Inspection as an integral part of WFD implementation in Slovenia

IMPEL Water conference 2016
5.-6. October 2016, Firenze

REPUBLIC OF SLOVENIA
MINISTRY OF THE ENVIRONMENT AND SPATIAL PLANNING
INSPECTORATE FOR THE ENVIRONMENT AND SPATIAL PLANNING

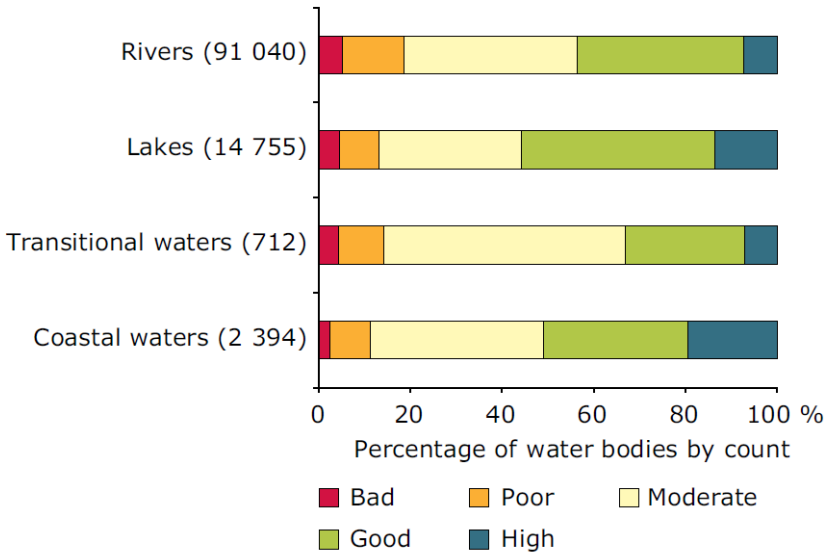
darja.stanic-racman@gov.si

WFD framework

- WFD establishes a framework for the management, protection and improvement of the quality of water resources across the EU.
- Achievement of 'good status' by 2015
- River Basin district approach (RBD)
- Polluters pays principle
- Ecological status in addition to quality standards(limit values)
- Analysis of pressure and impacts + monitoring + characterisation of the RBD
- Program of measures (obligatory and others) Based on sound monitoring and the analysis of the characteristics of the river basin and pressure and impacts, to identify a programme of measures for achieving the environmental objectives.

Not achieving good status – trigger for inspection?

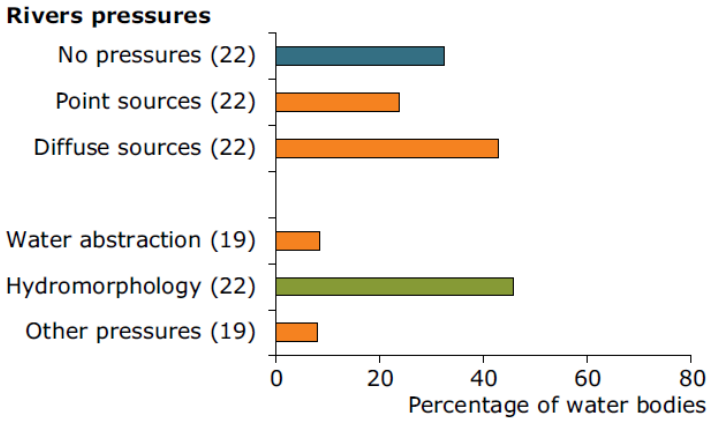
Figure 4.1 Distribution of ecological status or potential of classified rivers, lakes, coastal and transitional waters



Source: WISE-WFD database, May 2012. Detailed data are available at http://discomap.eea.europa.eu/report/wfd/SWB_STATUS.

Pressures and impacts on EU rivers

Figure 4.3 Proportion of total number of classified water bodies with identified significant pressures (left column) and impacts (right column), for rivers, lakes, coastal waters, and transitional waters



Notes: See the EEA ETC/ICM technical report for more details and the methodology used for assessing pressures and impacts (EEA ETC/ICM, 2012a).The percentage is calculated against the total number of classified surface water bodies in Member States reporting the specific pressure or impact type. The proportion of water bodies without any pressures or impacts is illustrated using blue bars. The number of Member States included is indicated in parentheses.
Source: WISE-WFD database, May 2012. Detailed data are available at http://discomap.eea.europa.eu/report/wfd/SWB_PRESSURE_STATUS and http://discomap.eea.europa.eu/report/wfd/SWB_IMPACTS_STATUS.

