LATVIJAS VIDES, ĢEOLOĢIJAS UN METEOROLOĢIJAS CENTRS

CURRENT SITUATION ON WATER MANAGEMENT IN LATVIA

WATER BODIES WITHOUT BORDERS (WBWB) PROJECT SEMINAR,
BURTNIEKI, 10.05.2018.

LEGMC role in WFD implementation

According to Water Management Law, LEGMC:

- develops water quality monitoring programmes, performs regular monitoring of inland surface waters and groundwater;
- develops river basin managements plans and programmes of measures;
- coordinates implementation of PoMs;
- develops flood risk management plans;
- reports RBMPs and FRMPs to the Commission.

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LEGMC role in WFD implementation

To develop RBMPs, LEGMC collaborates with other institutions:

- Ministry of Environment Protection and Regional Development (MEPRD);
- Ministry of Agriculture (ZM);
- State Environmental Service (VVD);
- Institute of Aquatic Ecology (LHEI);
- University of Latvia, Institute of Biology (LU BI);
- Latvian University of Agriculture (LLU);
- State Forest Service, etc.

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LEGMC role in WFD implementation

Information included in the RBMPs is coordinated with MEPRD

First (2009) and second (2015) RBMPs were legally approved by Minister of Environmental Protection and Regional Development

RBMPs are legally binding for the institutions supervised by MEPRD

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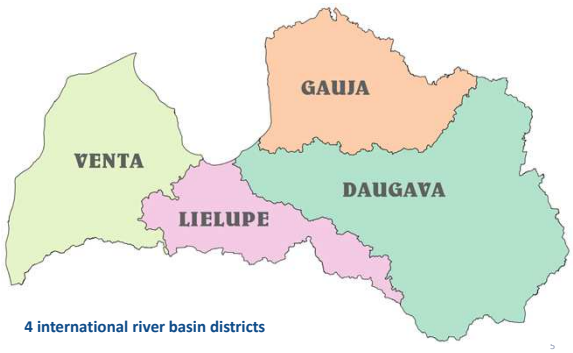
General issues: Delineation



4 international river basin districts

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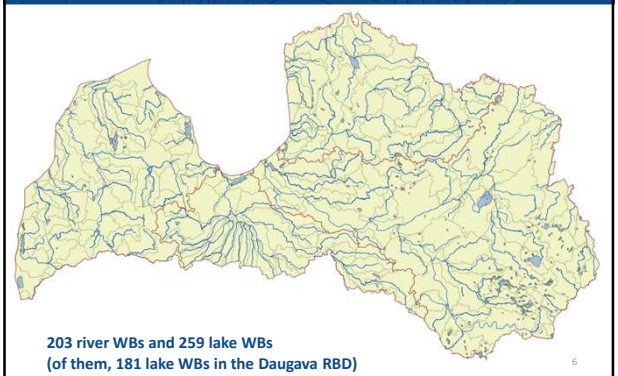
General issues: Delineation



203 river WBs and 259 lake WBs
(of them, 181 lake WBs in the Daugava RBD)

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General issues: Delineation

6 types of rivers
River WBs: for the most part, with catchment area > 100 km2
Of 203 river WBs, 27 are HMWBs
10 types of lakes
Lake WBs: lake surface area > 0.5 km2
Of 259 lake WBs, 4 are HMWBs
1 transitional WB and 4 coastal WBs (previously 6 coastal WBs)

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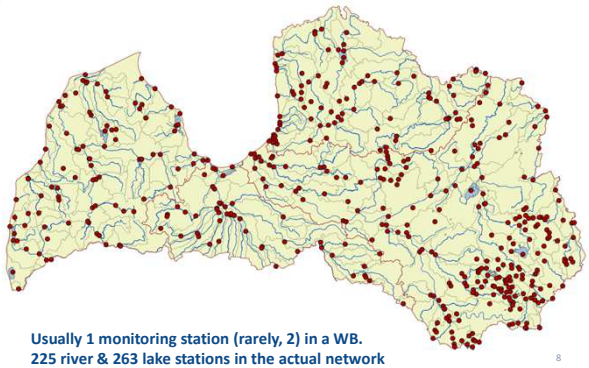
General issues: Monitoring



Usually 1 monitoring station (rarely, 2) in a WB.
225 river & 263 lake stations in the actual network

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General issues: Monitoring

Before 2006: monitoring of surface waters generally designed to assess impact from the sources of pollution

Additional tasks – monitoring under HELCOM, ICP-Waters, cross-border agreements

Starting with 2006: monitoring **re-designed** in accordance with WFD principles (monitoring station representative of a water body)

New locations; large number of new lake stations

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General issues: Monitoring

To develop first RBMPs: first monitoring cycle – 3 years long (2006 – 2008)

All new monitoring stations had to be covered in 3 years' time

Second monitoring cycle: 2009 – 2014

Third monitoring cycle: 2015 – 2020

New requirements posed by EQS directive: significantly **higher costs** (& limited financing)

Need to reduce the number of stations surveyed

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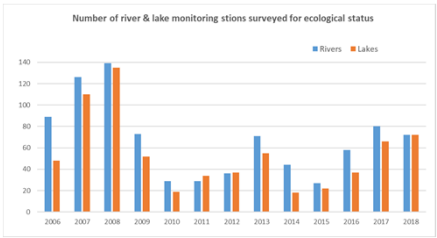
General issues: Monitoring



