



FAIRWAY Dissemination & Communication Strategy

*Authors: Jane Brandt,
Giovanni Quaranta,
Rosanna Salvia*

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www.fairway-project.eu



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Authors	Jane Brandt, Giovanni Quaranta, Rosanna Salvia, Mariacristina de Luca
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Contents

1	Introduction	1
2	Orientation	3
2.1	What kinds of needs does the project respond to?	3
2.2	What kinds of problem will the project solve and why this solution is better than existing ones?	3
2.3	What new knowledge will the project generate?	4
2.4	Who will use the results?	5
2.5	What benefits will be delivered and how much benefit?	5
2.6	How will end users be informed about the generated results?	6
3	Visual identity	7
3.1	Logos, background image and colours	7
3.2	Examples of the use of design elements and colours in different dissemination and communication platforms and media	8
4	Communication and dissemination channels	10
4.1	Websites	10
4.2	Social media (Facebook, twitter, LinkedIn, YouTube)	14
4.3	Social Media campaigns	16
4.4	Newsletter	16
4.5	MAP / other stakeholder meetings	18
5	Material for communication and dissemination	19
5.1	Deliverables	19
5.2	Flyer	19
5.3	Infographics	19
5.4	Video clips	23
5.5	News items	24
5.6	Research Highlights	24
5.7	Key messages	24
6	Evaluation of the effectiveness of the dissemination and communication strategy	27
6.1	Stakeholders engaged	27
6.2	Dissemination and communication events and products	27
6.3	Digital dissemination and communication platforms	28
7	Annex 1: Record of dissemination activities	29
7.1	Project-wide	29
7.2	Further details for each work package	31
7.3	Further details for each case study site	37
8	Annex 2: Building dissemination and communication skills in the consortium	51
9	Annex 3: Open access and data management (coordination)	52

FAIRWAY Dissemination & Communication Strategy

Jane Brandt, Gianni Quaranta, Rosanna Salvia (MEDES)

1 INTRODUCTION

We start this deliverable by framing the FAIRWAY Communication and Dissemination strategy within the needs the project responds to, the new knowledge to be generated and the expected users of that knowledge results, according to the IPR Helpdesk's Fact Sheet "The Plan for Exploitation and Dissemination of Results in Horizon 2020" (July 2015) (Section 2). In Section 3 we describe the visual identity used for all communication and dissemination products.

FAIRWAY uses the same distinction between dissemination and communication as given by the Commission in the guidance "Social media guide for EU funded R&I projects" (April 2018).

Commission	Communication	Dissemination
Coverage	Covers the whole project (including results)	Covers the project results only.
Timing	Starts at the outset of the project	Happens only once results are available
Audiences	Addresses multiple audiences beyond the project's own community including media and general project.	Specialist audiences. Groups that may use the results in their own work, including peer groups, industry, professional organisations, policy makers
Aims	To inform and engage with society to show how it can benefit from research	Enabling the take up and use of results

FAIRWAY's events, products and use of digital platforms map onto this framework in the following way.

FAIRWAY	Communication	Dissemination
Events	MAP meetings	Meeting with national/international level stakeholders
	Workshops, demonstrations, meetings for local and regional stakeholders	EU level workshops
		Conferences, seminars
Products	Reports of activities on technical, local or national media or other websites	Research Highlights summaries, scientific publications

	Newsletter contributions to regional, national organisations or to technical journals	
	Infographics, videos, key messages, leaflets	
Digital platforms	FAIRWAY project website	FAIRWAYiS website
	Facebook, Twitter, YouTube	Linkedin, ResearchGate

In Sections 4 and 5 we describe the (mainly digital) communication and dissemination channels and the material that was developed for them.

However, much communication activity took place within the MAPs and other local stakeholder meetings and dissemination activity took place at workshops, meetings and conferences. These activities are recorded separately for each case study and work package and are given in Annex 1. brief summary statistics for which are given in Section 6. A much fuller account of MAP activity is given in Deliverable 2.2.

Annex 2 describes how dissemination and communication skills (particularly to produce material for social media) were developed in the consortium. Annex 3 gives a brief statement on Open Access and data management.

2 ORIENTATION

(The headings in this section are those listed in the IPR Helpdesk's Fact Sheet "The Plan for the Exploitation and Dissemination of Results in Horizon 2020" July 2015)

2.1 WHAT KINDS OF NEEDS DOES THE PROJECT RESPOND TO?

(sources: FAIRWAY GA Part B 1.1 Objectives, Project leaflet)

Safe drinking water is vital for human health and the economy. However, throughout the EU, diffuse pollution by nitrogen and pesticides from agriculture is the main obstacle to meeting drinking water quality targets. Policies to protect drinking water resources are not achieving a consistent level of implementation and effectiveness across all member states.

The productivity of agriculture in the EU has greatly increased over recent decades, due to the availability of fertilisers and pesticides, which have boosted crop production and, indirectly, animal production. However, these increased inputs of fertilisers, pesticides and manures to agricultural soils have also led to increased losses to the environment and thereby contributed to the pollution of ground and surface water.

To address this issue, the EU has developed an extensive set of directives, guidelines and policies. The requirements of the Drinking Water Directive (DWD) set an overall minimum quality for drinking water within the EU. The Water Framework Directive (WFD), Groundwater Directive (GWD), Nitrates Directive (ND) and the Directive on the Sustainable Use of Pesticides (PD) require Member States (MS) to protect drinking water resources against pollution in order to ensure that it is safe.

However, regulations arising from these directives are not achieving a consistent level of implementation and effectiveness across all MS. The DWD particularly regulates large water suppliers, but about 65 million people are served by small suppliers, often located in rural and remote areas where monitoring and reporting on water quality is not mandatory, and adequate protection and treatment facilities are often missing. Consequently, many areas still have vulnerable water resources where limits for nitrate (50 mg/l) and pesticides (0.1 µg/l) content are still exceeded.

EIP Water identified 'inconsistency and fragmentation of policies, regulations and governance structures' as 'low hanging fruit' in the development of the sector. At the same time, there is a movement away from top-down management of water issues by national governments towards governance approaches at regional/local levels with all relevant actors involved. However, it is unclear what specific governance arrangements and regimes, under what circumstances, will result in better ground and surface water quality.

2.2 WHAT KINDS OF PROBLEM WILL THE PROJECT SOLVE AND WHY THIS SOLUTION IS BETTER THAN EXISTING ONES?

(sources: FAIRWAY GA Part B 1.1 Objectives; 1.3.4 Overall approach and methodology)

Within the EU there is a huge diversity in farming systems, climate, geomorphology, hydrology, soils, education level of farmers, quality of extension services and type of water supplies. This means that site-specific measures and good practices are required to decrease nitrate and pesticide pollution of drinking water resources. Various measures and good practices have been developed and partly implemented at a farm level. In some cases and regions, measures and practices have been successful, especially on the so-called 'early adaptors' or 'frontrunner' farms.

However, to step up from 'proof of concept' at farm level to a durable and long-lasting implementation at regional level requires additional approaches and engagement of more regional actors. Coherent, but site-specific packages of measures are needed. However, the critical success factors that determine the effectiveness of these measures on a site by site basis are not well-known. Additionally, it has been recognized that a number of EU environmental directives (e.g., DWD, WFD, ND, PD) and the Common Agricultural Policy could be better integrated when focusing on the protection of drinking water resources.

FAIRWAY's basic premise is that safe drinking water is a result of multi-actor, multi-sector and multi-level efforts and that solutions to the problems of nitrate and pesticide pollution can be found by taking a four-pronged approach.

- Firstly, using experience and evidence from 13 case study sites in 11 countries, tools and measures to mitigate nitrate and/or pesticide pollution from agriculture will be analysed and assessed in multi-actor settings (actors include local farmers, land managers and citizens, ministries at national/regional level and supra-national organisations). The views of the actors on the success and failure factors of drinking water protection programs will be obtained. The capability, ability and willingness of farmers and land managers to implement drinking water protection programs will be analysed and assessed.
- Secondly, in areas of vulnerable drinking water resources there will be a thorough and integrated analysis of initiatives that have been launched to diminish diffuse pollution. The success and failure factors (social, legal, technical, environmental) will be analysed bringing added value to these cases through innovative approaches to support farmers, exchange and improve existing farmer advice tools.
- Thirdly, site-specific management tools, measures and good practices, indicators for monitoring and communication tools will be developed, taking into account variation across different pedo-climatic zones.
- Fourthly, different governance approaches (ranging from central- to interactive- to self-governance) will be identified, evaluated and further developed. Together with the actors, the critical environmental factors for these approaches will be identified, as well as the mix of suitable communicative, economic and regulatory instruments and practical indicators to monitor effective governance.

FAIRWAY will extract lessons learned from the case studies, literature and other projects to identify success and failure factors for wide-ranging and long-duration implementation of cost-effective mitigation options. The effects, costs, and benefits for society of preventive and curative measures will be analysed in a harmonized approach. Consequences for farmers' income will be calculated. Measures will be evaluated from a proof of concept at the level of an individual farm to the scale of capture zones / recharge areas of drinking water supplies, with focus on evaluation of the social, economic and technical barriers to the effective implementation.

2.3 WHAT NEW KNOWLEDGE WILL THE PROJECT GENERATE?

(source: GA Part B 1.1 Objectives)

FAIRWAY will generate:

- i) increased scientific understanding of the relationship between agriculture and drinking water protection;
- ii) increased understanding of the barriers to practical implementation of protection measures, delivering innovative measures, tools and instruments to overcome these barriers;
- iii) harmonized monitoring protocols and data-sets for monitoring key farming practices and water quality;
- iv) effective governance approaches, and

- v) increased awareness and involvement of farmers and other citizens in improving drinking water quality.

2.4 WHO WILL USE THE RESULTS?

(source: GA Part B 2.2.1 Dissemination and exploitation of results)

The target audiences for FAIRWAY's key messages include individuals and organisations from the local to European level, from the scientific community to the general public. Representatives from each of these groups will be included in the multi-actor platforms.

- Local level - the most important users of the project's results are the people who implement measures to reduce nitrogen and pesticide contamination. They include farmers, land users, farm advisory services, water companies and authorities. An important part of the dissemination effort will focus on these groups through the multi-actor platforms. These activities will be crucial to the improved utilization of decision support tools.
- Regional and national level - project and case study partners at regional and national levels will identify actors to invite to events in the case study sites and be presented with relevant project outputs and information. These will include amongst others the following:
 - policy makers, water bodies, authorities, environment agencies and regulatory bodies;
 - national level relevant institutions and networks concerned with drinking water protection;
 - professionals (engineers) and practitioners (land managers, users, and consultants) and their respective representative bodies (farmers unions / agricultural chambers);
 - water companies and industries, especially those focussing on agricultural inputs such as fertiliser and pesticides; and
 - intermediary, advisory, and NGOs.
- European level - European policy makers concerned with agriculture and water quality. Specifically these include: DG Environment, DG for Agriculture and Rural Development, and DG Research. Other target audiences are the European Innovation Partnership (EIP) for 'Agricultural Productivity and Sustainability', farming organisations such as Copa-Cogeca and the farm advisor organisation EUFRAS.
- Scientific community.
- Public.

2.5 WHAT BENEFITS WILL BE DELIVERED AND HOW MUCH BENEFIT?

(Source: GA Part B 2.1 Expected impacts)

FAIRWAY expects to deliver the following.

- Good cooperation between actors on pesticides, fertilisers and irrigation management practices capable of reducing point source and diffuse pollution in different contexts.
- Harmonised datasets on pesticide and fertiliser contamination of drinking water resources.
- Greater involvement of farmers and other citizens in the monitoring of water quality.
- Water governance models that are more conducive to the adaptation and long-term durability of efficient on-farm and land use strategies.
- Integrated scientific support for relevant EU policies (e.g. CAP, WFD, ND, PD, Fertiliser regulation).

As a result, the following environmental and societal benefits should also accrue.

- Sufficient drinking water of high quality for human consumption.

- Improved surface water quality will also improve aquatic biodiversity and increase the quality of water for recreation and swimming.
- Lower use of fertilisers and pesticides will result in higher resource efficiency and lower greenhouse gas emissions.
- Improved soil quality.
- Increased understanding of citizens of the issues that play a role in the supply of high quality drinking water.
- Cost-effective measures for mitigation of water pollution and cheap water monitoring tools and indicators will result in increased cost-efficiency in drinking water protection.
- Good cooperation between all the actors resulting in reductions in point source and diffuse pollution.
- Better understanding of the role of gender in drinking water protection.

2.6 HOW WILL END USERS BE INFORMED ABOUT THE GENERATED RESULTS?

(source GA Part B 2.2.1 Dissemination and exploitation of results)

A range of different material will be prepared to inform end users about the projects results:

- scientific publications;
- summaries of and extracts from the project deliverables;
- flyer/s or leaflets summarising the principal aims and objectives of the research;
- a series of videos and infographics explaining different key messages;
- press releases;
- policy briefs.

This material will be disseminated through a variety of channels including:

- two websites, each one with a different function and target audience;
- social media (Facebook Page, Facebook Groups, Twitter, YouTube);
- scientific media (peer-reviewed journals, LinkedIn, ResearchGate);
- regular newsletter.

3 VISUAL IDENTITY

The purpose of establishing a distinctive visual identity for FAIRWAY is to ensure the consistent, memorable, attractive visual presentation of all the information products delivered as part of the project.

3.1 LOGOS, BACKGROUND IMAGE AND COLOURS

3.1.1 Logo

The droplet-shaped logo can be used with or without the project name and extended title.



3.1.2 Background image

The background image is used as a banner on Facebook, Twitter, LinkedIn, YouTube and on posters.



3.1.3 Colours

Colours used in the logo are:

- Blue: #5AA3CE
- Dark Green: #1E882E
- Light Green: #8BB93D
- Brown: #3E2E21

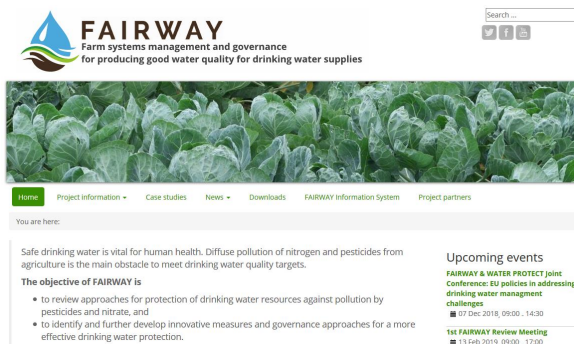
3.1.4 Fonts

Fonts (not strictly prescribed).

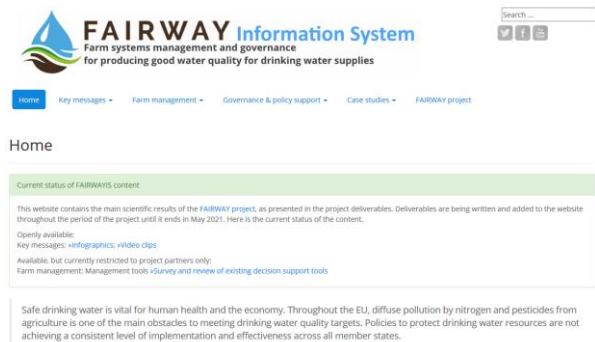
- Raleway (where available) for headings
- Calibri or Arial for documents and presentations

3.2 EXAMPLES OF THE USE OF DESIGN ELEMENTS AND COLOURS IN DIFFERENT DISSEMINATION AND COMMUNICATION PLATFORMS AND MEDIA

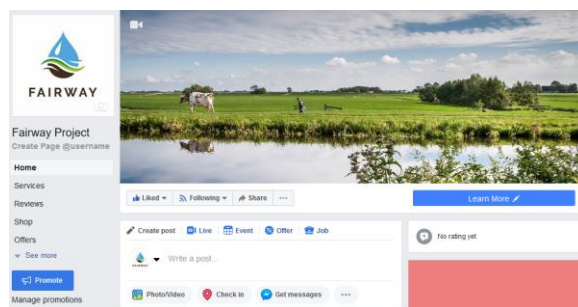
FAIRWAY Project website home page



FAIRWAYiS website home page



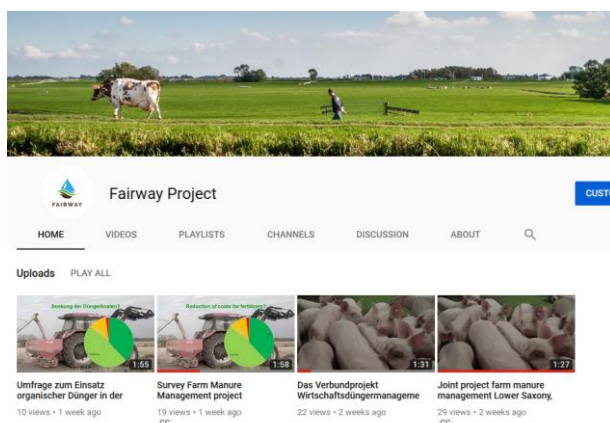
FAIRWAY Facebook Page



FAIRWAY Twitter



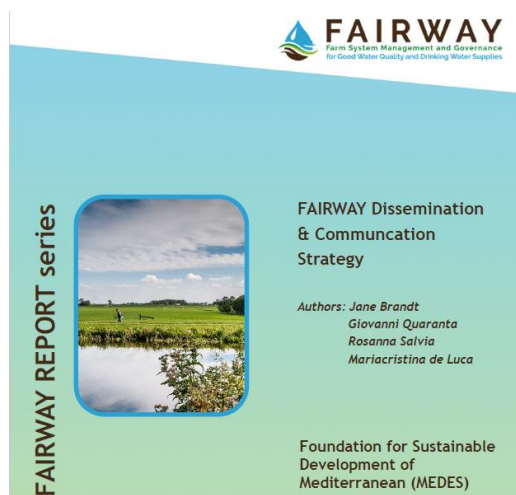
FAIRWAY YouTube channel



Templates for infographics



Report template



Presentation template



Infographic, document and presentation templates are available for the partners to download from the project website and can be adapted as necessary.