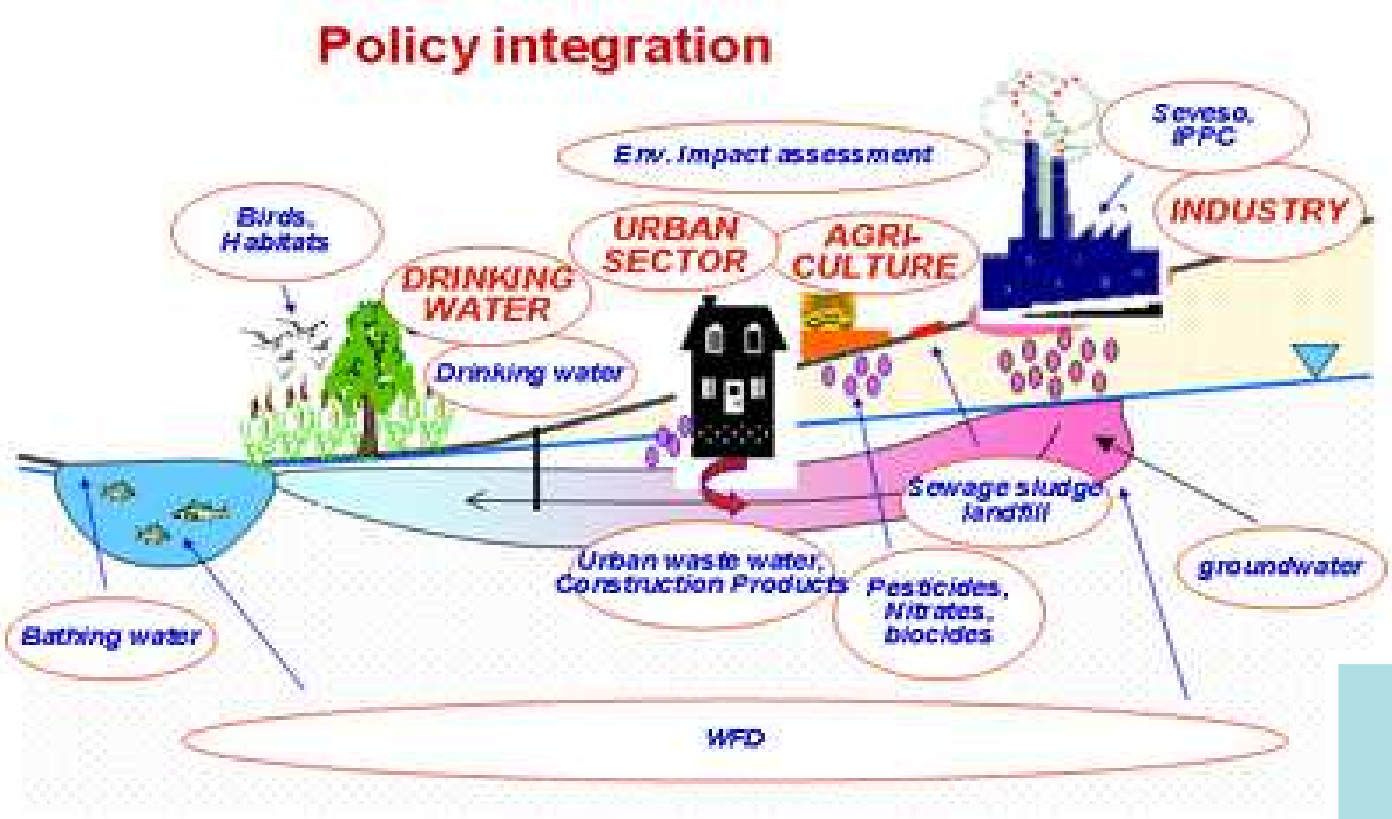
Significant improvements in recent decades