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Rivers	89	126	139	73	29	29	36	71	44	27	58	80	72
Lakes	48	110	135	52	19	34	37	55	18	22	37	66	72

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General issues: Classification

Classification of ecological status: significant improvements in methodology in 2nd RBMPs

	BQE, river WBs	BQE, lake WBs
1st RBMPs	Benthic invertebrates: saprobity index	Phytoplankton: total biomass & chlorophyll a concentration
2nd RBMPs	Benthic invertebrates: T, H', EPT, ASPT, DSFI combined into MMQ Macrophytes: MIR Fish: LFI, EFI	Benthic invertebrates: T, H', EPT, ASPT combined into MMQ Macrophytes: LMAM Phytoplankton: J, FPK, PCQ/FKI, chlorophyll a combined into multi-metric index

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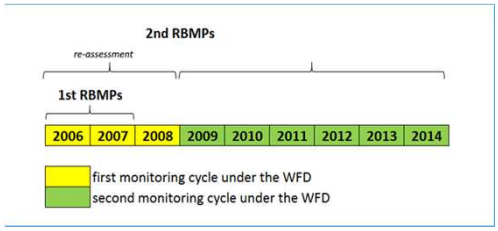
General issues: Classification



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General issues: Classification

Number of QEs significantly increased	Data gaps: number of stations per year. In many cases, only 2006-2008 year data available
Taxonomic composition & abundance taken into account	Data gaps: number of QEs in a given station & year
First monitoring cycle data re-assessed for 2nd RBMPs	In most cases, low status assessment confidence
Problematic to evaluate improvements / progress in ecological status, between 1st and 2nd RBMPs	

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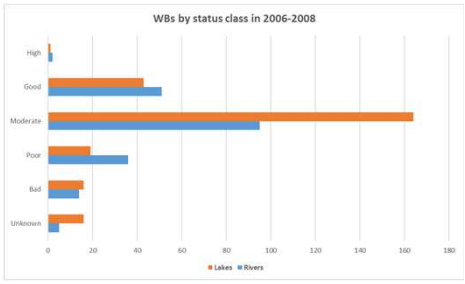
General issues: Classification



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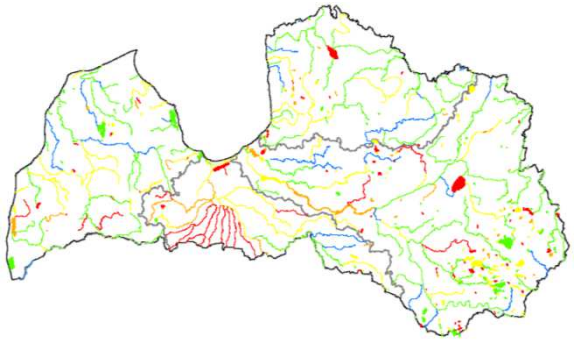
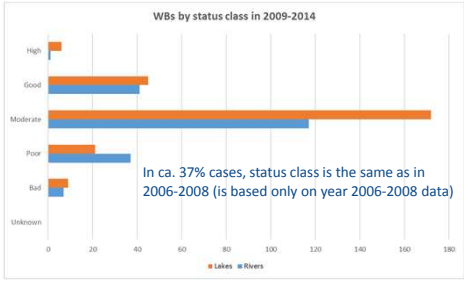
SURFACE WATERS ECOLOGICAL QUALITY (2008)



General issues: Classification



In ca. 37% cases, status class is the same as in 2006-2008 (is based only on year 2006-2008 data)

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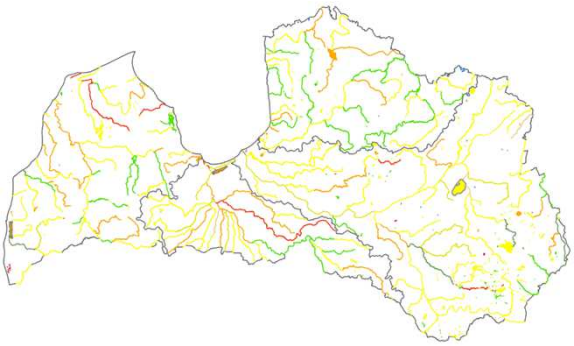
SURFACE WATERS ECOLOGICAL QUALITY (2014)



General issues: Pressures

1)Lack of precise biogenic loads:
- to Baltic sea and Gulf of Riga;
- from agricultural activity;
- from cross-border pollution;
- from decentralized sewage systems

2)Lack of data for pressure modelling:
- aquaculture data;
- fertilizer amount to fields;
- decentralized sewage system amount;
- precise data about clear-cuts;

3) Lack of assessment of pressures from lakes, because of all lake catchment areas are not defined

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General issues: Development of PoMs

- PoM is binding to state institutions subordinated to Ministry of Environment;
- For rest of the institutions, farmers, NGOs etc. PoM has only reccomendative status;
- PoM has no Cost effectiveness analysis;
- The effect of measures is not known in some cases;
- Financing of measures is not known for most of the measures;
- Implementation status is not known in most cases

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THANK YOU FOR YOUR ATTENTION!

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