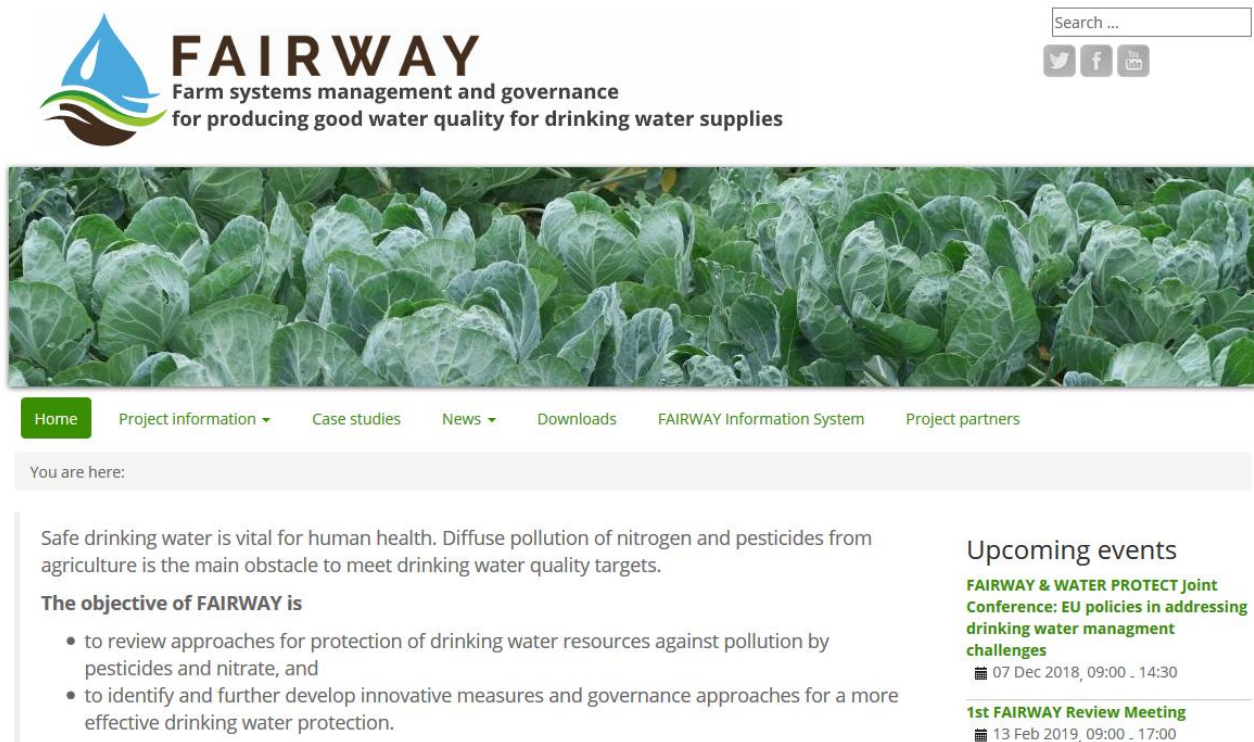
4 COMMUNICATION AND DISSEMINATION CHANNELS

4.1 WEBSITES

FAIRWAY has two websites, each one with a different function and target audience. The project site is concerned with the organisation and running of the FAIRWAY while the information site contains and explains the results. The project site was initially the more important of the two. The two websites are linked.

4.1.1 FAIRWAY project site

www.fairway-project.eu



For the duration of the project, the FAIRWAY project website has been the main source of information about the project to our public audiences. It contains

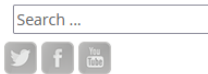
- Essential information about the project, partners, funding, work packages, study sites
- News, newsletter, forthcoming events
- Public documents – project leaflet, infographics, press releases

Its second function has been to be the place that partners will go to when they needed resources such as:

- copies of the project logo, document and presentation templates
- meeting presentations
- restricted documents such as deliverables
- current email address list for partners
- information relating to project planning

4.1.2 FAIRWAY Information System

www.fairway-is.eu



Home Results in brief Farm management Governance & policy support Case studies FAIRWAY project

Home

Safe drinking water is vital for human health and the economy. Throughout the EU, diffuse pollution by nitrogen and pesticides from agriculture is one of the main obstacles to meeting drinking water quality targets. Policies to protect drinking water resources are not achieving a consistent level of implementation and effectiveness across all member states.

The FAIRWAY Information system is the major dissemination product of the project and the long-term repository of the results. Project deliverables are the source of most of the content which has been edited to tell a coherent story about the measures and governance that can be used to protect drinking water from contamination, and to provide that story in different levels of detail and in different formats. It is the most comprehensive source of information for all our target audiences.

Content is grouped in four broad thematic categories

- Farm management
- Governance & policy support

A third category provides case study specific information

- Case studies

Each category has subsections that correspond to the work packages and, within each subsection, the work package deliverables have been grouped into those that advance scientific understanding, make practice recommendations or provide policy support.

The screenshot shows the FAIRWAY Information System website. The header includes the logo and navigation links: Home, Key messages, Farm management (selected), Governance & policy support, Case studies, and FAIRWAY project. A breadcrumb trail indicates 'You are here: / Farm management / Management tools'. The main content area is titled 'Management tools' and contains a paragraph about decision-support tools. Below this, there are three columns: 'Science', 'Recommendations', and 'Policy support'. The 'Science' column lists three items, with the last one marked with an asterisk. The 'Recommendations' column lists two items, with the last one marked with an asterisk. The 'Policy support' column is empty.

Science

- Survey and review of existing decision support tools [D5.1]
- *Report on the evaluation of the decision support and information tools and measures completed [D5.2]
- *Report on costs and benefits, including risk [D5.3]

Recommendations

- *Recommendation report/ synthesis report on decision-support systems [D5.4]
- *Phone App -Pesticides [D5.5]
- *A description of a decision support framework for advice, training and communication strategies of a decision support framework for advice, training and communication strategies [D5.7]

Policy support

NB Sections marked * are not available yet

Each deliverable is introduced by an executive summary followed by (typically) about 8-10 short articles dealing with scientific principles, experimental methods and case study examples in more detail.

Survey and review of existing decision support tools

Main authors: F.A. Nicholson, J.R. Williams, A. Cassidy, D. Doody, A. Ferreira, A. Janssen, B. Kaste, S. Langos, A. K. Lousen, P. Schipper, N. Sandjiv, L. Tondier, J. van Vliet and A. Vellinga
 Editor: Jane Brinall
 Source document: Nicholson, F.A. et al. (2018) Survey and Review of Decision Support Tools. FAIRWAY Project Deliverable 5.1 166 pp

This section is currently restricted and is only visible to project partners who have logged in.

This section of FAIRWAYiS contains a comprehensive overview of decision support tools (DSTs) used by farmers, farm advisors, water managers and policy makers in the EU for water, nutrient and pesticide management. It encompasses simple, semi-automated, and complex models intended for research studies. The overall purpose of the review was to select a subset of DSTs that could be further assessed by the multi-actor platform for their potential suitability in managing water quality within the case study catchments of the FAIRWAY project (multi-actor platforms).

Structured searches of the scientific literature largely returned details of research-based modelling tools, therefore the unique combination of expertise and practical experience of project participants was used to identify farm-scale tools and other locally developed DSTs that were assessed as being important in the regional context.

Definitions and methodology

More than 150 DSTs were identified in total, of which 36 were selected for further investigation based on their national importance and relevance to the project area. For these 36, a set of information sheets were produced to provide an easily accessible source of key information on tool capabilities, and a subset were demonstrated to a group of project partners and MAP leaders at a workshop.

Decision support tool short list

Executive summary

A classification scheme was devised to better understand the target users of the DSTs and the types of support they were intended to provide. The DSTs were separated into those developed to support water quality/environment policy makers operating at a regional or national level, and those intended to support sustainable nutrient management at the farm level. The DSTs were further divided into groups depending on whether they provided support for i) evaluation of current practices; ii) strategic advice for farm management and implementation of measures; or iii) on-farm operational management.

Types of decision support tool

From the selected DSTs were primarily aimed at improving water quality. Rather than being farm (nutrient/pesticide) management tools and their inclusion in this scheme was based on the assumption that the efficient use of nitrogen and pesticides indirectly improves water quality; most participants reported using this type of DST. Only 3 of the shortlisted DSTs were explicitly developed to consider the impact of mitigation methods on water quality. FARMSCOPE (UK), Environmental Yardstick for Pesticides (NL) and Catchment Land Use Modelling (UK). However, tools that support the efficient and smart application of nutrients or pesticides (e.g. by taking into account weather forecasts), can be said to provide indicative information on management measures for reducing losses to the water environment. Economic and financial impacts of mitigation methods were infrequently reviewed by the shortlisted DSTs.

Representation of water quality, mitigation methods and economic and financial aspects in decision support tools

All the DSTs examined in this review operate within the context of the wider advisory framework in place in their respective countries, and this will clearly impact on the uptake of a DST and its usefulness/effectiveness. It may not always be straightforward to transfer a DST from one country to another because the advisory framework are likely to be different, in addition to issues around language and requirements for country-specific data or calibration.

National and international use of decision support tools and barriers to their uptake

Selected DSTs will be evaluated in the FAIRWAY case studies for their ability to assist in implementing mitigation methods and managing water quality.

Related articles

- Definitions and methodology
- Decision support tool short list
- Types of decision support tools
- Representation of water quality, mitigation methods and economic and financial aspects in decision support tools
- National and international use of decision support tools and barriers to their uptake
- References

8 – 10 short articles

Table 1: The current status of FAIRWAYiS content

NB: The deliverable date of D2.2 and D7.4 is the same as D8.1v4. Therefore, at the time of writing this report, they have not been added to FAIRWAYiS. However they will be added in time for the Final Periodic Report. Similarly a number of publications based on deliverables are being published or in the final stages of review. As soon as they are published the deliverables will be made publicly available on FAIRWAYiS.

Available on FAIRWAYiS (restricted access - to allow partners time to publish)	Available on FAIRWAYiS (public access)	Deliverables are available but the material has not yet been extracted for FAIRWAYiS
--------------------------------------------------------------------------------	----------------------------------------	--------------------------------------------------------------------------------------

Results in Brief	Key messages	Research Highlights	Video Clips
	Infographics		
	Science	Recommendations	Policy support
Farm management			
Farming practices: review of measures and practices	4.1: Review on effective pesticide mitigation measures	4.3 ₂ : Report on most promising nitrate measures and practices	
	4.2: Review on effective nitrate leaching mitigation	4.3 ₁ : Report on most promising pesticide measures and practices	
Monitoring & indicators	3.1: Review report of Agri-Drinking Water quality Indicators and IT/sensor techniques	3.2: Report and leaflets with evaluation of all indicators	

		3.3: Database containing harmonized dataset	
Management tools	5.1: Technical report of the review of existing support tools	5.4 & D5.7: Decision support tool framework	
	5.2: Report on the evaluation of the decision support and information tools and measures completed	5.5: SprayDay: mobile app for infrequent pesticide users	
	5.3: Report on costs and benefits, including risk		
Governance & policy support			
Policy & governance	6.1: Coherence in EU law and policy for the protection of drinking water resources	6.3: Effectiveness of EU legislation in the context of local realities	6.5: Policy brief: From farm to drinking water - fit for the future?
	6.2: Governance arrangements in case studies	6.4: Cost-effective and coherent management models for drinking water protection	
Science & policy support	7.1: Barriers and issues in providing integrated scientific support for EU policy		7.3: Recommendations for the most promising activities, policies and tools
	7.2: Actors' feedback on practices for improvement of water quality in FAIRWAY case studies and interim project results		7.4: Synthesis report on the iterative process of knowledge and practice exchange in the FAIRWAY project for integrated scientific support for relevant EU-policies
Multi-actor platforms	2.2 Summary of all MAP experiences conducted during the project period	2.4: Lessons learned and recommendations for Water Safety Plans	2.5: MAPs as vehicles for resolving drinking water pollution issues

Case Study descriptions and details of their contributions to the research programme			
Island Tunø, DK	Aalborg, DK	Anglian Region, UK	La Voulzie, FR
Lower Saxony, DE	Axios river, GR	Derg catchment, UK	Overijssel, NL
Noord-Brabant, NL	Vansjø, NO	Baixo Mondego, PT	Arges-Vedea, RO
Dravsko Polje, SI			

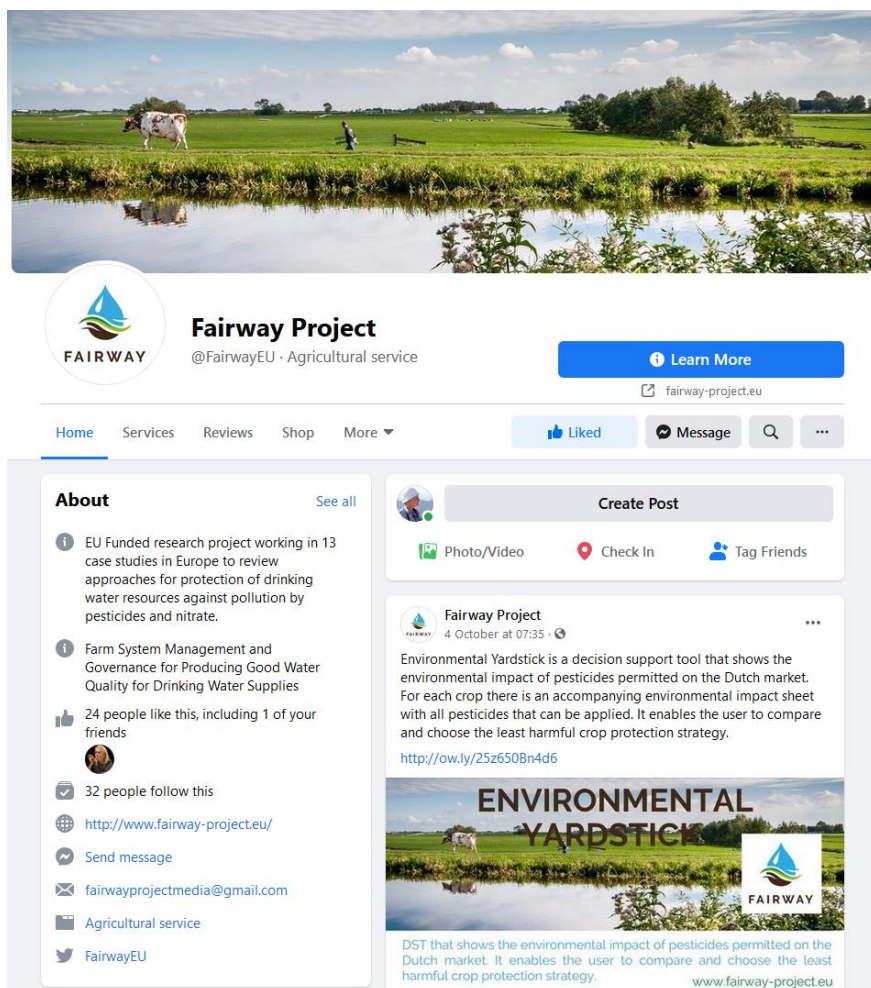
A fuller description of FAIRWAYiS is given in Deliverable 8.3.

4.2 SOCIAL MEDIA (FACEBOOK, TWITTER, LINKEDIN, YOUTUBE)

Social media has become an important channel for projects to communicate concise and visual pieces of information about their research to a broad target audience. FAIRWAY is using Facebook, Twitter, LinkedIn and YouTube as our main social media platforms.

4.2.1 FAIRWAY Facebook Page

www.facebook.com/Fairway-Project-118107408845897/



The Facebook page is used in parallel with Twitter and LinkedIn to announce news and event and communicate key messages from the project results using infographics and short videos. The top three posts to date reached 110 (Vansjø case study infographic), 26 (review by the Source to Tap project (the Northern Irish FAIRWAY case study) of MCPA) and 25 (publication on Lag Time as an Indicator of the Link between Agricultural Pressure and Drinking Water Quality State) people.

The page currently has 40 followers and has made 73 posts.

4.2.2 FAIRWAY MAP Facebook groups

In the Grant Agreement, it was suggested that, if it is useful or appropriate, each MAP may also set up Facebook Groups to enable members of the group to communicate with each other. However, following a review of dissemination and communication activity at the plenary meeting in Ljubljana (September 2019), most of the case study leaders considered that this would not be effective. Social media is often not used by farmers and, where it is, it would be preferable to build on any existing networks that are used.

4.2.3 FAIRWAY Twitter

<https://twitter.com/FairwayEU>

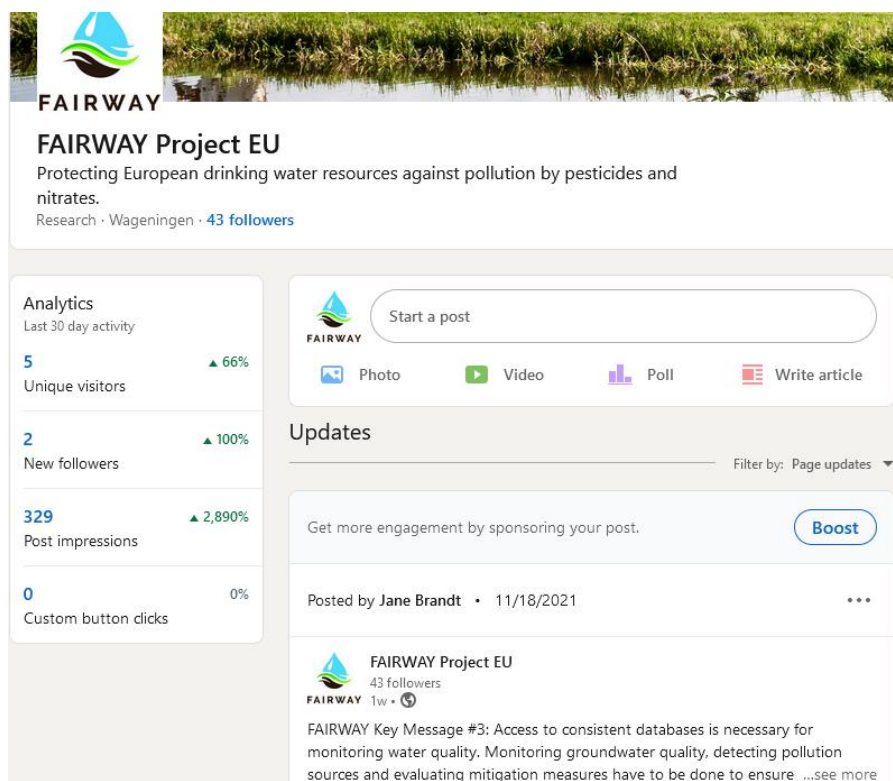


Twitter is used in parallel with Facebook and LinkedIn to announce news and event and communicate key messages from the project results using infographics and short videos.

There are currently 246 followers and we have made 96 tweets.

4.2.4 LinkedIn

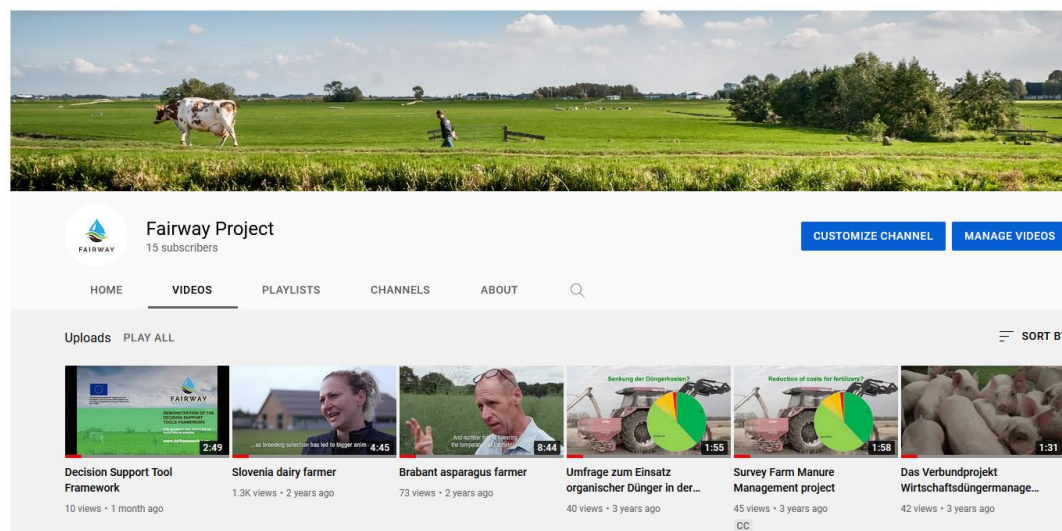
<https://www.linkedin.com/company/fairway-project-eu/>



The LinkedIn page has 43 followers and has made 34 posts since it was set up in May 2020.