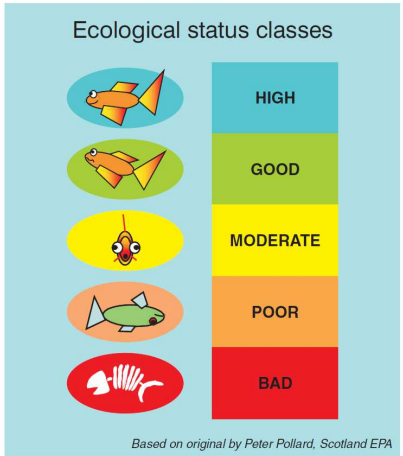
Generally significant progress has been made in last decades in reducing pollution:

- improved wastewater treatment,
- reduced volume of industrial effluents,
- reduced use of fertilisers,
- reduced or banned phosphate content in detergents,
- reduced atmospheric emissions.

Large share of water bodies having poor ecological status, particularly in areas with high agricultural intensity and high population density.

- agricultural management and urban agglomerations are the most evident driving forces of water pollution (population growth)





The different pieces of legislation illustrated in the figure are directly linked to the Water Framework Directive and the Groundwater Directive. They are part of the set of measures that need to be operational to achieve the "good environmental status"

Source: European Commission (http://ec.europa.eu/environment/water/water-framework/groundwater/framework.htm)

Hydromorphological pressures

What are HM pressures?

- straightening and canalisation, disconnection of flood plains, land reclamations, dams, weirs, bank reinforcements, etc.

Are HM pressures regulated?

- The WFD is the first piece of European environmental legislation to address hydromorphological modifications and their impacts on water status.
- There are usually some national pieces of regulation that mainly governs the construction and use of water, possibly with some elements recognizing the ecological function of water.

Water abstraction is also HM pressure that is usually regulated.

HM measures reported RBMPs

Measure	means
hydromorphological functioning via restoration;	➢ Investments + natural succession
ensuring ecological flows;	➢ Regulated (SI) Inspection ➢ Soft approach ➢ Incentives
removing migratory obstacles and transverse structures such as weirs in order to restore river continuity	➢ New barriers regulated Inspection ➢ Old barriers; investments; incentives
hydromorphological functioning via changed land-use (e.g. buffer strips);	➢ Regulated (SI) Inspection ➢ Good agricultural practice Cross compliance

Diffuse pollution from agriculture - measures

Pollution from agriculture is regulated therefore enforceable!

- Full compliance with the Nitrates Directive and the Directive on Sustainable Use of Pesticides (basic measures)
- For nitrates, the current decreasing trend is too slow to approach the level of water quality comparable to at least good ecological status in 2027. This implies that additional measures are needed

Inspection (mostly agricultural inspectors)

- CAP measures
- CAP cross-compliance mechanism (only 1 %)

Point source pollution

UWWT

- considerable success in reducing the discharge of pollutants to Europe's waters, leading to water quality improvements
  - Regulated
  - wastewater treatment implementation in some regions remains incomplete
  - urban storm flows

Industrial emission

- Regulated
- Industrial pollutants are still a significant factor in a number of countries.

WFD and programing of inspection (SI)

- Are we as ispection an integral part of RBMP managment cycle?
- How are we useing our resources to suppotr the achivement of good status?

WFD and programing of inspection (SI)

