



# Outcomes from the Workshop on diffuse pollution sources EUROPE-INBO 2015

How to develop solutions for tackling  
those pressures at local level?

October 21, 2015, Thessaloniki, Greece

# Context and objectives



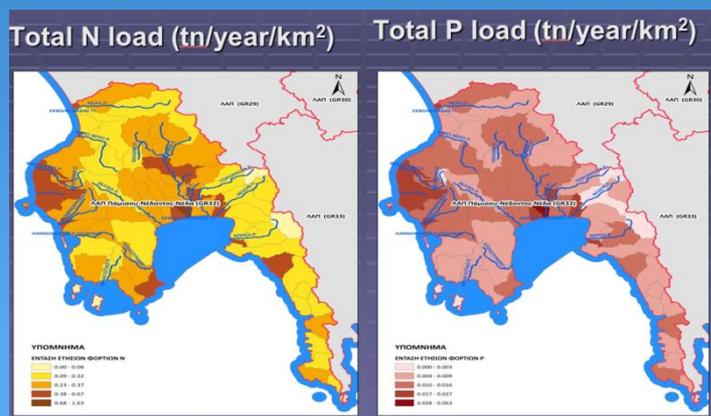
- Pursuing the goal to play a more active role for EUROPE-INBO, CEENBO, MENBO in the 2013-2015 CIS, through Better coordination between CIS works and Networks activities
- **Organise works and exchanges on current subject of interests with the high diversity of Europe-INBO members, in this case on diffuse pollution**
- Preparatory works with ONEMA and Network representatives
- **Balance between presentations and works in groups**

# Introduction session



Welcoming address by Jacques Ganoulis, Water Director, Greece and Philippe Dupont, ONEMA, France  
Diffuse pollution sources, status and stakes in Europe - Claire McCamphill, DG ENV, EU COM  
Greek National policy on diffuse pollution sources - Chrisoula Nikolarou, Special Secretariat for Water, Greece  
Diffuse pollution, the approach in Scotland - Darrel Crothers, SEPA, Scotland

- WFD and other EU directives provide frame and measures
- Diffuse pollution among major problems at EU level
- Good information is vital for good policy, evidence building.
- Need of prioritisation of measures
- But needs remain for implementing the measures
- Sharing information and involvement of stakeholders

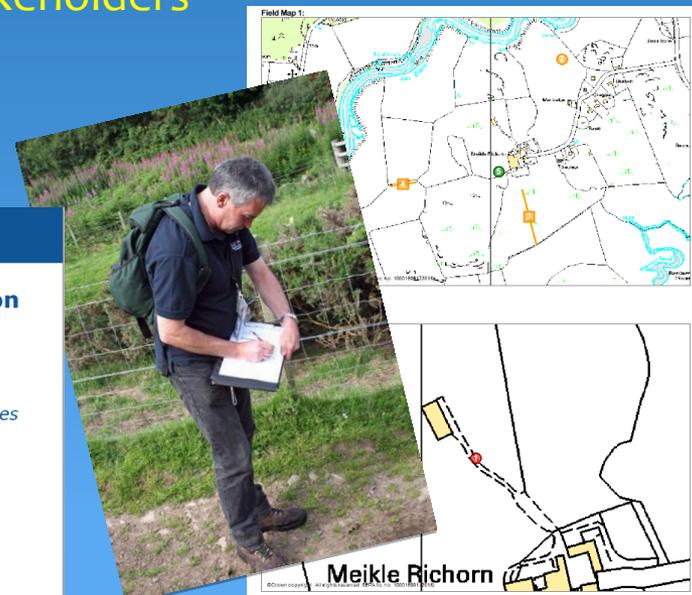


### WFD measures for diffuse pollution (2)

**Supplementary measures**  
- Where basic measures are not sufficient to reach good status then supplementary measures should be included in the POM

- e.g. for agriculture included in rural development programmes

*\*\*understanding WFD requirements*



# Theme 1: Strategies and stakeholders involvement for reduction of diffuse pollution

## Presentations:

An overview of strategies and tools in France,  
**Laurence Amblard, IRSTEA, France**  
Awareness raising,  
**Rebecca Audsley, SRUC, Scotland**