4.2.5 FAIRWAY YouTube channel

www.youtube.com/channel/UCtixNzL_7ziRXNnHqvJTgpQ



Seven short videos (ranging in length from 1:26 to 8:43) were completed, two by Scienceview and the others by members of the consortium or partner organisations in the case studies. The videos show initiatives to mitigate nitrate and pesticide contamination in the Lower Saxony, Dravsko Polje, Noord-Brabant and Vansjø case studies, an animation on managing pesticide use in Netherlands and a user guide to the FAIRWAY decision support tool framework. All videos are hosted on YouTube and publicised as part of FAIRWAY dissemination and communication strategy.

The channel has 15 subscribers and there have been a total 1,565 views of all videos, 1.3K of those being for the Slovenian dairy farmer video.

Full details of the process of making the videos are provided in Deliverable 8.4.

4.3 SOCIAL MEDIA CAMPAIGNS

News of events and publications (including Research Highlights summaries of project deliverables) is published across all social media platforms as and when it is received. Occasionally we have more sustained campaigns, posting regularly on a particular theme.

Table 2: Social media campaigns run to date

Name of campaign	Dates	Information posted
Case study spotlights	May - July 2020	Infographics
Key messages	November 2021 - ongoing	Key message summaries

4.4 NEWSLETTER

Since October 2017 we have issued 11 newsletters to coincide with events, announce new infographics or videos or focusing on particular study sites.

Previous editions of the newsletter are available on the project website (www.fairway-project.eu/index.php/news-events/newsletter-archive).

Table 3: Newsletters produced to date

Date	Theme	Sent to	% opens	% clicks
12-Oct-17	FAIRWAY and WaterProtect launch meetings	79	63	0
26-Apr-18	WP5 meeting, focus on Lower Saxony CS	84	37	11
31-Jul-18	Aalborg Plenary, site visit, infographic	93	33	6
05-Nov-18	WP6 meeting Oslo, Conference, filming in Slovenia CS	99	34	4
18-Mar-19	Joint Policy Conference with waterProtect, First Review Meeting, first FAIRWAY publication	106	42	11
24-Apr-19	DST workshop, infographic	106	36	7
26-Nov-19	Videos of farmers in case studies	113	22	9
15-Apr-20	Deliverable 7.1 highlights, Knowns and unknowns of Herbicide MPCA (Derg Catchment), new publication, Knowledge and Innovation Day (Anglia Region)	114	31	11
21-Jul-20	Decision support tools: Research highlights from Deliverables 5.1 and 5.2 with accompanying infographic	115	36	7
8-March-2021	SprayDay app webinar	119	29	5
1-November-2021	Stakeholder engagement and governance webinar	120	29	13

The newsletter is currently sent to 120 subscribers including project partners, individuals and organisations that sponsored the project proposal, and others that the partners have suggested. People can subscribe to the newsletter via the project website.



Newsletter 27 November 2018

Hello Visitor,

Among many other things, the last few months have seen: the second FAIRWAY plenary meeting, a visit from two of the Commission's policy makers to one of the case studies and the production of first FAIRWAY infographic.

Second plenary meeting held in Aalborg, DK



4.5 MAP / OTHER STAKEHOLDER MEETINGS

Almost 200 meetings, workshops and formal and informal consultations have been held in the case studies with members of the local multi-actor platforms and other local or national groups of stakeholders. These meetings provided many opportunities for exchanging information and communicating results between the actors and the project partners.

These events are summarised in Section 6 and itemised in Annex 1. Those meetings that explicitly involved members of the MAPs are reported in Deliverable 2.2. Further exploration of these activities is given in the WP8 section of the Final Periodic Report.

5 MATERIAL FOR COMMUNICATION AND DISSEMINATION

5.1 DELIVERABLES

The most extensive source of material for dissemination and communication are the project deliverables. Each deliverable has been formulated in a number of different ways so that it can be used on all the dissemination channels.

- Deliverable (20-25 pages) - FAIRWAYiS website
- Research Highlights (2 pages) - FAIRWAYiS website, newsletter
- Key messages (short text, image) - Facebook, Twitter, YouTube, Newsletter
- Scientific paper - peer-review journals, ResearchGate

5.2 FLYER




The project flyer gives a short, 1-page summary of the objectives and expected outcomes of FAIRWAY, written and illustrated for general audience. It is currently available in English, Portuguese and Slovenian and can be downloaded from the project website








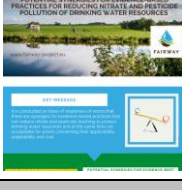
www.fairway-project.eu/index.php/downloads/category/17-fairway-leaflets

5.3 INFOGRAPHICS


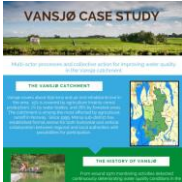
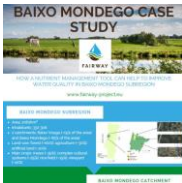


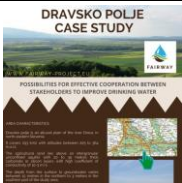
Key messages for each work package and case study site are explained using infographics, 22 of which have been produced to date (www.fairway-is.eu/index.php/key-messages/infographics).

Table 4: Infographics produced to date

Infographics relating to the main research themes addressed by FAIRWAY		
Farm management		
	Prevent pesticide pollution	<p>Best practises to reduce agricultural related pesticide pollution of ground water and surface water resources.</p>

Decision support tools		
	Decision support tools for nutrient management	Decision support tools help farmers and their advisers apply the right amount of nutrients at times when crops can use them most effectively
	A successful decision support tool	Successful decision support tools designed to help reduce pollution of water resources should fulfil a number of criteria relating to their access, use, functionality and output.
	Environmental Yardstick	Environmental Yardstick is a decision support tool that shows the environmental impact of pesticides permitted on the Dutch market. For each crop there is an accompanying environmental impact sheet with all pesticides that can be applied. It enables the user to compare and choose the least harmful crop protection strategy.
	Danish nutrient management on German farms	Denmark has achieved great success in water protection in the past decades. Land size and farm structure of Denmark and Lower Saxony are quite comparable. Application of Danish fertilization legislation on farms in Lower Saxony by using a Danish Decision Support Tool. Do farms in Lower Saxony meet Danish requirements?
Policy and governance		
	Drinking water protection: coherence in EU law and policy	Agricultural pollution by nitrates and pesticides from agriculture is one of the main obstacles to meeting drinking water quality targets in the EU. To successfully prevent and manage diffuse pollution, legal and policy frameworks need to be coherent and consistent.
	Effectiveness of EU legislation in the context of local realities	An extensive EU framework on agriculture and protection of drinking water resources exists. We analyzed the effectiveness of these regulations towards attaining water quality objectives at local level.
Science and policy support		
	Agriculture and water quality	Barriers and solutions in science and policy interaction.
	Potential synergies for practices reducing nitrate and pesticide pollution	Potential synergies for evidence-based practices for reducing nitrate and pesticide pollution of drinking water resources.
Infographics relating to the FAIRWAY case studies		


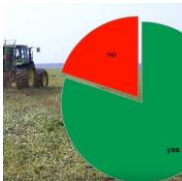




Case Studies 1 & 2: Island Tunø & Aalborg, Denmark		
	How protection zones and land management restored nitrate contaminated groundwater on the Island of Tunø	<p>Tunø is an example of successful groundwater protection on a small island with one small waterworks where the aquifer is vulnerable to nitrate pollution and salt-water intrusion. The case provides valuable lessons learned.</p>
	How protection zones and different mitigation measures restore contaminated groundwater in the Kongshøj area in Aalborg	<p>Since 2004 mitigation measures have included general regulations, set-aside or reduced use of N fertilization, afforestation, campaign on correct use of herbicides.</p>
	Working hypotheses for the Danish case studies	<p>Five working hypotheses have been developed to assist the various groups of stakeholders achieve a common goal.</p>
	Danish farmers' recommendations	<p>Based on practical experience, three Danish farmers from the FAIRWAY case study of Aalborg make recommendations which they believe can ease groundwater protection processes when nitrate and /or pesticide restrictions are discussed for agricultural land.</p>
Case Study 3: Anglian Region, England		
	Using different methods of farmer engagement to reduce the use of pesticides.	<p>In the predominantly arable Anglian Region (England) the drinking water company has funded a number of Catchment Officers responsible for reducing the amount of pesticides, particularly metaldehyde, reaching water treatment works. This case study focuses on: the social science lessons behind two approaches to reducing on-farm pesticide use; collecting comparable data in a third control area with metaldehyde challenges; testing a third 'new network engagement' approach.</p>
Case Study 5: Lower Saxony, Germany		
	Closing nutrient cycles by manure transport: analysis of potential and reported experience	<p>In Lower Saxony the public advisory authority for agriculture has initiated a program that aims at closing nutrient cycles on supra-regional scale. "Farm Manure Management" examines the (potential) export of farm manure from regions with intensive pig and poultry farming to arable farming regions.</p>
Case Study 9: Noord-Brabant, Netherlands		
	Collective actions to improve water quality	<p>In Noord-Brabant the use of pesticides is a threat to ground water in some of the drinking water abstraction areas. A simple contract has been made between farmers and the province including an agreement on reduced use of pesticides. The farmers take measures and (try to) implement innovations and new techniques, they choose pesticides with low environmental impact and register their pesticide use. The municipalities</p>


		have reduced their pesticide use to zero on hard surfaces and they aim for zero use in parks, sport pitches and golf areas.
	Cleaning out the pesticide store	As part of the Clean Water project, farmers are supported to get rid of outdated and leftover pesticides without obligation. It prevents unnecessary use or discharge of these chemicals. This approach is very successful and is now used in projects throughout the Netherlands.
Case Study 10: Vansjø, Norway		
	Multi-actor processes and collective action for improving water quality	Vansjø is a complex lake-river system with varying long-term nutrient loads. The aim is to elucidate for the various stakeholders the possible effects on drinking water quality of modelled scenarios in which climate change, agricultural land use and the water regulation scheme are changed.
Case Study 11: Baixo Mondego, Portugal		
	How a nutrient management tool can help improve water quality	In Baixo Mondego the soils are being used as a medium to dispose of organic waste within a circular economy strategy that aims to close energy and matter loops at the local scale. However, this is not done without risk, and the addition of residues to the soil has to be controlled in order to keep under the legal pollutant concentration limits for both ground and surface water, all year round and particularly during the summer dry period.
Case Study 12: Arges Vedeia, Romania		
	When best agricultural practices are applied there is less nitrogen pollution in water bodies	The area of Arges-Vedeia (Romania) is affected by high nitrate concentration in the groundwater. About 75% of drinking water is taken from private wells located on household sites. Most of the households have animals and very rudimentary manure storage facilities so the main pollution sources for nitrates is animal waste. A World Bank project related to "Integrated Control of Fertilizer Use" is being implemented with the objectives of developing measures to mitigate the nitrate flow to surface and groundwater.
	Optimized nitrogen management plans for human health and welfare using a fertilization plan	The fertilization plan is accomplished for a period of 4-5 years for crops within a certain rotation at farm level and contains economic optimum doses (for a maximum economic benefit) and technical doses (for maintaining soil fertility). The fertilization plan is carried out going through three stages: the field stage, laboratory stage and desk stage.
Case Study 13: Dravsko Polje, Slovenia		
	Possibilities for effective cooperation between stakeholders to improve drinking water	FAIRWAY opens new areas of research into the organisation of multi-actor platforms and contributing to the formalisation of current occasional meetings between farmers and government.

5.4 VIDEO CLIPS

Key messages for work packages and case study sites are also explained and illustrated using using 7 short video clips (fairway-is.eu/index.php/key-messages/video-clips). A professional film maker is also part of the consortium.

Table 5: Video clips produced to date

Introducing the FAIRWAY Case Studies		
	Lower Saxony, DE	The Joint Project Farm Manure Management is investigating how much of the farm manure accumulating in the west of Lower Saxony (where husbandry dominates) can be transported to the southeast (a mainly arable area) in an environmentally-sound way, to substitute mineral fertilizers and close the nutrient cycle on a supraregional scale. »Video also available in German
	Lower Saxony, DE	Around 250 farmers in the south east of Lower Saxony were questioned about the use they make of organic manure. Because of variability in the quality of manure, most farmers prefer long-term cooperation with farmers they know in person and whom they can trust. »Video also available in German
	Dravsko Polje, SI	A dairy farmer in Dravsko Polje (Slovenia) tells how she has replaced the old cattle shed with a new one using a deep bedding system. The bedding material mixed with slurry is applied to the fields, providing much needed additional organic matter and a reduced risk of leaching.
	Brabant, NL	An asparagus farmer in Brabant (Netherlands) tells his personal story about how he tries to reduce pollution risk while keeping his farm economically sustainable.
	Vansjø, NO	Cross-municipal and sectoral cooperation has enabled the implementation of measures to improve water quality.
Research themes		
	Environmental Yardstick for Pesticides	FAIRWAY partner CLM has developed the Environmental Yardstick for Pesticides for use in Noord-Brabant. The tool provides an overview of the environmental pressures generated by all crop protection agents permitted on the Dutch market. It enables the user to compare these agents and choose the least harmful crop protection strategy.

	Decision support tool framework	<p>A short introduction to the FAIRWAY Decision Support Tool Framework (https://www.dstframework.com/). The Framework catalogues and describes 30 decision support tools (DST) used in the FAIRWAY case studies for optimal nitrate and pesticide use. It is a web-based, interactive user interface that allows the user to compare functionality and technical aspects of different DSTs. The framework also includes information sheets with links and contact details for key workers involved in their use and development.</p>
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Full details of the process of making the videos are provided in Deliverable 8.4.

5.5 NEWS ITEMS

Press releases and announcements are prepared for special events, significant project milestones and major project results.

To date there have been 42 news items posted on the FAIRWAY project website (<https://www.fairway-project.eu/index.php/news-events>).

5.6 RESEARCH HIGHLIGHTS

Succinct summaries of the research results are given in as short highlight articles (<https://fairway-is.eu/index.php/key-messages/research-result-highlights>). The objective is to have at Research Highlights articles at least for every deliverable. This effort will continue during the final report writing phase.

Table 6: Research highlights articles produced to date

Title	Source
Use of passive samplers in drinking water catchments	D3.1
Survey and review of decision support tools	D5.1
Evaluation of decision support tools	D5.2
Decision support tool framework	D5.4, 5.7
SprayDay: mobile app for infrequent pesticide users	D5.5
Barriers and issues in providing integrated scientific support for EU policy	D7.1
Actors' feedback on practices for improvement of water quality in FAIRWAY case studies and interim project results	D7.2


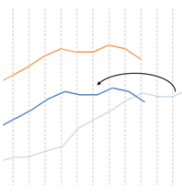
5.7 KEY MESSAGES


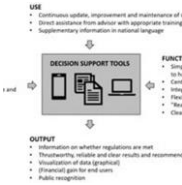


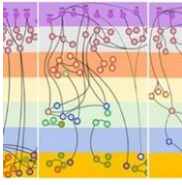
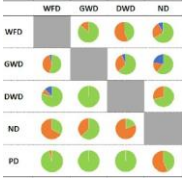

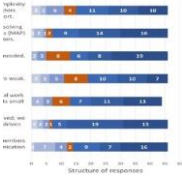

In Deliverable 7.3 we describe how FAIRWAY's 16 key messages were determined and the most promising activities, policies and tools summarised. (<https://fairway-is.eu/index.php/results-in-brief/key-messages>). Each description contains five main sections:

- Key message statement: a concise one or two sentence summary of the KM.
- Identification of target audience: which groups of stakeholders are most likely to be interested in the KM and why.

- Explanation: the context to which the KM is relevant.
- Evidence: summary of FAIRWAY's results (including evidence from the Case Studies) from which the KM conclusion is drawn, including a photo or figures.
- Further details: links to the full results from which the KM is derived on FAIRWAYiS and any relevant publications.

Table 7: Key messages

Title	Key message
 <p>Multi-actor platforms are important for joint strategy setting, but only one step towards achieving impacts</p>	Multi-actor platforms are valuable in building networks and creating a common understanding about complex issues in the agriculture-water governance interface. While they are important for setting joint strategies, they might not be sufficient to achieve desired impacts.
 <p>Engagement of stakeholders in Water Safety Planning is essential</p>	During all phases of Water Safety Planning, engagement of stakeholders in the development of the methodology and content is essential. Establishing cooperation between large and small suppliers contributes to overcoming barriers for effective risk assessment and management for small suppliers.
 <p>Access to consistent databases is necessary for monitoring water quality</p>	Monitoring groundwater quality, detecting pollution sources and evaluating mitigation measures have to be done to ensure a safe, sustainable drinking water supply for citizens. Hence, it is necessary to have access to consistent databases that enable scientists to link pollution and mitigation measures to water quality.
 <p>Lag times exist between leaching and aquifer impact</p>	Water and nitrate transfer through geological material is not instantaneous. There is a lag time between agricultural nitrogen leaching from the fields and its impact on water quality in aquifers, and wells. This time lag should be taken into account when developing drinking-water protection strategies.
 <p>Nitrogen surplus can be an ambiguous indicator</p>	Nitrogen surplus at the farm or regional level is a useful agri-environmental indicator. However, because Member States apply different calculation methods, comparisons at the European level are ambiguous. As calculation data, particularly on farm level, may not sufficiently represent local conditions and activities, the indicator may not fulfil legal certainty.
 <p>Measures to reduce nitrate losses need real-world validation</p>	For measures to reduce nitrate losses, there is a discrepancy between the type of field- or trial-based measures tested and reported in literature and real-world farm-level management options that are used or reported in the case studies.
 <p>Measures to reduce nitrate leaching can risk pollution swapping</p>	Implementation of measures to reduce nitrate losses should consider not only their effectiveness, and costs, but also the likelihood of (unwanted) side-effects such as pollution swapping to emissions of ammonia, nitrous oxide and phosphate..

	Reduction of pesticide pollution demands a combination of actions	Reduction of pesticide pollution of drinking water resources demands a combination of input reduction, farm system redesign and point source mitigation.
	Decision support tools help optimize yield and prevent pollution	Decision support tools are helpful in advising farmers about best practices in the application of fertilizers and pesticides, in order to both optimize crop yield and prevent water pollution problems.
	Few management tools consider the impact of mitigation methods	Many farm management tools promoting smart nutrient and/or pesticide use are available, but only a few explicitly consider the impact of mitigation methods on water quality.
	There are obstacles to exchanging decision support tools between countries	Although most EU countries already have comparable decision support tools, designed to address similar problems, there are obstacles to exchanging the tools between countries.
	Capacity at local level is needed for good drinking water quality	Good drinking water quality delivery requires sufficient capacity at the local level to ensure that implementation of policies and law results in effective local action. This includes feedback mechanisms and intersectoral learning.
	Improved coherence in EU policy will strengthen protection of drinking water resources	Improving correlations between directives, policies, objectives and requirements, including cross-referencing them, will strengthen the overall policy framework towards protection of drinking water resources from agricultural pressures.
	Structural policy choices can reduce inputs and pressures at source	Economic pressures in agriculture severely limits farmers' room to maneuver. The effect of local optimisation processes is only a fraction of what can be achieved with more structural policy choices that reduce inputs and pressures at their source.
	Barriers to water quality protection relate to lack of political will and scarce instruction	Barriers to protection of water quality in the EU are mostly observed at the national or regional levels and relate to lack of political will, and scarce instruction on the process of legislation implementation. Project clustering is a strategy to make science more connected to policy challenges and stakeholder needs.
	Potential synergies exist for evidence-based practices	There are potential synergies for evidence-based practices for reducing nitrate and pesticide pollution of drinking water resources, regarding their applicability, adoptability, and costs across EU.