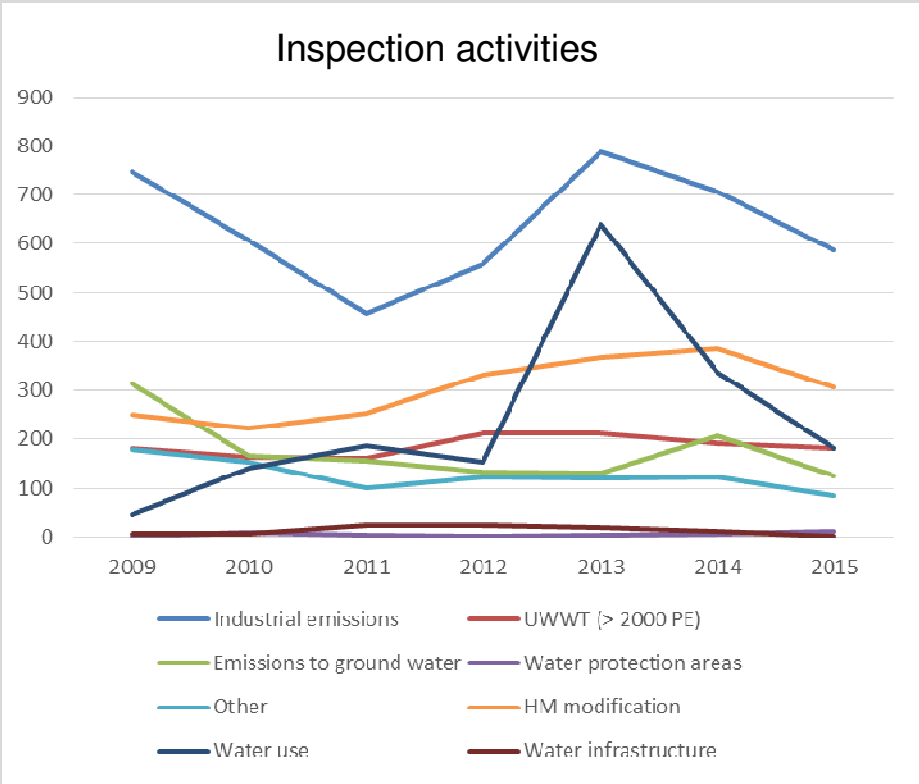
RBMP 2009 – 2015 notes that the strenghtening of inspection is needed in the :

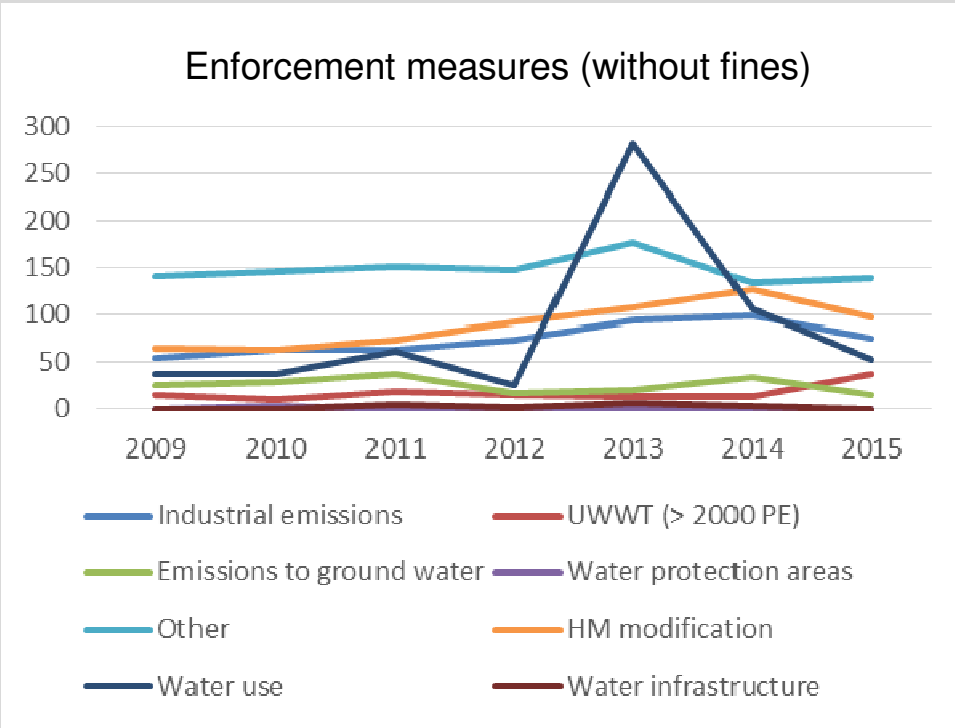
- water abstractions, and abstractions of gravel;
- Hidromorphological pressures (new)
- Diffuse pollution from agriculture

Analysis of the implementation of Program of mesures also points out that the strenghtening of inspection is needed :

- water use and ensuring ecologically flow ;
- prohibition of fertilization and use of plant protection products in buffer strips;
- Fish passes;
- emissions to water.

