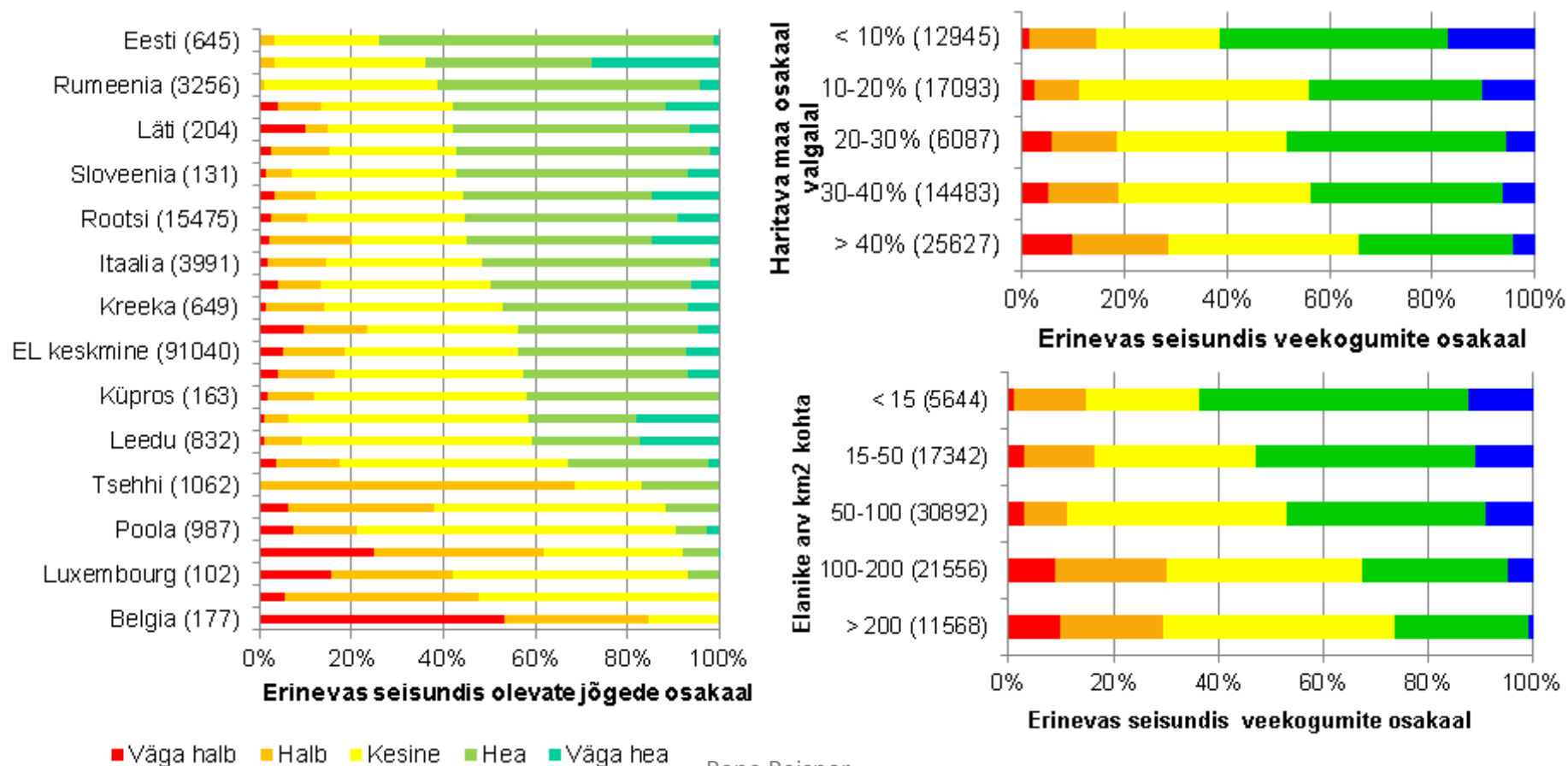


Joonis 12. Nitraadi sisaldus kõrgema nitraadi sisaldusega allikates 2009-2014

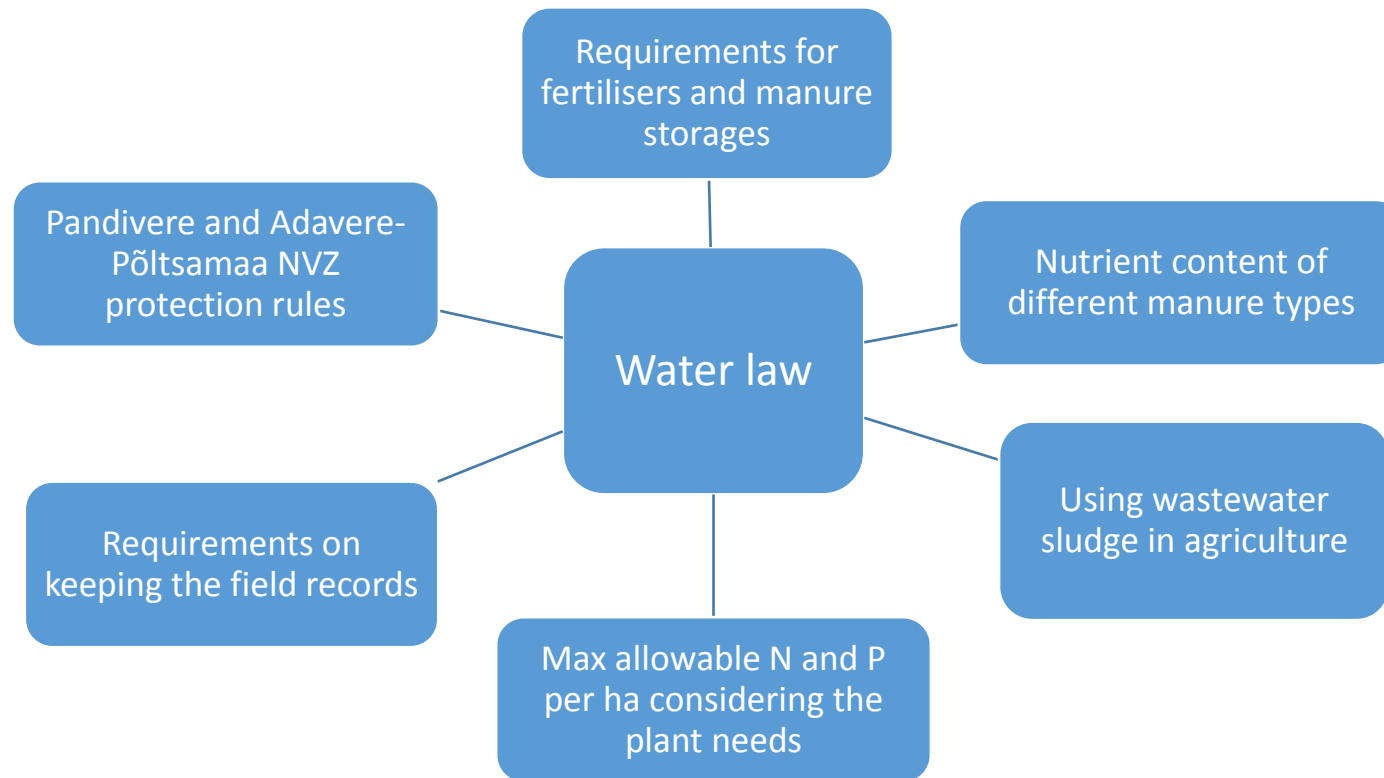
The most significant water issues in Estonia are related to point pollution sources, diffuse pollution from agriculture and hydro-morphological alterations in rivers



In 2010 approximately 72% of Estonian waters were believed to be in the good status. According to the more precise measurements only 62% of surface waters are in good status. The status is more likely to be not good if there the share of arable land or the number of people living in the catchment area is higher



The water law in Estonia has gone through for at least 50 revisions during the past 20 years. In most of the cases changes have been made because of the agricultural pollution. To limit the pollution from agriculture there are two main types of measures – use less substances that cause pollution or remove substances from the nature.