The social media campaign to publicise the key messages started in November 2021 and is ongoing.

6 EVALUATION OF THE EFFECTIVENESS OF THE DISSEMINATION AND COMMUNICATION STRATEGY

The complete lists of dissemination and communication activities, recorded separately for each case study and work package, are given in Annex 1.

A fuller exploration of communication activities, particularly of the workshops, demonstrations and meetings for local and regional stakeholders, and of reports of activities on technical, local or national media (which were mainly carried out in the case studies) is given in the WP8 section of the Final Periodic Report.

The following metrics have been used to monitor the effectiveness of the Dissemination and Communication Strategy.

6.1 STAKEHOLDERS ENGAGED

Many of the local stakeholders at levels A and B are identified only by type (e.g. farmers, private well owners). However at the levels C, D and E most of the organisations have been identified by name.

Stakeholders	Number of groups or organisations
A – Local farmers, land managers	22
B – Local research institutes, technicians & advisors, farmer unions, enterprises, NGOs	61
C- Regional payment agencies, government offices, research institutes, policy makers, NGOs	47
D – National payment agencies, government offices, research institutes, policy makers, NGOs	32
E – International organisations	30

6.2 DISSEMINATION AND COMMUNICATION EVENTS AND PRODUCTS

Details of activities in the MAPs are generally reported separately under WP2.

Dissemination events and products	Number
Workshops, demonstrations, meetings – local and regional stakeholders	178
Meeting presentations – national stakeholders	15
EU level workshops	4
Conference presentations – scientific	16

Newsletter series – regional, national, technical journals	5
Report of activities – technical, local, national media, other websites	45
Infographics	22
Videos	7
Key messages	16
Research Highlights articles	6
Scientific publications	10 (of which 8 are open access and 1 is an article in The Conversation)

6.3 DIGITAL DISSEMINATION AND COMMUNICATION PLATFORMS

Digital platforms	Metrics
FAIRWAYiS website	22 deliverables added to content
FAIRWAY Project website	42 news items
Facebook Page	40 Followers, 73 posts, top 3 reaches to date 110, 26 and 25 people.
Twitter	246 followers, 96 tweets
LinkedIn	43 followers, 34 posts
YouTube	15 subscribers, 1,565 views in total
Newsletters	11 issues, 120 subscribers, av 36% opens, 7.6% links clicked.

7 ANNEX 1: RECORD OF DISSEMINATION ACTIVITIES

7.1 PROJECT-WIDE

WPs 1 and 8:		Coordination and Dissemination & Communication					
WP leaders:		Gerard Velthof, Gianni Quaranta					
Contact email address:		gerard.velthof@wur.nl, giovanni.quaranta@unibas.it					
Page last updated:		29-Nov-21					
News items		Dissemination channel and date					
No.	Title	Author	Website	Facebook	Twitter	YouTube	Newsletter
1	The project FAIRWAY started officially on the 1st June 2017	Gerard Velthof	19-Jul-17	14-Nov-17			
2	Launch meeting & afternoon Workshop for FAIRWAY and WaterProtect – Press release	Gerard Velthof	21-Nov-17	21-Nov-17	21-Nov-17		12-Oct-17
3	FAIRWAY meeting in Naples, November 2017	Jane Brandt	11-Dec-17	11-Dec-17	11-Dec-17		08-Jan-18
4	FAIRWAY and WaterProtect Joint Launch, 6 December 2017	Gerard Velthof	12-Dec-17	08-Jan-18	08-Jan-18		08-Jan-18
5	Waterkwaliteit beter, maar nog niet op orde	Gerard Velthof		19-Dec-17	19-Dec-17		
6	FAIRWAY workshop event in Brussels, December 2017	Jane Brandt	08-Jan-18	08-Jan-18	08-Jan-18		08-Jan-18
7	FAIRWAY decision support tool workshop, April 2018	Rikke Krogshave Laursen	23-Apr-18	23-Apr-18	23-Apr-18		26-Apr-18
8	EIP-AGRI workshop May 2018	Marina Pintar	18-Jun-18				
9	International Conference: Water Science for Impact, October 2018	Sandra Boekhold	05-Nov-18	05-Nov-18	05-Nov-18		05-Nov-18
10	Legal Policy & Governance WP meeting, 2 Oct 18	Sandra Boekhold	05-Nov-18	05-Nov-18	05-Nov-18		05-Nov-18
11	Second FAIRWAY Plenary meeting, June 2018	Gerard Velthof	05-Nov-18	20-Jun-18	20-Jun-18		31-Jul-18
12	FAIRWAY & WATERPROTECT Joint Conference	Marina Pintar	20-Nov-18	20-Nov-18	20-Nov-18		
13	Aalborg plenary meeting	Gerard Velthof			31-Jul-18		
14	WP6 Oslo meeting, 8-9 October 18	Sandra Boekhold		05-Nov-18	05-Nov-18	05-Nov-18	
15	Water Science for Impact conference	Sandra Boekhold		05-Nov-18	05-Nov-18	05-Nov-18	
16	Filming for Davsko Polje video	Matjaž Glaven			05-Nov-18		
17	Carvalho et al publication in STOTEN	Sindre Langaas		08-Jan-19		08-Jan-19	
18	Joint Policy Conference with WaterProtect, Dec 18	Marina Pintar			18-Mar-19		
19	1st FAIRWAY Review - Brussels	Jane Brandt			18-Mar-19		
20	Paper publication - March 19, Barriers and issues in providing EU policy support	Matjaž Glaven		18/03/2019 28Jan2020	18-Mar-19	28-Jan-20	
21	DSS tools workshop - March 19	Rikke Krogshave Laursen		27-Mar-19	23-Apr-19	27-Mar-19	
22	Joint FAIRWAY-WaterProtect meeting, DK	Rikke Krogshave Laursen		02-Jul-19	15-Apr-20	02-Jul-19	
23	The Knowns and Unknowns of the Herbicide MCPA	Donnacher Doody		03-Jan-20	15-Apr-20	03-Jan-19	
24	Nicholson et al publication	Fiona Nicholson		06-Apr-20	15-Apr-20	06-Apr-20	
25	KID event, Anglian Region case study	Jenny Rowbottom		15-Apr-20	15-Apr-20	15-Apr-20	
26	Klages et al, Nitrogen surplus publication	Susanne Klages		07-May-20		07-May-20	
27	Research highlights: D5.1	Rikke Krogshave Laursen		14-Sep-20		21-Jul-20	
28	Research highlights: D5.2	Rikke Krogshave Laursen		21-Sep-20		21-Jul-20	
29	Environmental Yardstick - new infographic	Alice Blok		04-Oct-20		03-Aug-20	
30	Kim et al. Time lag as an indicator publication	Hyojin Kim		10-Sep-20		10-Sep-20	
31	SprayDay webinars	Luke Farrow		08-Mar-21	08-Mar-21	08-Mar-21	
32	Wuijts et al. Effectiveness of EU regulations	Sandra Boekhold		15-Mar-21		15-Mar-21	
33	Platjouw et al Coherence in EU law	Froukje		06-Apr-21			
34	RH - Use of passive samplers			10-May-21			
35	Prevent pesticide pollution - new infographic			15-Jul-21			
36	Potential synergies - new infographic			02-Aug-21			
37	Coherence in EU law and policy - new infographic			16-Aug-21			
38	Webinar Measures and tools	John Williams		09-Aug-21			
39	The Conversation article on lag time	Nicolas Surdyk		28-Oct-21		28-Oct-21	
40	24 November: Webinar	Sindre Langaas		01-Nov-21	01-Nov-21	01-Nov-21	

Deliverables			Research Highlights				
No.	Title	Authors	FAIRWAYIS	FB, Twitter, LinkedIn	Newsletter	FAIRWAY	FAIRWAYIS
2.4	Water safety plans	van den Brink et al.	03-Nov-21				
2.5	MAPs as vehicles for resolving drinking water pollution issues	Sudnes et al.	10-Mar-21				
3.1	Review report of Agri-Drinking Water quality Indicators and IT/sensor techniques	Klages et al.	22-Jan-19				
3.2	Report and leaflets with evaluation of all indicators	Kim et al.	17-Apr-20				
3.3	Database containing harmonized data set	Laurencelle et al.	01-Jun-21				
4.1	Review on effective pesticide mitigation measures	Oenema et al.	04-Dec-18				
4.2	Review on effective nitrate leaching mitigation	Commelin et al.	04-Dec-18				
4.3a	Management practices that reduce nitrate transport	Ros et al.	01-Mar-21				
4.3b	Management practices that reduce pesticide transport	Commelin et al.	01-Mar-21				
5.1	Survey and review of existing decision support tools	Nicholson et al.	20-Aug-18	27-Jul-20	21-Jul-20	21-Jul-20	01-May-20
5.2	Report on the evaluation of the decision support and information tools and measures completed	Krogshave Laursen et al.	24-Apr-20	30-Jul-20	21-Jul-20	21-Jul-20	01-May-20
5.3	Report on costs and benefits, including risk	Hasler et al.	29-Jan-20				
5.4, 5.7	Decision support tool framework	Laedsgaard et al	21-Jul-21				10-Apr-21
5.5	SprayDay mobile app	Farrow et al.	26-Jul-21				01-May-21
6.1	Report on policy analysis on EU and national level MS	Platjouw et al.	10-Feb-20				
6.2	Governance arrangements in case studies	Rowbottom et al	04-Aug-21				
6.3	Effectiveness of EU legislation in the context of local realities	Wuijts et al.	13-Jul-21				
6.4	Cost-effective and coherent management models for drinking water protection	Hasler et al.	06-Jul-21				
6.5	From farm to drinking water - governance fit for the future?	Boekhold et al.	05-Aug-21				
7.1	Barriers and issues in providing integrated scientific support for EU policy	Glavan et al.	28-Jan-20				16-Sep-20
7.2	Report on actors' feedback on the evidence-based practices for water quality improvement of the different FAIRWAY case studies and FAIRWAY project interim results.	Rudolf et al.	04-Feb-20				16-Sep-20
7.3	Recommendations for the most promising activities, policies and tools	Rudolf et al.	15-Nov-21				
Flyers			Dissemination channel and date				
No.	Title	Author	Website	Facebook	Twitter	YouTube	Newsletter
1	FAIRWAY leaflet_EN	Velthof	16-Jul-18				
2	FAIRWAY leaflet_SI	Glaven	16-Jul-18				
3	FAIRWAY leaflet_PT	Ferreira	06-Sep-18				
4	Linking agricultural impact and drinking water quality response	Hansen et al	01-Feb-21				
5	Decision support tool framework	Madsen et al	10-Apr-21				
Videos			Dissemination channel and date				
No.	Title	Authors	Youtube	FB & Twitter + LinkedIn (from 8May)	Newsletter	FAIRWAY	FAIRWAYIS
1	Joint project farm manure management Lower Saxony, DE	Tendler	13-Nov-18				15-Nov-18
2	Survey Farm Manure Management Project	Tendler	08-Nov-18				15-Nov-18
3	Environmental Yardstick for Pesticides	van Vliet	Not hosted by FAIRWAY				
4	Slovenia dairy farmer	Viverra Films	26-Nov-19		26-Nov-19		26-Nov-19
5	Brabant asparagus farmer	Viverra Films	26-Nov-19		26-Nov-19		26-Nov-19
6	Vansjø, NO	Kober	Not hosted by FAIRWAY				05-Nov-20
7	Decision Support Tool Framework	Marije Hoogendoorn	04-Oct-21				04-Oct-21
Infographics			Dissemination channel and date				
No.	Title	Authors	FB & Twitter + LinkedIn (from 8May)	Newsletter	FAIRWAY	FAIRWAYIS	
1	Agriculture and water quality	WP7	23-Jul-18	31-Jul-18		23-Jul-18	
2	Decision support tools for nutrient management	Rikke Krogshave Laursen, John Williams	15-Oct-18	23-Apr-19		15-Oct-18	
3	The Danish case study sites	Birgitte Hansen				27-Jun-19	
4	The Aalborg study site	Birgitte Hansen	11-May-20			27-Jun-19	
5	The Tuna study site	Birgitte Hansen	14-May-20			27-Jun-19	
6	The Lower Saxony case study	Linda Tendler	18-May-20			06-Aug-19	
7	The Vansjø case study	Ingrid Nesheim	21-May-20			05-Sep-19	
8	The Noord Brabant case study		25-May-20			14-Oct-19	
9	Baixo Mondego case study	Inês Amorim Leitão	26-Nov-19			26-Nov-19	
10	Danish nutrient management on German Farms	Linda Tendler	02-Jan-20		02-Jan-20	02-Jan-20	
11	Arges Vedeia case study	Irina Calciu	01-Jun-20			28-Apr-20	
12	Anglian Region case study	Jenny Rowbottom	04-Jun-20			28-Apr-20	
13	Optimized nitrogen management plans	Irina Calciu				05-May-20	
14	La Voulzie case study	Nicolas Surdyk				07-May-20	
15	Environmental Yardstick DST + Environmental Impact Sheets	Marije Hoogendoorn	06-Aug-20		03-Aug-20	20-Jul-20	
16	Dravsko Polje case study	Gregor Kramberger	22-Jul			20-Jul-20	
17	The successful decision support tool	Rikke Krogshave Laursen	03-Aug	21-Jul-20		21-Jul-20	
18	Danish farmers' recommendations	Rikke Krogshave Laursen			30-Sep-20	30-Sep-20	
19	Cleaning out the pesticide store	Alice	15-Feb-21		15-Feb-21	15-Feb-21	
20	Governance and legislation	Susanne	06-Apr-21		06-Apr-21	06-Apr-21	
21	Prevent pesticide pollution	Meindert	15-Jul-21		15-Jul-21	15-Jul-21	
22	Potential synergies for practices reducing nitrate and pesticide pollution	Janja	02-Aug-21		15-Jul-21	15-Jul-21	
23	Coherence in EU law and policy	Froukje	16-Aug-21		02-Aug-21	02-Aug-21	
Social media campaigns							
No.	Title	Material	Channels	Dates			
1	Case study spotlights	Infographics	FB, Twitter, LinkedIn	May-July 2020			
2	Key messages	Key message summaries	FB, Twitter, LinkedIn	Nov 2021 - ongoing			

7.2 FURTHER DETAILS FOR EACH WORK PACKAGE

7.2.1 Work package 02 Multi-actor platforms and case studies

WP 02:	Multi-actor platforms and case studies
WP leader:	Alma de Vries, Cors van den Brink, Frode Sundnes
Contact email address:	alma.de.vries@rhdhv.com , cors.van.den.brink@rhdhv.com , frode.sundnes@niva.no

Page last updated:	28/nov/21
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KEY MESSAGES

1	Multi-actor platforms are valuable in building networks and creating common understanding on complex issues in
2	During all phases of Water Safety Planning, engagement of stakeholders in the development of the methodology and content is essential. Establishing cooperation between large and small suppliers contributes to overcoming barriers for effective risk assessment and management for small suppliers.

STAKEHOLDER GROUPS

MAP participants and other secondary level stakeholders	International	Scientific community	General public
ABCD	E	F	G
Individuals, local, regional and national levels	European Commission, International bodies		Media, students
Farmers		Scientific community	
Advisers			
Water quality managers			
Municipalities			
Environment agencies			
River Trusts			
Government departments			
Water companies			
Case study leaders			

TASKS FROM THIS WP INVOLVING MAPs

Task No.	Description	Task type	Date	Stakeholder groups involved
D2.3	MAP workshop	Workshop	31.02.2018	A
D2.1	Compilation of MAPs	Report	31/05/2018	A
D2.5	Report on MAPs	Report	31/12/2019	A, F
D2.4	Report: WSP rec.	Report	31/01/2021	A
D2.2	MAP activities	Report	30/11/2021	A

DISSEMINATION EVENTS

Information provided	Target audience/stakeholder	Format or media	Delivery date
Key message, MAPs	A-D, E, F	One-pager, Website, twitter	Oct-21
Key message, WSPs	A-D, E, F	One-pager, Website, twitter	Oct-21
Webinar: Stakeholder Engagement	A-F	Webinar, open	24/11/2021
Infographic, WSP	A-F	Infographic, website, twitter	Jun-21

SCIENTIFIC PUBLICATIONS (conference presentations, articles published or in press)

Presentations at LUWQ conference in Aarhus, 2019: The role of MAPs in addressing challenges to protect drinking water supplies

Nesheim, I.; Sundnes, F.; Enge, C.; Graversgaard, M.; van den Brink, C.; Farrow, L.; Glavan, M.; Hansen, B.; Leitão, I.A.; Rowbottom, J.; Tendler, L. Multi-Actor Platforms in the Water–Agriculture Nexus: Synergies and Long-Term Meaningful Engagement. *Water* 2021, 13, 3204. <https://doi.org/10.3390/w13223204>

van den Brink, C. M. Hoogendoorn, K. Verloop, A. de Vries, P. Leendertse (2021) Farmers' responsiveness to policies and voluntary measures: Lessons learned from groundwater protection in the Dutch provinces Overijssel and Noord-Brabant, *Water* 2021, 13, 3278.