SI inspection statistic 1st RBMP cycle





Point source emission

Frequency of regular inspections (the interval between two on-site inspections) are based on a systematic assessment of the environmental risks.

- For installations posing the highest - one year
- For low risk installations - three to five years

SI is using software tool IRAM (Integrated Risk Assessment Method; IMPEL) for IED and SEVESO installations.

One of the criteria is also emission to water which is assessed as follows:

- The device is not a source of emissions into water (O points)
- Emissions exist, limit values are not exceeded (1 point)
- Limit values exceeded for 1 parameter less than 10% (2 points)
- Limit values exceeded for 2 parameters for less than 10% or one or more parameters for more than 10% (3 points)

Point source emission (SI)

During the 1st RBMP cycle a solid tool was developed for programing inspection of point source emissions.

- emission are assessed based on the environmental risk

- The integral holistic approach of WFD is not fully implemented
  - The risk assessment does not takes into account if the location of the source (emitting specific pollutant) is within the water body that fails to achieve good status due to specific pollutant.

During the 1st cycle SI has implemented the investigative monitoring where the chemical status was not good and the polluter was not jet identified.

Point source emission (SI)

In the program of monitoring for the first cycle investigative monitoring was planned:

- 1 WB due to pollution by tributyltin compounds
- 1 WB (impoundment) due to mercury pollution
- All costal WB due to pollution by tributyltin compounds

Investigating monitoring was planned also for WB which do not meet good status because of specific pollutants such as sulphate, cobalt, molybdenum and AOX.

Agency responsible for monitoring is providing the data on sources of pollution to inspection.

Water abstractions and abstractions of gravel

In 2013 Inspectorate undertook a comprehensive enforcement action of water usage (stimulated by the Court of Audit of the Republic of Slovenia measures):

- compliance with the conditions of permits and concessions for all water uses
- payment for water charges
- illegal abstractions (databases and internet based search)

Many irregularities were discovered and therefore inspectors imposed a lot measures.

Ecological flow

In 2009 the regulation on Qes was adopted in SI.

The transitional period of 5 years was determined.

Therefore the Qes was included in inspection of water uses only this year.

This year we are focusing on small HP.

Hidromorphological pressures (new)

- Based on SI law most of these modifications require permits.
- In 1st cycle most of the inspection was carried out as response to complaints
- 2nd cycle

In 2015 we start considering programming inspection of HM modifications.

- implementing the pilot activity focused on verifying the compliance of constructions in the areas of nature protection status (also NATURA 2000) that are also influencing water waterside land and / or flood areas.
- sample of higher environmental risk were determined by experts
- we made a first attempt to determine the environmental risk criteria in this area.

Diffuse pollution from agriculture

RBMP

- diffuse pollution from agriculture
- prohibition of fertilization and use of plant protection products in buffer strips;

  - 1st cycle BAU
  - 2nd cycle BAU

Programming in 2nd cycle

Inspection for the environment and nature

Based on the identified significant pressures (analysis od pressures and impacts – WFD)

- targeting the inspection on specific water bodies or polluters
- Integrate these activities in the program of work
- Report

Not all significant pressures can be improved by control (e.g. old HM pressures, land use, etc.).

Sources:

- European waters — assessment of status and pressures (EEA report; No 8/2012; http://www.eea.europa.eu/publications/european-waters-assessment-2012/at_download/file)
- European Commission (http://ec.europa.eu/environment/water /water-framework)
- RPMB SI 2009-2015 (http://www.mop.gov.si/si/delovna_podrocja/voda/nacrt_upravljanja_voda/)
- POM SI 2010 – 2015 (http://www.mop.gov.si/si/delovna_podrocja/voda/nacrt_upravljanja_voda/)
- Program of work of the Inspectorate for teh environment and spatial planning 2016 (http://www.iop.gov.si/fileadmin/iop.gov.si/pageuploads/5_O_INSPEKTORATU/Porocila_in_nacrti_dela/Letni_nacrt_dela_2016.pdf)

Thank you for your attention!