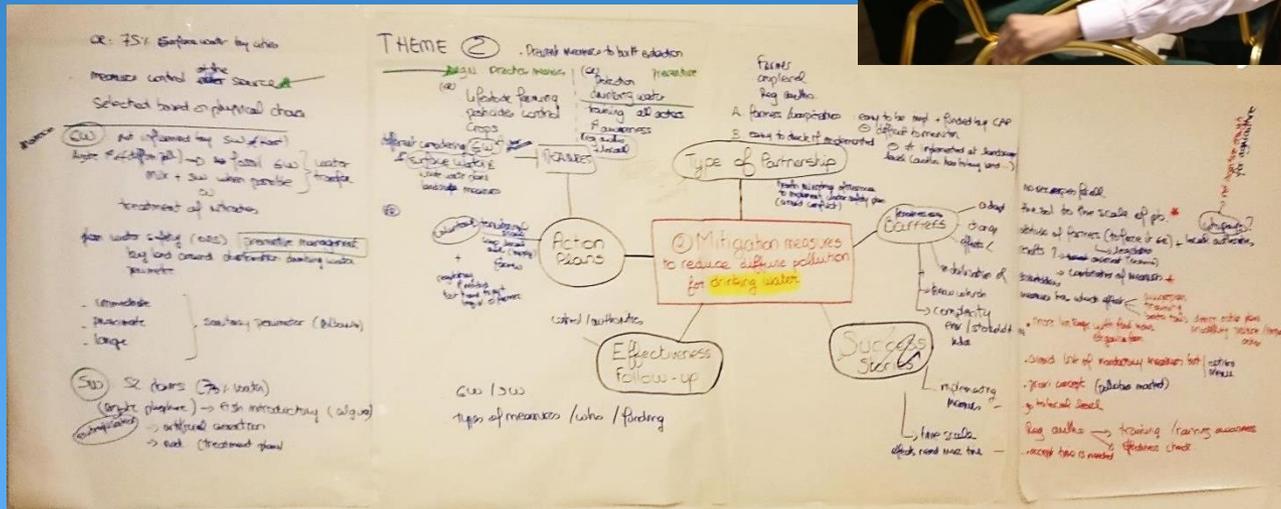
# T1: Main outcomes and recommendations

- **Diversity of tools could be used:** financial incentive, awareness raising, code of good practices, policy of price, action plans in drinking water catchments, EU project
- **Obviously Strengths (work together) and Weaknesses (time, money) exist**
- **No one size fits all**
- **Need to treat the 4 levels : national - regional – local – individual. awareness, concrete and pragmatic tools (leaflets, demonstration, pilotes, rules etc... )**
- **Involvement of the producers** and other people affected by the pollution
- **Advocate and disseminate the needs for minimizing the fertilizer use:** show (and finance) cases studies (of change of practices), with financial support,
- **Make the link between the economic stakes and other drivers** and diffuse pollution/environmental quality
- **Develop stakeholders ownerships**

# Theme 2: Mitigation measures against diffuse pollution in particular for drinking water abstraction

## Presentation:

Overview of mitigation options to reduce nutrient losses from rural areas and to improve surface water quality (Cost 869), Antonio Lo Porto, IRSA-CNR



# T2: Main outcomes and recommendations

## Measures

- Measures for surface waters and measures for groundwater
- Curative (increase treatments) and Preventive measures (measures to decrease pollution at source)
- Importance of the scale of action (one solution for one problem)
- The type of measures will determine who the actors will be and what type of funding needed
- Coordination of actors: local, regional and national (roles, responsibilities...)

## Action plans

- Related to Nitrate Directive (NVZ) and WFD implementation (basic + supplementary measures)
- Need of educational measures: training of all stakeholders (not only farmers)
- List of measures and prioritization

# T2: Main outcomes and recommendations

## Weaknesses

- Different behavior of pollutants / need of modelling (transfer of pollutants)
- Involvement and coordination of actors
- Funding / costs of measures
- Delay to see the effects of measures
- Change the attitude of farmers / convince them

## Future actions / recommendations

- Avoid to impose regulations / propose list of alternative measures (« proxi concept »)
- Compensatory measures – more incentive measures (positive funding if farmers to achieve more)
- Develop tools to help designing action plans
- Raise awareness of the actors (specially t the local scale)
- Develop strategies to assess effectiveness of measures