7.2.2 Work package 03 Monitoring and indicators

WP3:	Monitoring and indicators
WP leader:	Nicolas Surdyk
Contact email address:	n.surdyk@brgm.fr

Page last updated:	22 November 2021
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KEY MESSAGES	
1	Linking Pressure indicators to state indicators can help to understand contaminant origins (such as fertilisation) and variations
2	In some context (hydrogeology), a long time lag between N input and NO ₃ concentration in groundwater exists
3	Long time series are needed to link pressure and state indicators at the catchment scale (for GW and depending on hydrogeology: long lag times)
4	Complex indicators can be difficult to set up at European level because Member States have different systems and rules for data collection and processing
5	Difficult to find promising participative monitoring techniques for groundwater

STAKEHOLDER GROUPS			
MAP participants and other secondary level stakeholders	International	Scientific community	General public
ABCD	E	F	G
Individuals, local, regional and national levels	European Commission, International bodies		Media, students
Farmers	European Commission,	Scientific community	
Farm advisers			
Water compaigny			
National agencies			

TASKS FROM THIS WP INVOLVING MAPs				
Task No.	Description	Task type	Date	Stakeholder groups involved
3.1	Questionnaire about indicators	Questionnaire	Q3 2018	ABCD
3.1	Passive sampler test (monitoring)	Test of passive samble (French MAP only)	Q2 2020-Q2 2021	BC
3.2	Data collection	Workbook to collect data	Q1 2019 -Q3 2019	BCDF
3.3	Data collection	(specific for each MAP)	Q1 2020 -Q2 2021	BCDF

DISSEMINATION EVENTS			
Information provided	Target audience/stakeholder	Format or media	Delivery date
Lag time results	French MAP Water Company	On line presentation	2020
Lag time importance for policy maker	Policy Maker (around CAP issue)	On line presentation	9 November 2020
Passive sampler results	French MAP Water Company	On line presentation	2021
Lag time results	Aalborg waterworks and local	In person meeting	2021
"Fairway" results	EdP catchment managers	On line presentation	2021

SCIENTIFIC PUBLICATIONS (conference presentations, articles published or in press)	
Abstract for WP3 send to LUWq 2019, 15. October 2018	
Nicolas Surdyk, Susanne Klages, Christophoros Christophoridis, Donnacha Doody, Birgitte Hansen, Claudia Heidecke, Abel Henriot, Hyojin Kim, Sonja Schimmelpfennig. 2019. Agri-drinking water indicators (ADWIs): Linkage between agricultural practice and good drinking water quality. Land Use and Water Quality Conference 3-6 June 2019, Aarhus, Denmark	
Klages, S.; Heidecke, C.; Osterburg, B.; Bailey, J.; Calciu, I.; Casey, C.; Dalgaard, T.; Frick, H.; Glavan, M.; D'Haene, K.; Hofman, G.; Leitão, I.A.; Surdyk, N.; Verloop, K.; Velthof, G. Nitrogen Surplus—A Unified Indicator for Water Pollution in Europe? Land Use and Water Quality Conference 3-6 June 2019, Aarhus, Denmark	
Heidecke C. Klages S., Heidecke C., Osterburg B. 2020. The Impact of Agricultural Production and Policy on Water Quality during the Dry Year 2018, a Case Study from Germany Land Use and Water Quality Conference 3-6 June 2019, Aarhus, Denmark	
Kim, H.; Surdyk, N.; Moller, I.; Graversgaard, M.; Blicher-Mathiesen, G.; Henriot, A.; Dalgaard, T.; Hansen B. Lag time as an Indicator of the link between Agricultural Pressure and Drinking Water Quality State. Water 2020, 12, 2385. OPEN ACCESS	
Kim, H.; Surdyk, N.; Moller, I.; Graversgaard, M.; Blicher-Mathiesen, G.; Henriot, A.; Dalgaard, T.; Hansen B. Linking agricultural impact and drinking water quality response. Examples of drinking water protection in Denmark and France. FLYER	
Klages, S.; Heidecke, C.; Osterburg, B.; Bailey, J.; Calciu, I.; Casey, C.; Dalgaard, T.; Frick, H.; Glavan, M.; D'Haene, K.; Hofman, G.; Leitão, I.A.; Surdyk, N.; Verloop, K.; Velthof, G. Nitrogen Surplus—A Unified Indicator for Water Pollution in Europe? Water 2020, 12, 1197. OPEN ACCESS	
Klages S., Heidecke C., Osterburg B. 2020. The Impact of Agricultural Production and Policy on Water Quality during the Dry Year 2018, a Case Study from Germany Water. 2020, 12, 1519. OPEN ACCESS	
Surdyk, N.; Farrow F.; Cassidy R., Doody D.; 2021 Use of passive samplers in drinking water catchments. FLYER	
Surdyk, N., Baran, N. 2021. Moins de nitrates dans l'eau, une vraie course de fond. Web journal : The conversation. Available at: https://theconversation.com/moins-de-nitrates-dans-leau-une-vraie-course-de-fond-165474	

7.2.3 Work package 04 Review of measures and practices

WP 4:	Review of measures and practices
WP leader:	Gerard Velthof from 1 January 2019; Oene Oenema June 2017 - up to 1 January 2019 (retired)
Contact email address:	gerard.velthof@wur.nl

Page last updated:	27-Nov-21
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KEY MESSAGES	
1	Selecting most promising measures for pesticides pollution is hampered by a lack of statistical sound data.
2	Vegetated filter strips are an effective measure to prevent pollution, however they are not applicable in each situation.
3	Based on responses from the case studies, effective results are more often reached through policies and social interventions than through the more physical/agronomical measures.
4	For nitrate, literature shows that (non-legume) cover crops and the nitrification inhibitor DCD may provide options to reduce losses to the environment. Results on other measures, such as application of biochar or changes in tillage practices, vary.
5	Here too there is a discrepancy between the field- or trial-based measures reported in literature and the farm-level management options that are used/reported in the case studies.
6	Measures to reduce nitrate losses should consider potential effects other nitrogen compounds or greenhouse gas losses (NH ₃ , N ₂ O, CO ₂).

STAKEHOLDER GROUPS			
MAP participants and other secondary level stakeholders	International	Scientific community	General public
ABCD	E	F	G
Individuals, local, regional and national levels	European Commission, International		Media, students
Water boards	Policy makers	Scientists	
Farmer organisations	Farmer organisations		

TASKS FROM THIS WP INVOLVING MAPs				
Task No.	Description	Task type	Date	Stakeholder groups involved

DISSEMINATION EVENTS			
Information provided	Target audience/stakeholder group	Format or media	Delivery date
Results from FAIRWAY	E, F	Presentation at sister project (WaterProtect)	24-09-20
Results from FAIRWAY - pesticide reduction	all	Fairway webinar DSS tools and measures	22/09/2021
Results from FAIRWAY - nitrates reduction	all	Fairway webinar DSS tools and measures	22/09/2021
Field excursion - students	G	Field visit, overland pollution studies	13/10/2020
Guest lecture pesticide movement with sediment	G	guest lecture (presentation + Q&A)	16/03/2021
Webinar EJP Soils (European Joint Programming) on synergies/policy swapping risks of carbon and nitrogen measures	Scientists in EJP project	Discussion session	30/03/2021
Stakeholder discussions	Water board	Results presentation/discussion	17/06/2020
Several meetings with Dutch ministry of agriculture about cover crops in 7th Action programme Nitrates Directive	National policy makers	Discussion meetings	June - November
Field visit policy makers Dutch ministry of agriculture; effects of N management on N losses to the environment	National policy makers	Field visit	16/07/2021
Infographic on pesticide pollution	all	Infographic https://www.fairway-is.eu/index.php/results-in-brief/infographics/397-prevent-pesticide-pollution	17/07/2021
Discussion with ministry of agriculture and Statistics Netherlands about statistics on N in agriculture in the Netherlands	National policy	Discussion meeting in The Hague	27/08/2021
Presentation about pollution swapping: Soil on one meeting WUR	Student and staff WUR	Presentation	28/10/2021
Presentation about balance nitrogen fertilization in The Hague	Members of the Dutch parliament	Physical meeting in the Hague	03/11/2021
stakeholder discussions	ABCD	Results presentation/discussion	12/11/2021
Presentation results of FAIRWAY	all	FAIRWAY webinar STAKEHOLDER ENGAGEMENT	24/11/2021
Presentation at Nitrates expert panel (invited by DG Environment on 26th Nov 2021)	EU policy makers	Presentation about manure and discussion (digital)	15/12/2021

SCIENTIFIC PUBLICATIONS (conference presentations, articles published or in press)	
Abstract for WP4-Nitrates pollution send to LUWq 2019, October 2018	
Abstract for WP4-Pesticide pollution send to LUWq 2019, October 2018	
Abstract for EGU2022 (to be submitted Jan 2022)	
Measures to reduce diffuse pesticide pollution from agricultural land: comparing literature with experiences in eight case studies across Europe (submitted)	
Exploring the potential of cover crops and balanced fertilisation to reduce nitrate leaching in Europe (submitted)	

7.2.4 Work package 05 Review of decision support tools to diminish pollution of water resources

WP 5:	Review of decision support tools to diminish pollution of water resources
WP leader:	John Williams, Berit Hasler, Rachel Cassidy, Rikke Laursen
Contact email address:	john.williams@adas.co.uk, bh@envs.au.dk, rachel.cassidy@afbini.gov.uk, rila@seges.dk

Page last updated:	30/Nov/21
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KEY MESSAGES

1	Decision support tools are helpful in advising farmers about best practices in the application of fertilizers and pesticides, in order to both optimize crop yield and prevent water pollution problems.
2	Many farm management tools promoting smart nutrient and/or pesticide use are available, but only a few explicitly consider the impact of mitigation methods on water quality.
3	Although most EU countries already have comparable decision support tools, designed to address similar problems, there are obstacles to exchanging the tools between countries.

STAKEHOLDER GROUPS

MAP participants and other secondary level stakeholders	International	Scientific community	General public
ABCD	E	F	G
Individuals, local, regional and national levels	European Commission, International bodies		Media, students
Farmers	EU	Scientific community	
Advisers			
Water quality managers			
Municipality			
Anglers' Associations			
Environment agencies			
River Trusts			
Government departments			
Water companies			

TASKS FROM THIS WP INVOLVING MAPs

Task No.	Description	Task type	Date	Stakeholder groups involved
5.2	Test of DSTs	Individual testing / workshops etc.	Q4 2018 and Q1 2019	ABCD
5.4	Test and feedback on DST framework	Individual testing / workshops etc.	Q1 2021	ABCD
5.5	Test and feedback on phone app	Individual testing / workshops etc.	Q1 2021	ABCD
M5.3	Webinar on nitrate and pesticide measures and DSS tools	Webinar / demonstration / evaluation	Q3	ABCDEF

DISSEMINATION EVENTS

Information provided	Target audience/stakeholder group	Format or media	Delivery date
Successful decision support tool workshop	G	Social media post	23/04/18
DSTs for nutrient management	G	Infographic	15/10/2018
Main findings from test of decision support tools	G	Social media post	27/03/19
Results of testing the decision support tool Mark Online on	G	Infographic	02/01/20
Deliverable 5.1	G	Research Highlights	27/07/20
Deliverable 5.2	G	Research Highlights	30/07/20
A succesful decision support tool	G	Infographic	30/07/20
Decision support tool Environmental Yardstick for pesticides	G	Infographic	06/08/20
Deliverable 5.3	G	Research Highlights	30/07/21
Deliverable 5.4	G	Research Highlights	31/05/21
Deliverable 5.5	G	Phone app	31/05/21
Report on phone app	G	Research Highlights	31/05/21
Deliverable 5.7	G	Flyer	30/09/21
Translation of D5.7 flyer to different languages	G	Flyer	26/11/21

SCIENTIFIC PUBLICATIONS (conference presentations, articles published or in press)

Abstract for WP5 send to LUWq 2019, 15. October 2018
Conference presentation "Decision support tools for reduction of nitrate and pesticide pollution from agriculture". 3-6 June 2019, Aarhus, Denmark.
Nicholson, F.; Krogshave Laursen, R.; Cassidy, R.; Farrow, L.; Tendler, L.; Williams, J.; Surdyk, N.; Velthof, G. How Can Decision Support Tools Help Reduce Nitrate and Pesticide Pollution from Agriculture? A Literature Review and Practical Insights from the EU FAIRWAY Project. Water 2020, 12, 768. OPEN ACCESS
Poster presentation: "Mobile Phone Apps to Manage Pesticides at Field Scale: The Perspective of Northern Ireland Farmers". Presented at the Catchment Science 2019 Conference, 5th - 7th November 2019, Wexford, IE.
Poster presentation: "Pesticide Source Risk Identification – An Evaluation of Decision Support Tools in the Derg Drinking Water Catchment". Presented at the Catchment Science 2019 Conference, 5th – 7th November 2019, Wexford, IE.
Madsen, M. L., Laursen, R. K., Thøstrup, L. K., Tendler, L., Williams, J. R., Wright, I., Schipper, P., Verloop, K., Clements, G., Hoogendoorn, M., Nicholson, F., Brandt, J., Donnacha, D., Farrow, L., Velthof, G. Development of a Decision Support Framework. May 31st, 2021

7.2.5 Work package 06 Legal policy and governance

WP 6:	Legal policy and governance
WP leader:	Isobel Wright, Froukje Platjouw, Berit Hasler, Sandra Boekhold, Susanne Wuijts
Contact email address:	iwright@lincoln.ac.uk, froukje.platjouw@niva.no, bh@envs.au.dk, sandra.boekhold@rivm.nl, susanne.wuijts@rivm.nl

Page last updated:	29 Nov 21
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KEY MESSAGES	
1	Capacity at local level is needed for good drinking water quality
2	Improved coherence in EU policy will strengthen protection of drinking water resources
3	Structural policy choices can reduce inputs and pressures at source

STAKEHOLDER GROUPS			
MAP participants and other secondary level stakeholders	International	Scientific community	General public
ABCD	E	F	G
Individuals, local, regional and national levels	European Commission, International bodies		Media, students
Policy making bodies within and across nations, on the local, regional and national scale	European Commission, International bodies	researchers worldwide	
	OSPAR		
	Basin approaches		
	HELCOM		

TASKS FROM THIS WP INVOLVING MAPs				
Task No.	Description	Task type	Date	Stakeholder groups involved
6.2 (Milestone 6.2 due Feb 2018)	Protocol for collection of data in case studies	Questions on governance arrangements	Data collection March-August 2018	MAP coordinators
6.3	follow up discussions with MAP coordinators	Supporting questions related to effectiveness of governance arrangements	Annual meeting consortium, Ljubljana, September 2019	MAP coordinators

DISSEMINATION EVENTS			
Information provided	Target audience/stakeholder	Format or media	Delivery date
Meeting with local Drinking Water Company and agricultural advisors in UK/England including outputs for WP6	Drinking water company and agricultural advisors	Online (Zoom) meeting	11-Aug-21
Infographic T6.1: Drinking water protection: coherence in EU law and policy	EU level stakeholders	FAIRWAY website	October 2021
M6.5 policy brief	EU level stakeholders	Workshop	Organised for 23 November 2021, was cancelled last minute because of lack of interest in the topic at EU level/European Commission (DG research, DG Agri, DG ENV)
M6.5 policy brief	Dutch national stakeholders	Policy brief translated &	2022. Delivery is delayed due

SCIENTIFIC PUBLICATIONS (conference presentations, articles published or in press)	
Aims of FAIRWAY and preliminary results. Oral presentation at Water Science for Impact conference, Wageningen, NL 16Aug2018 followed by discussion and exchange of good governance examples with the audience.	
Conference presentation: Balancing economy and sustainability Defragmentation of European policies to enhance the effectiveness of local scale water governance, Conference Water Science for Impact, Wageningen, 2018	
Oral presentation 'FAIRWAY WP6 Legal policy and governance' by Sandra Boekhold (RIVM), Froukje Platjouw (NIVA), Isobel Wright and Jenny Rowbottom (UoL) at the Land Use and Water Quality Conference, 4 June 2019, Aarhus, Denmark.	
Oral presentation 'Policy and governance for a more effective drinking water protection, elements from the H2020 project FAIRWAY' by Sandra Boekhold (RIVM) at the workshop 'Better integration of drinking water considerations into river basin management planning, links between drinking water, water frame work and groundwater directives' on 16 October 2019 under the Finland's presidency of the council of the European Union, jointly organised by the EU Common Implementation Strategy (CIS) working group on groundwater and drinking water experts.	
Interactive session in the Netherlands with experts and stakeholders on effective strategies on nitrate and pesticides, experiences from the FAIRWAY project (Bodembreed conference, June 2021)	
Article T6.3 published, https://doi.org/10.1016/j.jenvman.2021.112270 , Wuijts S. et al., Protection of drinking water resources from agricultural pressures: Effectiveness of EU regulations in the context of local realities, 2021.	
Article T6.4 in prep, Hasler et al., Identification of cost-effective and coherent management models for drinking water protection in agriculture.	
Article T6.2 - submitted to JEMA and accepted with major revisions, Rowbottom et al., Water governance diversity across Europe: Do we have sticking points in implementing multi-level governance?	

7.2.6 Work package 07 Integration and recommendations at EU level

WP 7:	Integration and recommendations at EU level
WP leader:	University of Ljubljana (Marina Pintar, Matjaž Glavan, Špela Železnikar, Rozalija Cvejić)
Contact email address:	Marina.Pintar@bf.uni-lj.si, matjaz.glavan@bf.uni-lj.si, spela.zeleznikar@bf.uni-lj.si, rozalija.cvejic@bf.uni-lj.si
Page last updated:	29/Nov/21

KEY MESSAGES
1) Recommendations of solutions for elimination of the weak points in science policy relationships
2) To build link for standard methodologies for communication improvement between science and policy

STAKEHOLDER GROUPS					
MAP participants and other secondary level stakeholders	International		Scientific community		General public
ABCD	E		F		G
Individuals, local, regional and national levels	European Commission, International bodies		Sector		Media, students
Representatives of all MAPs within the FairWay project	Directorate Generale Agriculture and Rural Development	EU Commision	European Water Resources Associations	Research	
	Directorate Generale Environment	EU Commision	European centre of excellence for sustainable water technology	Research	
	Directorate Generale Research and innovations	EU Commision	European Network of Freshwater Research Organisations	Research	
	Committee Agriculture and Rural Development	EU parliament			
	Committee Environment, Public Health and Food Safety	EU parliament			
	Committee Industry, Research and Energy	EU parliament			
	The European Technology Platform for Water	EU			
	European Innovation Partnership on Water	EU			
	European Innovation Partnership for Agricultural productivity and Sustainability	EU			
	European farmers and European agri-companies	Farmers organisation			
	European Council of Young Farmers	Farmers organisation			
	European Forum for Agricultural and Rural Advisory Services	Other agricultural body			
	The European Conservation Agriculture Federation	Other agricultural body			
	Fertilizers Europe	Company			
	European Fertilizer Blenders Association	Company			
	European Crop Protection Association	Company			
	European Network for Rural Development	Agricultural Platform			
	Farm Europe	Agricultural Platform			
	European Federation of Bottled Waters	Company			
	European Drinking Water (EDW)	Company			
	European Federation of National Associations of Water Services	Water Company			
	European Water Association	Water Company			
	Aqua Publica Europea	Water Company			
	European Union of Water Management Associations	Water Company			
	European Water Partnership	Water Platform			
	European Water Regulators	Regulators			

TASKS FROM THIS WP INVOLVING MAPs				
Task No.	Description	Task type	Date	Stakeholder groups involved
7.1	Evaluation of the barriers/issues around providing integrated scientific support for EU policy	Workshop, individual interviews	6. 12. 2017	E, F
7.2	Stakeholders feedback on the evidence based practice in the CS and on Fairway project interim results	Workshop	7. 12. 2018	E, F, B (MAP)
7.4	Validate and cross-check the results on possibilities of integrating science as a support for relevant EU policies	Webinar, online survey	15.11.-24.11.2021	E, F

DISSEMINATION EVENTS				
Information provided	Target audience/stakeholder group	Format or media	Delivery date	
Workshop	EU level science and policy organisations	e-mail, press release - https://www.eip-water.eu/launch-meeting-afternoon-workshop-fairway-and-waterprotect	16. 10. 2017; 24. 11. 2017; Month 4-6	
Workshop	EU level science and policy organisations	e-mail, press release - https://www.fairway-project.eu/index.php/news-events/105-fairway-water-protect-joint-conference-eu-policies-in-addressing-drinking-water-managment-challenges ; https://twitter.com/FairwayEU ; https://www.facebook.com/pages/category/Agricultural-Service/Fairway-Project-118107408845897/ ; http://www.eureau.org/resources/news/288-eureau-newsletter-edition-30-november-2018 ; http://www.bf.uni-lj.si/dekanat/novica/7x_tnews%5Byear%5D=2018&tx_tnews%5Bmonth%5D=12&tx_tnews%5Btt_news%5D=2939&cHash=0c55bea4853f2621cc30c3501b2d29d . Pictures from the event are published here: https://www.facebook.com/pg/SlovenianBusinessResearchAssociation/photos/?tab=album&album_id=2495530427128880	23. 11. 2018; Month 18	
Webinar, online survey	EU level science and policy organisations	email, press release - https://www.fairway-project.eu/	15.11.-24.11.2021	

SCIENTIFIC PUBLICATIONS (conference presentations, articles published or in press)	
Executed 2021:	
November 2021: FAIRWAY's key messages. Publication of 16 key messages distilled from FAIRWAY's research results. D 7.3. https://fairway-is.eu/index.php/results-in-brief/key-messages . Delivered also through Twitter and Facebook.	
August 2021: Potential synergies for evidence-based practices for reducing nitrate and pesticide pollution of drinking water resources. Infographic. https://www.fairway-project.eu/index.php/news-events/151-august-2021-potential-synergies-new-infographic . Delivered also through Twitter and Facebook.	
Executed 2019:	
Land Use and Water Quality Conference, Aarhus, Denmark, 3. - 6. 6. 2019	
Glavan, M., Železnikar, Š., Velthof, G., Boekhold, S., Langaas, S., Pintar, M. How to Enhance the Role of Science in European Union Policy Making and Implementation: The Case of Agricultural Impacts on Drinking Water Quality. Water 2019, 11, 492. OPEN ACCESS	
2018	
Infographic published on Twitter and Facebook: https://www.facebook.com/118107408845897/photos/a.136017413721563/216339265689377/?type=3&theater	

OTHER INFO
EIP Water action groups will not exist in form as we know it after 2020 (2021-2027). With what what kind of form will they be replaced is not yet clear. This will be to late to take this action in WP7, project ends on November 2021.