There are several requirements which are often argued as not being clear, effective, misinterpreted or inappropriate. The main aim though to revise the existing requirements is to make them more effective and more practical and easy to implement.

- Storing manure in storage or in the field
- The use of wastewater sludge
- Max allowable nutrients per ha of land
- Time limits and restriction for spreading the manure during
- Exact extent of areas where restrictions apply, how to measure the area
- The vulnerability of NVZ (nitrate vulnerable zones)
- Implementation of the NVZ action plans
- The use of field records

The effectiveness of national measures is assessed by the European Commission. Main Estonian weaknesses are – missing links between river basin management plans and rural development plans and ineffective water protection measures. There are still infringement cases open.

- The methodology to calculate the capacity of manure storages, not exact enough
- How to manage the manure from farms with less than 10 AU
- Storing the manure pits in fields and how to minimise the leakages
- The non-binding nature of the good agricultural practice
- How to measure the exact amounts of nitrogen in case of different types of manure

New requirements

- Limits for using manure and fertilisers
 - Amendments to the regulation to limit the pollution from manure and fertiliser storages, from the use of manure and fertilisers:
 - Additional requirements and methods to check the implementation of these restrictions
 - Limits of nutrients according to the plant needs
 - Need to consider the nutrient content of the soil
 - Manure to be defined in the law, what is considered as manure
 - No upper limit for N when using mineral fertilisers but this must be according to the plant needs
 - The maximum allowable amount of N to be applied with manure is 170 kg/ha-y, including the manure that is left on fields by livestock

New requirements

- Restrictions on manure spreading
 - Areas with 5-10% slope – no fertilisers 1. Oct -20. March
 - No mineral fertilisers and no liquid manure - 1. Dec – 20. March
 - No solid manure and other organic fertilisers - 1. Dec – 20. March
 - In fields with plants – solid manure until 15. Oct
 - In case of exemptions spreading of mineral fertilisers and liquid manure can be prohibited starting from 15. Oct
 - In fields with no plants – manure into the soil within 24 h
 - Max allowable P with manure for 1 ha is 25 kg / y, calculated as average for 5 years
 - In natural grasslands the use of fertilisers is not allowed, except the manure left on field from livestock and not more than 170 kg N / ha and 25 kg P / ha

New requirements

- Manure storages
 - In farms with 5 AU and more, there must be a manure storage
 - The storage capacity should enable the storage of at least 8 months manure, including wastewaters but except the manure left from livestock on fields
 - In case of solid manure no need for additional manure storage
 - All buildings must be leakage proof, leakages must be avoided also during the transport
- Manure stacks
 - In case of 10 AU or less – the solid manure may be stored near the livestock buildings in water proof area covered from rainfalls before it is spread of the field
 - Manure with at least 20% of dry matters may be stored in manure stacks during two months before the spreading, the stacks must not exceed the amounts to be spread during the vegetation period.
 - Manure with at least 25% of dry matters may be stored in stacks for 8 months with the prior consent from the Environmental Board
 - It is not allowed to store the manure into stacks during 1. Dec – 31. January
 - Manure stacks must be in areas with no slopes, at least 50 m from water bodies, wells, karst and must not be on top of the drainage pipes or in areas with unprotected groundwater or floods or with too much water in soil

Enforcement of new requirements

- Legally binding since 18.01.2016
- Time derogation
 - until 2021 (48 h/24h of manure into soil)
 - until 2023 almost all other requirements
- Upcoming changes to regulations
 - Revision and amendments to the national water lad in March/April 2016

Additional information

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