# \* Theme 3: Characterization of pressures and risk of impacts relative to diffuse pollution

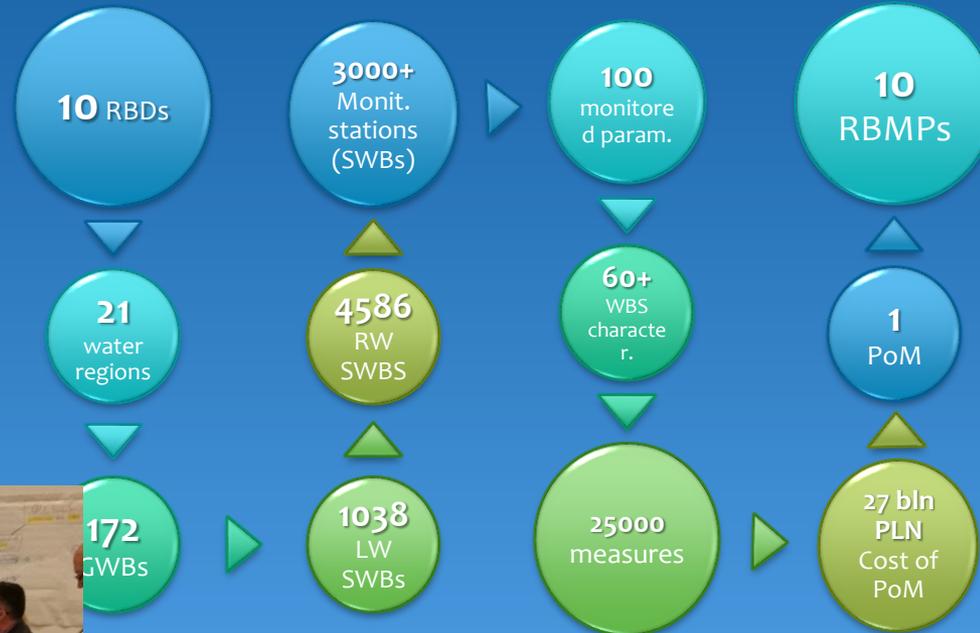
## Presentations:

Diffuse pollution in river basin management in Poland,

Przemysław Gruszecki, KZGW, Poland

Diffuse pollution, some insights

Ray Earle, Ireland



# T3: Main outcomes and recommendations

- The **problem of diffuse pollution is increasing** because the increase in economic growth is putting more pressure on European Waters. At present 90% of river basin districts, 50% of surface waters and 33% of groundwater are under diffuse pollution stresses.
- **Nitrate and pesticide pollution are the most critical issues with diffuse pollution but phosphates are also important in some cases.** Besides these compounds there is a need to **consider the effects of pesticide metabolites, nicotine derivatives, bio-pharmaceutical products, phthalates and many others.** Water treatment plants are not prepared to eliminate most of these compounds.
- **Management for solution of diffuse pollution problems should be based on accurate studies, involving measurements** to provide good data bases.
- There is a need of **harmonization of methods** of analysis, sampling, calibration and standardization. Steps have been done at European scale but more effort is needed.
- \* **New technologies** such as GPS location, drones and others should be considered for assessment of diffuse pollution inputs.
- There is a need of **management integration at the level of river basin** when these basins are between several studies. The same is the case for lake systems from mountain ranges, for instance.
- **Diffuse pollution is also related with long-range atmospheric transport.**
- There is a need to develop **tools for assessment of the benefits of implementation of specific actions.** This would help in a better appreciation of the strategy for remediation of diffuse pollution.
- **The effects of climate change on diffuse pollution** should be considered.

# Overall synthesis (preliminary)

- The **problem of diffuse pollution is commonly shared, no miracle solutions but a set of ideas and positive experiences do exist and are worth sharing**
- N, P and pesticide pollutions are the most critical but a lot of other substances (pharmaceuticals, metabolites...) would have to be considered and followed.
- Assessment must be **based on accurate data acquisition** for better design and implementation of measures. The entire Pressures-Impacts –Risk process must be considered.
- **But The information on WFD “status” is not enough. Evidence based approach is needed.**
- **In order to do, so new technologies** (GPS, Remote sensing, drones and others) but also “back-to-basics” approach (Field accurate surveys) are both needed.

# Overall synthesis (preliminary)

- **Need to treat 5 levels :**

- **EU:** (better CAP – Water integration, eco-conditionality... )
- **National & Regional:** Law, policies, RBMPs; mandatory but not enough
- **Local:** Scale for a real involvement of stakeholders, negotiations, socio-economic deals... )
- **Individual:** (Farmers or citizens) this level must really be targeted so that changes and actions are really implemented

- **At this individual level:**

- Rules are applied only if understood... assessed and controlled
- Very interesting “face to face” methods have been demonstrated
- Develop a real involvement and support: don't let farmers alone facing the rules and regulations but promote and organise exchanges, help and advice, raising awareness and bring back into context their role in the territory and with other stakeholders

# Overall synthesis (preliminary)

- Make the link between the economic stakes and other drivers and diffuse pollution/environmental quality. Assess the benefits of implementation of specific actions and the cost of no-action !
- **Distinguish between “improvement of agricultural practices” and “change of practices”.**
  - In some areas better practices (with limited costs and sometimes benefits) could (must) be implemented, with probably quite immediate results.
  - But in some others, much more drastic changes will be needed, those will required important changes that must be strongly prepared (regulation, development of new economic options, training, public support and also political backing and commitments)

# Follow-up

- Presentations and extensive groups findings to be find on INBO website
- Written product 4-6 pages
- Links with CIS activities
- Going on with this crucial issue : organise a technical workshop dedicated to "operational experts" to go ahead and work in more details ?
- The networks members and participants will be invited to identify relevant experts from their institutions.

Thank you for your participation!