7.3 FURTHER DETAILS FOR EACH CASE STUDY SITE

7.3.1 Case study 01 Island Tunø, DK

Case Study Site 01:	Island Tunø, DK		
Case Study site leader:	Birgitte Hansen		
Contact email address:	bgh@geus.dk		
Page last updated:	30/Oct/20		
KEY MESSAGES			
1	Lessons can be learned which are of general importance about combining agriculture with groundwater protection.		
Information requested by MAP participants:			
MULTI-ACTOR PLATFORM PARTICIPANTS			
Local		Regional	National
A	B	C	D
Farmers, land managers	Research institutes, technicians & advisors, farmer unions, enterprises, NGOs	Payment agencies, government offices, research institutes, policy makers, NGOs	Payment agencies, government offices, research institutes, policy makers, NGOs
RECORD OF DISSEMINATION			
Note: Dissemination activities within the MAPs should be reported in your WP2 MAP activity logs. Only include here any additional dissemination you do.			
Information provided	Target audience and numbers of people reached	Format or media	Date delivered
How protection zones and land management restored nitrate contaminated groundwater on the island of Tunø	Public	Infographic	14/05/20
SCIENTIFIC PUBLICATIONS			

7.3.2 Case study 02 Aalborg, DK

Case Study Site 02:	Aalborg, DK		
Case Study site leader:	Birgitte Hansen		
Contact email address:	bgh@geus.dk		
Page last updated:	30/Oct/20		
KEY MESSAGES			
1	Better dialogue can combine groundwater protection and agricultural production.		
2	Proved and acknowledged better management practices and technology development can improve water quality and create groundwater protection.		
3	Participative monitoring has given farmers better commitment to groundwater protection.		
4	Barriers for groundwater protection have been identified.		
5	Cost-effective solutions for the benefit of both farmers and waterworks have been achieved.		
Information requested by MAP participants:			
MULTI-ACTOR PLATFORM PARTICIPANTS			
Local		Regional	National
A	B	C	D
Farmers, land managers	Research institutes, technicians & advisors, farmer unions, enterprises, NGOs	Payment agencies, government offices, research institutes, policy makers, NGOs	Payment agencies, government offices, research institutes, policy makers, NGOs
Farmers, land managers	Small and large water works	EPA	COPA-COGECA
	Water councils	Nature Conservation Society	DGA
Private well owners	Municipalities	Local government	DGE
	Consumers	Limfjordsrådet - a regional cooperation between the municipalities in the Limfjords area dealing with surface water issues	Food and Ag. Council (national)
	Farm advisers		KL, National umbrella for the Danish Municipalities
	RUVA - the local drinking water organisation		Danske brøndejer forening - national organisation for well owners
			DANVA, umbrella for Danish water works
RECORD OF DISSEMINATION			
Note: Dissemination activities within the MAPs should be reported in your WP2 MAP activity logs. Only include here any additional dissemination you do.			
Information provided	Target audience	Format or media	Date delivered
Working hypotheses for the Danish Case studies	Public	Infographic	27/06/19
How protection zones and different mitigation measures restore contaminated groundwater in the Kongshøj area in Aalborg	Public	Infographic	11/05/20
Danish farmers recommendations	Public	Infographic	30/09/20
2nd annual joint FAIRWAY – WaterProtect stakeholder group meeting	Public	Social media posts	02/06/19
SCIENTIFIC PUBLICATIONS			

7.3.3 Case study 03 Anglian Region, UK

Case Study Site 03:	Anglian Region, UK		
Case Study site leader:	Jenny Rowbottom, Isobel Wright		
Contact email address:	JRowbottom@lincoln.ac.uk, iwright@lincoln.ac.uk		
Page last updated:	6-Nov-20		
KEY MESSAGES			
Users of products (nitrate and pesticides) need to be involved, knowledgeable, accountable and responsible for sustainable use in order to maintain use of products and minimize or reduce regulation.			
Farm advisers are aware and knowledgeable of impact of products on drinking water quality to provide sustainable and responsible advice to farmers.			
The importance of the water industries and agricultural industries to work collaboratively.			
The importance and the opportunity to communicate practical and effective on farm measures and practices to policy maker - to create ownership and successful implementation.			
Information requested by MAP participants:			
MULTI-ACTOR PLATFORM PARTICIPANTS			
Local		Regional	National
A	B	C	D
Farmers, land managers	Research institutes, technicians & advisors, farmer unions, enterprises, NGOs	Payment agencies, government offices, research institutes, policy makers, NGOs	Payment agencies, government offices, research institutes
Farmers	Agronomists	NFU	DEFRA
	pesticide suppliers	Water companies	Natural England
	Local residents	Regulatory bodies	Environment agency
	Catchment managers	Industry bodies	
	River trusts		
	Wildlife organisations		
	University of Lincoln		
RECORD OF DISSEMINATION			
Note: Dissemination activities within the MAPs should be reported in your WP2 MAP activity logs. Only include here any additional dissemination you do.			
Information provided	Target audience	Format or media	Date delivered
Inaugural MAP meeting aims of meeting	?	MAP meeting	?
Aims of Fairway	A General Public	Public event, stand at World Rivers Day event in Grantham, closest town to CS control area	23/09/2017
Aims of MAP	C water companys 3	MAP pre meeting	04/10/2017
Aims of FAIRWAY	D government 50	General agricultural meeting House of Lords, networking format	11/10/2017
Aims of Fairway	C water companies 2	MAP pre meeting	16/10/2017
Aims of MAP	C water companies 3	MAP pre meeting	30/10/2017
Aims of FAIRWAY	ABCD not involved in the MAPs	CABA meeting networking	10/11/2017
Introduction to FAIRWAY and UoL research	UoL/LIAT Breakfast Meeting Introduction to FAIRWAY project	Presentation. I Wright (UoL)	06/11/2017
Aims of FAIRWAY and MAP	A farmer 1	1:1 meeting with main farmers in CS control area	15/11/2017
Aims of FAIRWAY and MAP	ABC 25 not involved in the MAPs	Presentation to farmers and other stakeholders	24/01/2018
MAP	ABC local, regional	MAP Steering group meeting	06/03/2018
MAP and FAIRWAY	BC not directly involved in the MAPs	Grant meeting for work in the control area	29/03/2018
Aims of FAIRWAY	C3 not directly involved in the MAPs	Meeting with EA - NFM and FAIRWAY	20/04/2018
Aims of FAIRWAY	ABC50 not directly involved in the MAPs	Stand at Water Resources East event	30/04/2018
Aims of MAP	A in the CS study control area	Farmer surveys 12 (12 more to go)	10/04 -26/04/2018
AIMS of MAP	ABCD not directly involved in the MAPs	Farming Excellence, Profitability and Resilience	01/05/2018
Aims of FAIRWAY	A 20 not directly involved in the MAPs	Presentation to Deputy Lord Lieutentants	04/05/2018
Aims of FAIRWAY	B1 potetial MAP partner	Meeting with ADAMA - key pesticide manufacturer	12/06/2018
Aims of FAIRWAY	A B 15 not directly involved in the MAPs	Meeting presentation FERN group agric and education	12/09/2018
Aims of FAIRWAY	B1 not directly involved in the MAPs	Presentation to Lord Cormack	03/10/2018
Aims of FAIRWAY	A,B,C8 not directly involved in the MAPs	Presentation to AHDB/NFU local group	08/11/2018
Aims of FAIRWAY	AB25 in the CS study control area	Knowledge and Innovation Day in CS control area to ignite interest in the control area	13/11/2018
WP2/MAP/overview of FAIRWAY	ABCD Knowledge and Innovation Day - a MAP event. Also on UoL/ADAS Twitter feed 40	UoL lead ADAS/AW	18/11/2018
UoL research to include overview and outputs of FAIRWAY	Rothamsted Research (National Agricultural Research) - network day including PhD students 6.	Presentation. I Wright (UoL)	22/11/2018
UoL research to include overview and outputs of FAIRWAY	GLAFIP -Talk mainly on WP5, and also WP6	Presentation. I Wright (UoL)	19/02/2019

UoL research to include overview and outputs of FAIRWAY	Presentation to AW catchment advisers 5 persons	Presentation J Rowbottom I Wright (UoL) C Turner ADAS	25/02/2019
WP5	LIAT Short Course Alumni event. A presentation of decision support tools, to include the Environmental Yardstick 70	Presentation. I Wright (UoL)	27/02/2019
UoL research to include overview and outputs of FAIRWAY	Lincolnshire Agricultural Society 20	Presentation. I Wright (UoL)	10/04/2019
WP2 and farmer engagement	CEREALS - a National farming event Poster presentation on farmer engagement, KID events and MAPS Attendance reaches the 1000s	Poster - J Rowbottom	20/06/2019
UoL research to include overview and outputs of FAIRWAY	Natural England farmer facilitation Groups – 2 events of 10 each	Presentation. I Wright (UoL)	15/07/2019
UoL research to include overview and outputs of FAIRWAY	Café Scientifique - talk to general public in general on Agriculture and the Environment. 15 people	Presentation. I Wright (UoL)	23/07/2019
UoL research to include overview and outputs of FAIRWAY	Lord Cormack	Presentation. I Wright (UoL)	28/10/2019
UoL research to include overview and outputs of FAIRWAY	Environment Agency - training day, included an overview of FAIRWAY 10	Presentation. I Wright (UoL)	10/12/2019
UoL research to include overview and outputs of FAIRWAY	Dutch Embassy - overview of FAIRWAY 5	Presentation J Rowbottom	18/12/2019
UoL research to include overview and outputs of FAIRWAY	Major food retailer:- presentation by LIAT (UoL) 8	Presentation. I Wright (UoL)	15/01/2020
UoL research to include overview and outputs of FAIRWAY	Natural England Training day for 10 local coastal and freshwater team members, 2 local Env Agency staff and 1 local Drinking water staff – (13 people) ;to include dissemination of FAIRWAY to date	Presentation. I Wright (UoL)	20/01/2020
UoL research to include overview and outputs of FAIRWAY	National land agency - training day including WP6 and FAIRWAY. 40 people	Presentation. I Wright (UoL)	28/01/2020
WP2 and overview of FAIRWAY	Knowledge and Innovation Day - a MAP event Also on UoL & ADAS Twitter feed 50	UoL lead J E Rowbottom ADAS/AW	03/03/2020
UoL research to include overview and outputs of FAIRWAY	Presentation to UoL School of Geog academic staff. LIAT's water research to include FAIRWAY. 15 persons	Presentation. I Wright (UoL)	05.05.2020
UoL research to include overview and outputs of FAIRWAY	UoL Blog	UoL JERowbottom	01/08/2020
Overview of FAIRWAY and UoL research	UoL Blog presented in National Farmers Union publication and website	J E Rowbottom Article in NFU publication and on NFU website	20/08/2020
WP2 Overview of the MAP projects presented	British Sugar meeting with Anglian Water	presentation by Anglian Water - R Carter	09/09/2020
WP2 Overview of the MAP projects presented	Welland RNRP meeting	presentation by Anglian Water - R Carter	24/09/2020
WP 2 and All For the MAP UoL recived funding (Environment Agency) for a passive monitoring project in the Cringle Brook - the UoL MAP catchment to enable targeted engagement an UoL /AW collaborative project	Local community in the MAP	Article (by Anglian Water - R Carter) on local Facebook/notice board of shops and glof course etc. The article aimed to raise awareness of th project and additional inforamtion on FAIRWAY via UoL blog link	01/11/2020
Overview of results from FAIRWAY with a focus on the Anglian Water case study	C Water company advisers	Online presentations	11/08/2021
Developing a Multi Actor Platform in a mature farmer engagement arena	A,B,C,D	Presentation by Jenny Rowbottom to the Scottish Freshwaters Group Conference. Proceedings to appear in Water. Pdf of presentation here https://www.ceh.ac.uk/sites/default/files/2021-11/Developing-Multi-Actor-Platform-mature-farmer-engagement-arena_SFG1052021_V2.pdf	21/10/2021
Passive monitoring project in the Cringle Brook	B,C,D	Report by JER provided to Environment Agency and Anglian Water on results	31/05/2021
Infographic	ABCC	IW, JER, Infographic on the England MAP	31/10/2021
SCIENTIFIC PUBLICATIONS			
Papers in draft stage for WP2 and W6			
Developing a Multi Actor Platform will be published in the Water proceedings in a mature farmer engagement arena			

7.3.4 Case study 04 La Voulzie, FR

Case Study Site 04:	La Voulzie, FR		
Case Study site leader:	Jean-Francois Vernoux (BRGM) in collaboration with Sandra Cambournac (Eau de Paris)		
Contact email address:	jf.vernoux@brgm.fr		
Page last updated:	17-Nov-21		
KEY MESSAGES			
1	Better dialogue with farmers about their practices		
2	Better practices can improve groundwater quality even if it will be long (because of aquifer response time)		
3	Importance of diversification of agricultural systems with low input crops (crops rotation improvement, Pesticide decrease)		
Information requested by MAP participants: <i>The water company asked for information on the technology of passive samplers. We presented the results, but the BRGM and EdP laboratories also had close discussions.</i>			
MULTI-ACTOR PLATFORM PARTICIPANTS			
Local		Regional	National
A	B	C	D
Farmers, land managers	Research institutes, technicians & advisors, farmer unions, enterprises, NGOs	Payment agencies, government offices, research institutes, policy makers, NGOs	Payment agencies, government offices, research institutes, policy makers, NGOs
farmers (200)	Chamber of Agriculture	Water Agency	Ecophyto program
rural communities	Arvalis	region	INRA
	private advisers (Ubios)	department	
	Aqui'Brie association	state services (DDT77)	
RECORD OF DISSEMINATION			
Note: Dissemination activities within the MAPs should be reported in your WP2 MAP activity logs. Only include here any additional dissemination you do.			
Information provided	Target audience	Format or media	Date delivered
Participative monitoring set up		BRGM-EdP meeting	11-02-20
Lag time results	French MAP Water	On line presentation	2020
Passive sampler results	French MAP Water	On line presentation	11/02/2021
"Fairway" results	Eau de Paris catchment managers	On line presentation	20/09/2021
SCIENTIFIC PUBLICATIONS			
Kim, H.; Surdyk, N.; Moller, I. ; Graversgaard, M., Blicher-Mathiesen, G. ; Henriot, A. ; Dalgaard, T. ; Hansen B. Lag time as an Indicator of the link between Agricultural Pressure and Drinking Water Quality State. Water 2020, 12, 2385. OPEN ACCESS			
Surdyk, N.; Farrow F.; Cassidy R., Doody D.; 2021 Use of passive samplers in drinking water catchments. FLYER			

7.3.5 Case study 05 Lower Saxony, DE

Case Study Site 05:	Lower Saxony, DE		
Case Study site leader:	Thomas Beiss-Delkeskamp (assistant: Linda Tendler)		
Contact email address:	Linda.Tendler@lwk-niedersachsen.de Thomas.Beiss-Delkeskamp@LWK-Niedersachsen.de		
Page last updated:	5-Nov-20		
KEY MESSAGES			
1 Closing nutrient cycles in the region of Lower Saxony leads to more sustainability.			
2 Transport of farm manure can contribute to close nutrient cycles.			
3 Many different actors have to be involved to improve nutrient management on supra-regional scale.			
MULTI-ACTOR PLATFORM PARTICIPANTS			
Local		Regional	National
A	B	C	D
Farmers, land managers	Research institutes, technicians & advisors, farmer unions, enterprises, NGOs	Payment agencies, government offices, research institutes, policy makers, NGOs	Payment agencies, government offices, research institutes, policy makers, NGOs
farmers in Süd-Oldenburg (northwest of Lower Saxony)	Federal chamber of agriculture (LWK) - advisors working in respective regions	Federal authority for mining, energy and geology (LBEG)	
farmers in the southeast of Lower Saxony	Private advisory organizations	Federal authority for water, coast and nature (NLWKN)	
	University of Braunschweig (TU BS), Institute for ecology and sustainable chemistry	Federal ministry for agriculture (ML) and federal ministry for environment (MU)	
	Research Institute for Agriculture (TI), Institute for agricultural technology	Local authorities of districts	
	farmer's associations ("Landvolk")	Federal chamber of agriculture (LWK) - coordinators	
		Regional water supplier (OOWV)	
		Agricultural contractors (for farm manure transport/application)	
		federal administration for fertilization ("Düngebehörde")	
RECORD OF DISSEMINATION			
Note: Dissemination activities within the MAPs should be reported in your WP2 MAP activity logs. Only include here any additional dissemination you do.			
Information provided	Target audience	Format or media	Date delivered
Various articles published in local newspapers / journals about joint project farm manure management	AB	articles	2016-2018
Maintenance/update of websites of the joint project farm manure management and Fairway	ABC public	website www.lwk-niedersachsen.de	2017-2018
Various information events/ field days about use of organic fertilizers	Farmers, contractors	event, homepage of LWK https://www.lwk-niedersachsen.de/index.cfm/porta/1/betriebumwelt/nav/2092/article/29535.html	spring/summer 2017
Meetings of famers	Farmers, advisors	event	spring/summer 2017
Workshop with other scientific project (BONARES) abot soil compaction	ABC	workshop	Dec 2017
Various meeting of Round Tables (MAPs of Lower Saxony)	ABC	event	15.06.2018 16.10.2018 28.01.2019
Presentation of WP5-results:	B (farmer's representatives) C (Meeting with federal administration for fertilization and ministry for agriculture and environment with advisor from SEGES)	presentation	29.10.2018 21.05.2019 24.06.2019
SCIENTIFIC PUBLICATIONS			
No scientific publications available			

7.3.6 Case study 06 Axios river, GR

Case Study Site 06: Case Study site leader: Contact email address:		North Greece, GR (Subcases a: Axios, b: Agios Pavlos) Christophoros Christophoridis, Kostas Fytianos cchrist@chem.auth.gr, fyti@chem.auth.gr	
Page last updated:		29-Nov-21	
KEY MESSAGES			
1	Farmers are not alone. There is help here by specialized people not only from academia. There are available best practices for implementation of low pesticide use which does not negatively affect their quantity of produce. Sources related to this message: MAP regular meetings; D2.1_Compilation of Multi-Actor Engagement Plans for local cases; D2.3_Workshop on how to establish and nurture MAPs for constructive engagement in water- agriculture conflict related issues Target audience: Farmers, local MAPs		
2	There is a connection between farmers' practice and water quality Sources related to this message: MAP regular meetings; D4.1_Review report on effective nitrate leaching mitigation measures and practices; D4.2_Review report on effective pesticides leaching mitigation measures and practices; D3.3_Database containing harmonized dataset; D8.3_FAIRWAYS website final version; D8.4_Videofilm presentations explaining the scientific issues underlying drinking water quality Target audience: farmers and farmers organisations, local MAPs, water sector, municipal water utility companies		
3	Farmers are not threatened by new practices, instead they are finding tools to make production better, stick to regulations and change the situation from within.Sources: Regular MAP meetings; D2.1_Compilation of Multi-Actor Engagement Plans for local cases; D2.5_Report (or special edition of appropriate journal) on "Advancing MAPs as vehicles for reduced conflict on drinking water pollution from agricultural sector"; D3.1_Review report of Agri-Drinking Water quality Indicators and IT/sensor techniques, on farm level, study site and drinking water source; D4.1_Review report on effective nitrate leaching mitigation measures and practices; D4.2_Review report on effective pesticides leaching mitigation measures and practices; D6.2_Report on governance arrangements in cases; D6.3_Paper on lacks and spillover, narrative on actor perspectives; D7.1_Evaluation report on barriers and issues in providing integrated scientific support for EU policy; D7.2_Report on actors' feedback on the evidence based practices for water quality improvement of the different FAIRWAY case studies and FAIRWAY project interim results; All of WP8 orientated to give feedback to farmers about the findings of FAIRWAY and practices in other case studies Target audience: farmers and farmers organisations, local MAPs, water sector, municipal water utility companies		
4	Producers of fertilizers/pesticides feel there are regulations and systems that not just hinder their business but they actually create a new market of environmentally aware farmers. They therefore find products more friendly based on other examples. Sources: Regular MAP meetings; D4.1_Review report on effective nitrate leaching mitigation measures and practices; D4.2_Review report on effective pesticides leaching mitigation measures and practices; D6.2_Report on governance arrangements in cases Target audience: farmers and farmers organisations, water sector, pesticide and fertilizer industry, scientific community		
5	Water users/community/consumers of drinking water feel there is a system to observe the cycle of nutrients/pesticides. There are tools to help the authorities. Authorities are involved and not staying passive. Sources: Regular MAP meetings; D2.1_Compilation of Multi-Actor Engagement Plans for local cases; D4.1_Review report on effective nitrate leaching mitigation measures and practices; D4.2_Review report on effective pesticides leaching mitigation measures and practices Target audience: local MAPs, national/regional authorities, farmers and farmers organisations, water sector, pesticide and fertilizer industry, scientific community		
Information requested by MAP participants:			
MULTI-ACTOR PLATFORM PARTICIPANTS			
Local			
A	B	C	D
Farmers, land managers	Research institutes, technicians & advisors, farmer unions, enterprises, NGOs	Payment agencies, government offices, research institutes, policy makers, NGOs	Payment agencies, government offices, research institutes, policy makers, NGOs
Farmers	Producers of fertilisers	Big farms	Ministry of Environment
Animal stock raisers	Village authorities	Municipality	Ministry of Agriculture
Milk producers	Importers of pesticides	Water company/authority	Non-profit organisations
Drinking water consumers		Farmers' Union	NGOs
		Research Institutes	Students
			Media
			EU Agriculture
RECORD OF DISSEMINATION			
Note: Dissemination activities within the MAPs should be reported in your WP2 MAP activity logs. Only include here any additional dissemination you do.			
Information provided	Target audience	Format or media	Date delivered
Introductory information, aims of FAIRWAY, tasks necessary, participants, frame of project - Vafiohori. Farmers got informed in the activities of FAIRWAY and the MAP details. A discussion on the main innovation that the farmers use. Assessment of the engagement level that the farmers are willing to take.	A(5) farmers and animal stock raisers, B(2) village authority and farmer union, C(1) member of the	Introductory MAP multiactor enrollment meeting-Vafiohori	18-10-17
Discussion of the main challenges of the area (environmental, agricultural) with authorities and representatives of the scientific community (Polykastro). Main governance details, irrigation legislation. Nitrate legislation and pesticide legislation and its application on the area. Water authorities were informed on the details of FAIRWAY and the notion of MAPs as a tool for environmental management.	A(2) farmers and animal stock raisers, B(1) village authority and farmer union, C(1) member of the municipality of Polykastro	Informative MAP meeting- Polykastro	12-12-17
Travel to Athens for a visit and information from public services related to the Water Quality Directive 2000/60 and successful completion of the project (Ministry of Rural Development, Ministry of Environment, Central Water Region, EYDAP, State Chemical Laboratory) of relevance to WP3 (Monitoring and Indicators for Soil Quality and Water for Rural Use), WP4 (Review of Measures and Practices of Ministries and Water Directorates to Reduce the Use of Nitrates, Pesticides and Large Waters); WP6 (Legislation and directives at State and local level for the protection of water from agricultural activities).	D(5) Ministry of Rural Development, Ministry of Environment, Central Water Region, EYDAP, State Chemical Laboratory	Dissemination to the ministry and Water Central Authorities of Greece	17-4-2017 and 19-4-2018
Aims of FAIRWAY- Agios Pavlos subcase	A (4), B(1), C(0), D(0), public (3)	MAP meeting, oral	23-Feb-18
Aims of FAIRWAY- Vafiohori subcase	A (15), B(5), C(2), D(1), public (3)	MAP meeting, oral	03-05-18
detailed discussion on the problems of the area, special problems of the area's crops, main innovation methods that the farmers apply, information of non-chemical fertilization methods, information to water authorities and farmers association o the EU initiative for denitrification as well as the main FAIRWAY objectives	A(2) farmers ; B(2) village authority and farmer union, C(1) member of the municipality of Agios Pavlos	MAP annual meeting in Agios Pavlos	04-07-18
Groundwater regulations	A (4)	telephone contact	08-07-20
Evaluation Meetings (both subcases)	A (7), B(5), C(2), D(1), public (3)	MAP meeting, oral	October and November 2018
For both subcases: Informing stakeholders (authorities of province, water company and farmers organization) of FAIRWAY goals * Inspiring farmers and increasing engagement with stakeholders and farmers * Presenting the plan and focus for next year	A (15), B(1), C(1), D(1), public (2)	MAP meeting, oral, presentation	February 2019
Presentation of goals to farmers and stakeholders, Presentation of main goals of directives (nitrogen and pesticide), bringing together advisors, water authority and companies selling fertilizers/pesticides, technical support on reducing nitrogen use, registering needs of farmers (financial incentives, water scarcity, dissemination of EU programs on nitrogen use)	A (7), B(5), C(2), D(1), public (3)	MAP meeting, oral, presentation	June 2019
Both Subcases Presentation of main directives (nitrogen and pesticide) *registered new farmers, water authority members, members of the farmer's union *circulated dissemination material of FAIRWAY *learned about past programs on nitrate minimization	A (6), B(1), C(1), D(1), public (2)	MAP meeting, oral, presentation	Feb 2020
Best practices for implementation of low pesticide use.	A (6)	telephone contact	15-17/7/20
Aims and progress of FAIRWAY	A(12) B (2) C (2) D (2)	Leaflet of FAIRWAY, presentation	21-23/7/20
Recent advances in modern tools to produce without using increased fertilizers / pesticides	A(5) B (2)	Web meeting	23-25/7/20
Aims of FAIRWAY and progress	A (4) B (1)	Meetings with separate people	2-6/9/2019
Implementation of regulation in Greece	A (6) B (3) C (1) D (3)	Separate meetings	14-25/9/2020
Both subcases: Communicate results from FAIRWAY and practices from WP4* Present other examples of MAPs and communities of Practice	A (12), B(2), C(1), D(1), public (2)	MAP meeting, oral, presentation	May 2021
Both subcases: webcall to separate farmers on the new tools provided for farmers to finance innovative digital farming and to minimise nitrate pollution in groundwater	A (4)	Teleconference	June 2021
Both subcases Inform stakeholders on the progress of other case studies, inform authorities on the challenges posed by MAP creation/management, questions about who else could participate and how to keep this alive	A(13), B(2), C(1), D(2), public (4)	MAP meeting, oral, presentation	28-30/9/2021
SCIENTIFIC PUBLICATIONS			
Wuijs, S., Claessens, J., Farrow, L., Doody, D. G., Klages, S., Christophoridis, C., et al. (2021) Protection of drinking water resources from agricultural pressures: Effectiveness of EU regulations in the context of local realities. <i>Journal of Environmental Management</i> , 287, 112270, doi:https://doi.org/10.1016/j.jenvman.2021.112270.			
C. Christophoridis, E. Mitsika, E. Evgenakis, A. Chatzimpaloglou, K. Fytianos. "The presence of multi-class pesticides in water originating from Axios River Basin – A water quality tool for the first multi-actor platform". 19-22/6/2018, 40th International Conference on Environmental & Food Monitoring, Santiago de Compostela, Spain.			

7.3.7 Case study 07 Derg catchment, UK

Case Study Site 07:	Derg catchment, UK		
Case Study site leader:	Rachel Cassidy, Donnacha Doody		
Contact email address:	Rachel.Cassidy@afbini.gov.uk, Donnacha.Doody@afbini.gov.uk		
Page last updated:	29-Nov-21		
KEY MESSAGES			
1 Connecting MCPA use for rush and broadleaf weed control in extensive and improved grasslands to impact (contaminated and expensive water).			
2 Improvements (using DST) to farm practices in pesticide use.			
3 Increased awareness across all stakeholders			
4 Identifying policy conflicts within and across jurisdictions			
Information requested by MAP participants:			
MULTI-ACTOR PLATFORM PARTICIPANTS			
Local		Regional	National
A	B	C	D
Farmers, land managers	Research institutes, technicians & advisors, farmer unions, enterprises, NGOs	Payment agencies, government offices, research institutes, policy makers, NGOs	Payment agencies, government offices, research institutes, policy makers, NGOs
Farmers, land managers	Anglers' Association	Northern Irish Water	Ulster Wildlife
	Northern Irish Water	Irish Water	National Pesticides and Drinking
	Local water treatment works	EPA (Environmental Protection Agency, Ireland)	Agri-Food and Bioscience Institute
	Rivers Trust	NIEA (Northern Ireland Environment Agency)	
	Donegal County Council	DAFM (Department of Agriculture, Food and the Marine) Republic of Ireland	
	Fermanagh and Omagh Council	DAERA (Department of Agriculture, Environment and Rural Affairs (Northern Ireland))	
RECORD OF DISSEMINATION			
Note: Dissemination activities within the MAPs should be reported in your WP2 MAP activity logs. Only include here any additional dissemination you do.			
Information provided	Target audience	Format or media	Date delivered
Outline of the Fairway project and AFBI involvement in the Derg Case Study	C (Wexford County Council); B (Teagasc, WaterProtect team members)	Meeting in Teagasc Ashtown, Dublin, Ireland	14th February 2018
Presentation of risk mapping as a basis of decision support for MCPA pesticide risk in the Derg case study catchment (relevant to DST development as part of WP5 in Fairway)	B, C, D (Northern Irish Water; Irish Water; Rivers Trust; partners on the INTERREG VA Source to Tap project)	Meeting in NIW Seagoe Portadown, Northern Ireland	27th June 2018
Outline of Fairway decision support tool and app development to Department of Agriculture, Environment and Rural Affairs and Northern Ireland Environment Agency	C, D (Department of Agriculture, Environment and Rural Affairs; Northern Ireland Environment Agency)	Conference call to meeting	6th November 2018
Analysis of the Derg MAP dimensions	B (NIWater, Rivers Trust)	Meeting at the Rivers Trust Office in Ballinderry	31st January 2018
Overview of Task 6.2, policy analysis	D (Lord Curry, Member of the House of Lords)	Meeting at AFBI Hillsborough	29th of August 2018
Update of catchment activities	B (Catchment MAP coordinators)	Meetings at various locations	Every 3 months
Outline of Fairway decision support tool and app development to Northern Ireland Water and Irish Water	B/C (Northern Ireland Water, Irish Water)	Meeting at AFBI Hillsborough	21st January 2019
Outline of the Fairway project	D (Ulster Wildlife)	Meeting at Ulster Wildlife headquarters	15th February 2019
Outline of WP5.5 and gathering of target audience opinion on the proposed app	A (Farmers and professional pesticide users)	In-person presentation at CAFRE training day	28th February 2019
Outline of the Fairway project	A (Northern Ireland Environment Agency)	Meeting at NIEA headquarters	29th March 2019
Outline of WP5.5 and gathering of opinion on the proposed app from Source to Tap field staff	B (Rivers Trust)	Rivers Trust HQ	1st April 2019
Outline of the Fairway project	C(Department of Agriculture, Food and the Marine, Irish Water, Drinking Water Inspectorate and assorted bodies representing professional pesticide users)	Department of Agriculture, Food and the Marine HQ, Dublin	23rd May 2019
Outline of WP5.5 and gathering of target audience opinion on the proposed app	A (Farmers and professional pesticide users)	In-person presentation at CAFRE training day	14th June 2019
Outline of WP5.5 and gathering of farmer trainers opinion on the proposed app	B (Trainers employed by CAFRE to provide pesticide-relevant professional training)	In-person presentation at CAFRE training day	17th July 2019
Outline of WP5.5 and gathering of Source to Tap's committee members opinion on the proposed app	B (NIWater, Rivers Trust, Irish Water, Ulster University)	In-person presentation at NIWater HQ	9th October 2019
Outline of WP5.5 and gathering of committee members opinion on the proposed app	C (Department of Agriculture, Food and the Marine, Irish Water, Drinking Water Inspectorate and assorted bodies representing professional pesticide users)	Department of Agriculture, Food and the Marine HQ, Dublin	13th November 2019
Outline of FAIRWAY project and development of Ireland-focussed DST	D (Agri-Food and Bioscience Institute)	Poster - internal review of current research meeting	27th February 2020
Outline of FAIRWAY project and chemcatcher deployment experiences/findings	C (Loughs Agency (Republic of Ireland))	Online meeting	8th June 2020
Outline and discussion of FAIRWAY project and development of Ireland-focussed DST	B (Agri-Food and Bioscience Institute colleagues from Agriculture branch)	Online presentation	16th December 2020
Outline of water quality monitoring techniques in an Irish context - as explored by FAIRWAY and the case study	B (Agri-Food and Bioscience Institute colleagues - all branches)	Online presentation	25th January 2021
Outline of WP5.5 output - demonstration and gathering of feedback on the proposed app	A, B, C, D (reached farmers, NGO's, Government departments, private industry and academics)	Online presentation	22/03/21, 23/03/21, 25/03/21, 29/03/21, 30/03/21, 31/03/21, 12/04/21, 22/04/21
Outline of WP5.5 output - demonstration of the proposed app	D (Agricultural outreach and education organisation for NI (Arms length from government))	Online presentation	03/06/2021
Outline of WP5.5 output - demonstration of the proposed app	C (UK water utilities and academics)	Online presentation	15/06/2021
Outline of WP5.5 output - demonstration of the proposed app	B (Rivers Trust)	Online presentation	05/11/2021
SCIENTIFIC PUBLICATIONS			

7.3.8 Case study 08 Overijssel, NL

Case Study Site 08:	Overijssel, NL		
Case Study site leader:	Cors van den Brink		
Contact email address:	cors.van.den.brink@rhdhv.com		
Page last updated:	19-Nov-21		
KEY MESSAGES			
1	Farming for drinking water helps realising WFD objectives		
2	Improving nutrient use improves both the financial profit of farmers and the quality of groundwater		
3	Engagement of farmers increases by being taken seriously, supported monitoring data of groundwater quality and political support.		
Information requested by MAP participants:			
MULTI-ACTOR PLATFORM PARTICIPANTS			
Local		Regional	National
A	B	C	D
Farmers, land managers	Research institutes, technicians & advisors, farmer unions, enterprises, NGOs	Payment agencies, government offices, research institutes, policy makers, NGOs	Payment agencies, government offices, research institutes, policy makers, NGOs
Farmers	Royal HaskoningDHV	Province	Ministry *
Agricultural contractors	Wageningen University	Water company	6th Nitrate Action Programme
	Countus		
	Stimuland		
RECORD OF DISSEMINATION			
Note: Dissemination activities within the MAPs should be reported in your WP2 MAP activity logs. Only include here any additional dissemination you do.			
Information provided	Target audience	Format or media	Date delivered
Approach & results to EU-delegates	A (18), B (4), C (3), D (4)	meeting at farm	18-04-18
Info about aims, farmers, locations, results	A, B, C, D	website, twitter	continuous
Approach & results	B, C, D	article, press release, online paper	01-08-17
Approach & results	B, C, D	Land Use & Water Quality congress	2015, 2017, 2019
Approach & results	B, C, D	political meeting enhancing the implementation of the 6 th NAP	12-02-18
Approach & results	B, C, D	articles in online expert journals (Geo-Info; Melkvee)	2018, 2019, 2020
Approach	B, C, D	Example in 6th Nitrate Action Programme	12-12-2017
Boeren zorgen voor schoon drinkwater (zie bijlage persbericht)	B, C, D	Article in technical journal https://www.nieuweoogst.nl/nieuws/2020/02/10/boeren-zorgen-voor-schoon-drinkwater-in-overijssel	10-Feb-20
Nitraatuitspoeling door boeren gedaald in kwetsbare Overijsselse gebieden	B, C, D	Article in technical journal https://www.h2owaternetwerk.nl/h2o-actueel/nitraatuitspoeling-door-boeren-gedaald-in-kwetsbare-overijsselse-gebieden	08-Jan-20
Boeren in het oosten dupe van opzettewembaden	B, C, D	Article in technical journal https://www.nieuweoogst.nl/nieuws/2020/06/15/boeren-in-het-oosten-dupe-van-opzettewembaden	15-Jun-20
Vitens aan consumenten van drinkwater met daarin een berichtje en link naar website boeren voor drinkwater	Public	Newsletter with link to website	
Reportage door RTV Oost met interview met Gerben Korten en Erik Rensen op tv	Public	News item on regional media http://portal.rtvmonitor.nl/#/summary/2833873?token=cUpTMnoxU0g0Q2w4UW45R2l3eE0vNitwSGx6Z3pTUldDU0lXR1JaTWFxcWVxVWxsajFEEdWpMcS8wWmhnV015c1VVSjhabmVZR1NveWd3Tk5GaGI0YkR3L0J6bDB3YXJnN294NVF1VnN5SVQzTGJXVVVpTDdlZz090	03-Feb-20
Erik uit Holten blij met het project Boeren voor Drinkwater: "Het is een win-winsituatie"	Public	News item on regional media https://www.rtvooost.nl/nieuws/325283/Erik-uit-Holten-blij-met-het-project-Boeren-voor-Drinkwater-Het-is-een-win-winsituatie	03-Feb-20
Gewasbescherming Boeren voor Drinkwater (Crop protection farmers for drinking water)	Public	https://www.youtube.com/watch?v=e5GDbyDsgYg	15-Jun-20
Boeren voor Drinkwater (Farmers for drinkingwater)	Public	https://www.youtube.com/watch?v=TYvpYUAWOwA	07-Sep-20
Samen op weg naar schoon grondwater (Clean groundwater as common objective)	Public	LinkedIn post	03-march-2021
Landbouw & het veranderlijke regenpatroon: hoe pakken we dat aan? (Agriculture in changing weather patterns. How can we deal with that?)	Public	LinkedIn post	31-Aug-21
SCIENTIFIC PUBLICATIONS			
Paper published in Water: Effectiveness of voluntary measures to reduce agricultural im-pact on groundwater as a source for drinking water: Lessons learned from cases in the Dutch provinces Overijssel and Noord-Brabant			

7.3.9 Case study 09 Noord-Brabant, NL

Case Study Site 09:	Noord-Brabant, NL		
Case Study site leader:	Peter Leendertse		
Contact email address:	pele@clm.nl		
Page last updated:	29/Nov/21		
KEY MESSAGES			
1	Strong cooperation between regional stakeholders contributes to effective reduction of pesticide leaching.		
2	Involvement of retailers as stakeholders is crucial to implement reduction measures.		
3	Each farmer or contractor can take measures to reduce pesticide leaching and should take those measures that are apt for his farm or contractor business		
Information requested by MAP participants:			
MULTI-ACTOR PLATFORM PARTICIPANTS			
Local		Regional	National
A	B	C	D
Farmers, land managers	Research institutes, technicians & advisors, farmer unions, enterprises, NGOs	Payment agencies, government offices, research institutes, policy makers, NGOs	Payment agencies, government offices, research institutes, policy makers, NGOs
Farmers	Advisors	Water bodies	European Commission
	Civilians	NGO	Environment Agency
	Local government	Regional government	NGOs
		Retailers	Scientific community
		Farmers' Union	
RECORD OF DISSEMINATION			
Note: Dissemination activities within the MAPs should be reported in your WP2 MAP activity logs. Only include here any additional dissemination you do.			
Information provided	Target audience	Format or media	Date delivered
Advice on crop protection & preventing emission to water (crop disease and weed prevention, use of decision support systems, determining necessity for spraying, choice of pesticide etc)	A (10-15 per meeting), B (1-3 per meeting), C (occasionally)	around 60 field meetings per year for farmers, contractors, advisers ->in 2020 and 2021 fewer field visits were organised.	January 2018 – November 2021
Informing on spray techniques to reduce emission, farmyard run off, soil cultivation, personal safety etc	A (100-200 per meeting), B (10-20 per meeting)	4 big demonstration meetings per year for farmers contractors and advisers -> Due to covid 2020 only had an online webinar and 2021 only 2 demonstrations	January 2018 – October 2021
Advice/ discussion on Integrated Pest Management strategy of the individual farmer or contractor	A (60)	- around 70-80 home visits per year to farmers and contractors contractors - 24 visits in 2021	January 2018 – November 2021
Recommendations on crop protection throughout the growing season	A (500)	30 emails per year 2018-2020 10 emails in 2021	January 2018 – November 2021
Informing stakeholders on / discussing with them the progress and plans in the project Schoon Water for Brabant.	A (4), C(6) plus ourselves as advisors	2 MAP meetings per year	January 2018 –December 2020
Informing on the activities and results of the project Schoon Water for Brabant	A (500), B (20), C (40)	3 digital newsletters per year	January 2018 – May 2021
Informing on the results of the project Schoon Water for Brabant	A, B, C, D	2-4 press releases per year	January 2018 – November 2021
Informing about the project's meetings	A, B, C, D	reports of our meetings on our website	January 2018 – November 2021
Informing on the activities and results of the project Schoon Water for Brabant	A, B, C, D (around 600 followers)	twitter messages accompanying all mentioned publications	January 2018 – November 2021

7.3.10 Case study 10 Vansjø, NO

Case Study Site 10:	Vansjø, NO		
Case Study site leader:	Ingrid Nesheim		
Contact email address:	Ingrid.Nesheim@niva.no		
Page last updated:	30-Nov-21		
KEY MESSAGES			
1	The sustainability of engagement platforms depends on external frames within the larger governance system.		
2	Continued financial support of engagement platforms for planning and for coordination activities are essential.		
3	A multi-actor engagement platform will it self not allow for interaction with a sufficient number of farmers - considering different types of farmers (small scale, large scale, etc.) additional workshops or focus group discussions with farmers are needed.		
Information requested by MAP participants:			
MULTI-ACTOR PLATFORM PARTICIPANTS			
Local		Regional	
A	B	C	D
Farmers, land managers	Research institutes, technicians & advisors, farmer unions, enterprises, NGOs	Payment agencies, government offices, research institutes, policy makers, NGOs	Payment agencies, government offices, research institutes, policy makers, NGOs
Representative from the Norwegian farmer organization in Østfold	Nine agro-environmental advisors (9 municipalities)	County governor Oslo Viken, agricultural office (state representative, regional level)	
Representative from the Norwegian farmer organization in Østfold	MOVAR (The water company)	County governor Oslo Viken environmental office (state representative, regional level)	
Associated focus group discussion with 25 farmers organized in 2021	Sub-basin district chair	Norwegian Water Resources and Energy directorate regional office	
	Environmental NGO.		
	Land owner organization		
Note: The multiactor platform consists of the Sub-basin District Board, and associated working groups. The project has mostly interacted with the agricultural working group. Yet the engagement platform also consist of the sub-basin district board			
RECORD OF DISSEMINATION			
Note: Dissemination activities within the MAPs should be reported in your WP2 MAP activity logs. Only include here any additional dissemination you do.			
Information provided	Target audience	Format or media	Date delivered
History of Vansjø catchment (EN)	Farmers, public	Infographic	05-09-19
Future trends and actions (NO)	Farmers, public, advisors	Rollup	01-09-20
Different decision making tools available in Norway for fertilizer and for pesticides	Farmers, private companies, policy makers	Flyer	Available late 2020 : https://www.fairway-project.eu/index.php/downloads/category/14-deliverables
Cross-municipal and sectoral cooperation has enabled the implementation of measures to improve water quality	Mayor in Våler municipality, Farmers, public, advisors,	Video https://youtu.be/7Fp3Kbxs87Y (one version with English subtitles, and one version without.	Available since 2020 : https://www.niva.no/en/projectweb/fairway/publications
Youtube video collaboration with the WaterXR project - where the Fairway part focus on conditions important for meaningful engagement	European actors in the water-agricultural domain.	Video available on youtube.	Available since November 2021 : https://www.niva.no/en/projectweb/fairway/publications
Multi-actor platforms alone will not allow for interaction with a sufficient number of farmers – additional workshops or focus group discussions are needed	C and D - government offices municipality, regional and national level and other actors in the agricultural - water governance domain	Key message / Infographic	November 30th. 2021
The sustainability and achievements of engagement platforms are associated with their position within the larger governance system.	C and D - government offices municipality, regional and national level, and other actors in the agricultural - water governance domain	Key message / Infographic	November 30th. 2021
Pressure for change to improve water quality, and a common understanding of the problem are prerequisites for meaningful engagement in water governance	C and D - government offices municipality, regional and national level and other actors in the agricultural - water governance domain	Key message / Infographic	November 30th. 2021
Inputs from a focus group discussion meeting with 20 farmers to a process of revising the Regional environmental programme including economic and soft incentives for implementation of measures. The event was organized for as a collaboration between, the Sub-basin district daily manager, local offices, regional level state authorities, and Fairway reserach partners.	Farmers, municipality agricultural offices, county municipality agricultural offices, and state representative county governor agricultural offices	Minutes produced from regional workshop including focus group discussion with farmers , also participating municipality advisors and state regional representatives.	Meeting on November 15th 2021 minutes for distribution on November 30th.
SCIENTIFIC PUBLICATIONS			
Authors: Nesheim, I. et al. Journal: Water. Title Multi-Actor Platforms in the Water–Agriculture Nexus: Synergies and Long-Term Meaningful Engagement https://www.mdpi.com/2073-4441/13/22/3204			
Authors: Platjouw, F. M. and Nesheim, I. Manuscript submittet to the journal: Ambio, Title: POLICY COHERENCE FOR THE PROTECTION OF DRINKING WATER RESOURCES AGAINST AGRICULTURAL POLLUTION IN THE EU AND NORWAY			
Authors: Nesheim, I., Sundnes, F., and Platjouw, F. M. Manuscript submitted to the Journal: Vann (Norwegian journal); Title: Governance arrangements over time and multi-actor engagment in the Morsa catchment			
Authors: Graversgaard, M., Nesheim, I et al. Title: Catching the nutrient problem or developing new governance problems – A comparison of the implementation of catch crops as policy instrument for water quality protection in 6 European countries. Manuscript submitted to the journal, Water (as part of the special issue)			

7.3.11 Case study 11 Baixo Mondego, PT

Case Study Site 11:	Baixo Mondego, PT		
Case Study site leader:	Antonio Ferreira		
Contact email address:	aferreira@esac.pt		
Page last updated:	29-Nov-21		
KEY MESSAGES			
1	Improving dialogue and collaboration between different actors (farmers, water companies, research institutes, authorities) helps create a connection between groundwater protection and agricultural production.		
2	DSTs are an important tool to help and advice farmers to use the best practices and to planning the application of fertilizers, in order to optimize crop yield and prevent pollution problems associated with nitrates and nitrogen.		
3	Monitoring and relating to agricultural practices is fundamental to develop strategies to reduce fertilizer use.		
Information requested by MAP participants:			
MULTI-ACTOR PLATFORM PARTICIPANTS			
Local		Regional	National
A	B	C	D
Farmers, land managers	Research institutes, technicians & advisors, farmer unions, enterprises, NGOs	Payment agencies, government offices, research institutes, policy makers, NGOs	Payment agencies, government offices, research institutes, policy makers, NGOs
Farmers	Farmers' Associations	Environmental authorities	
	Local Water Authorities/management	Agriculture authorities	
	Researchers	Planning authorities	
		Regional water management companies	
RECORD OF DISSEMINATION			
Note: Dissemination activities within the MAPs should be reported in your WP2 MAP activity logs. Only include here any additional dissemination you do.			
Information provided	Target audience	Format or media	Date delivered
Aims of MAP	C (Environmental authorities)	MAP meeting	3.10.2017
Aims of MAP	C (Planning authorities)	MAP meeting	7.10.2017
Aims of MAP	B (Farmers' Association)	MAP meeting	5.12.2017
Aims of MAP	B/C	MAP meeting	24.4.2018
Aims of FairWay	A/B/C	MAP annual meeting	24.7.2018
Aims of MAP	A/B/C	MAP meeting	13.8.2018
Aims of MAP	A/B/C	MAP meeting	6.12.2018
Aims of MAP	A (farmers)	MAP meeting	16.4.2019
Aims of FairWay	A/B/C	MAP annual meeting	19.7.2019
Aims of MAP	A/B/C/D	Conference	14.11.2019
Aims of MAP	B	MAP meeting	17.6.2020
Aims of MAP	C	MAP meeting	2.9.2020
Aims of MAP	C (Regional water management companies) / B (researchers)	MAP meeting	29.1.2021
SCIENTIFIC PUBLICATIONS			

7.3.12 Case study 12 Arges-Videa, RO

Case Study Site 12:	Arges-Videa, RO		
Case Study site leader:	Irina Calciu		
Contact email address:	irina.calciu@icpa.ro		
Page last updated:	17-Nov-21		
KEY MESSAGES			
1	Optimum nitrogen and pesticides rates applied according to the plant need and specific local conditions avoid water bodies pollution by surface runoff and		
2	Proper nutrients management at farm level increases the security and safety of food production		
Information requested by MAP participants:			
MULTI-ACTOR PLATFORM PARTICIPANTS			
Local		Regional	National
A	B	C	D
Farmers, land managers	Research institutes, technicians & advisors, farmer unions, enterprises, NGOs	Payment agencies, government offices, research institutes, policy makers, NGOs	Payment agencies, government offices, research institutes, policy makers, NGOs
farmers from Arges-Videa watershed	County Survey Offices	INCDPAPM - ICPA Bucharest	INCDPAPM - ICPA Bucharest
	Local private advisors	Academic media representatives	Academic media representatives
	Communa hall representatives		
RECORD OF DISSEMINATION			
Note: Dissemination activities within the MAPs should be reported in your WP2 MAP activity logs. Only include here any additional dissemination you do.			
Information provided	Target audience	Format or media	Date delivered
to inform on Fairway project progress, to collect data on local problems, to collect suggestions of the stakeholders, to plan the activities for a good nutrient management at local level, to inform on Fairway project progress, to collect data on local problems, to collect suggestions of the stakeholders, to plan the activities for a good nutrient management at local level	A (7), B (3), C, D (8)	MAP meeting	23.07.2018
Workshop with other scientific national project (INTERASPA) about water loaded with different compounds and sediments and water flux from groundwater to surface water	C, D (15)	workshop	19.10.2018
Workshop in the study site area on dissemination of the revised Code of Good Agricultural Practices for water protection against pollution with nitrates from agricultural sources and of the revised Action Program	A (15), C (35)	workshop	10.10.2019
Dissemination of some results related to applying an optimum fertilization plan at farm level	D (15)	symposium	07-08.11.2019
Establishing best management practices in the study site area according to the specific local conditions	researchers (5), academic media (2) and local public authority (1)	Workshop	Sep-20
Representatives of Project Management Unit "Integrated Control of Nutrients Pollution" had presentations on benefits for farmers and local authorities for managing a public system for manure collection, knowledge transfer to farmers. A representative from National Agency of Payments and Interventions in Agricultura had a presentation on farm compliance with cross compliance regulations. A researcher from Fairway project (Ion Creanga) had a presentation on challenges for meeting the requirements of Nitrates Directive: interdiction periods for fertilizers application, ensuring the proper storage capacities, compliance with the limit of 170 Kg N/ha, protection strips. etc.	A (15), B (15), C (10), D (5)	Workshop on: Animal manure - welfare for farmers! Local measures for agricultural development and water protection	20.09.2021
Discussions on aspects related to: the outcomes of Fairway project; MAP dimension in terms of adaptivity, power balance, shared goals arenas, available resources, synergies, decision space.	A (7), B (3), C, D (8)	Annual MAP meeting	10.11.2021
Dissemination of good agricultural practices for avoiding water pollution with nitrates from agricultural sources	general public	telephonic interviews during TV news and during TV weather forecast	2-3-4 times each month during 2021
SCIENTIFIC PUBLICATIONS			

7.3.13 Case study 13 Dravsko Polje, SI

Case Study Site 13:	Dravsko Polje, SI		
Case Study site leader:	University of Ljubljana (Matjaž Glavan - CS leader); KGZS - Zavod Maribor (Katarina Kresnik - MAP coordinator; Gregor Kramberger - MAP analyst)		
Contact email address:	matjaz.glavan@bf.uni-lj.si, katarina.kresnik@kmetijski-zavod.si, gregor.kramberger@kmetijski-zavod.si		
Page last updated:	29.11.2021		
KEY MESSAGES			
1	How to farm on the water protection areas for better slurry management with new application technologies.		
2	How to reduce inputs of fertilisers and pesticides with improvements of existing DST.		
3	How to adjust the legislation that farmers have to fulfill to allow longterm steady development of agriculture in the area.		
4	How to effectively connect different actors (farmers, water companies, ministries) in water protection area for drinking water quality improvements.		
Information requested by MAP participants:			
MULTI-ACTOR PLATFORM PARTICIPANTS			
Local		Regional	National
A	B	C	D
Farmers, land managers	Research institutes, technicians & advisors, farmer unions, enterprises, NGOs	Payment agencies, government offices, research institutes, policy makers, NGOs	Payment agencies, government offices, research institutes, policy makers, NGOs
Farmers (several)	Agricultural advisors	This level doesn't exist in Slovenia	Ministry for agriculture
Local farmers incentives	Municipalities (several)		Ministry for environment
Agro-business	Water company Ptuj		
	Water company Maribor		
RECORD OF DISSEMINATION			
Note: Dissemination activities within the MAPs should be reported in your WP2 MAP activity logs. Only include here any additional dissemination you do.			
Information provided	Target audience	Format or media	Date delivered
Educational video	A, B, D	Youtube video	26. 11. 2019
ANCA	A, B, D (35)	Open event, workshop	4. 3. 2019
DEMO event – Improving the water quality of vulnerable aquifers - challenges and solutions?	A, B, D (66)	Open event, workshop	28. 1. 2020
General information on CSS Dravsko polje	A, B, D	Infographic	20. 7. 2020
Paper on FAIRWAY mid-project results at Vodni dnevi / Water Days	B, D	expert paper	18. 9. 2020
Paper on MAP activities at Mišič Water day	B, D	expert paper	27. 11. 2020
Presentation of FAIRWAY and local MAP work at Demonstration workshop E-trajnostna kmetij/ E-sustainable farm, dedicated to water protection areas. Organised at local farm at Dravsko Polje CSS - Colegues Gregor KRAMBERGER (KGZ MB), Miha CURK (UL) presented work "Modern solutions for agricultural land management in water protection areas"	A, B, D	Open event, workshop	23. 9. 2021
SCIENTIFIC PUBLICATIONS			

8 ANNEX 2: BUILDING DISSEMINATION AND COMMUNICATION SKILLS IN THE CONSORTIUM

A training event on “Using Social Media for Dissemination” was delivered from 10:30 to 13:00 on Wednesday 20 June 2018 at the second FAIRWAY plenary meeting in Aalborg, Denmark. The aim was to enable the partners to produce the kind of succinct and highly visual material that social media uses best and which is slightly different from usual scientific output. The meeting was attended by some 48 members of the FAIRWAY consortium and all work packages and study sites were represented.

Extensive “Guidelines for using social media for dissemination” were prepared for the event.

The training presentation and guidelines are all included in Deliverable 8.2 (August 2018)

9 ANNEX 3: OPEN ACCESS AND DATA MANAGEMENT (COORDINATION)

The Open Access and Data Management Plan is contained in Deliverable 1.2 (November 2017).