MISSION and PRIORITIES

FOSTERING UPTAKE OF INNOVATION IN IRRIGATED AGRICULTURE

- integrated agricultural water management under drought
- efficient water reuse in irrigation
- energy saving in irrigation
Steering Group

Action Lines

1. Water reuse in irrigation (P12 plus P52, 61, 71)
2. Energy saving in irrigation (P31 plus P61, 71)
3. Integrated drought management (P42 plus P52, 71)

Contact Group

Innovation pilots

a, b, c, d, e, f

Expert Group (P12, 31, 42)
48 PARTNERS

13 COUNTRIES
2 INT. BODIES

WIRE PARTNERSHIP
4 ICT/Industries
4 Public/Finance Bodies
13 Ass. End Users/Stakeholders
14 Pilot/Demonstration
27 Scientific Institutes

CONNECTED with
13 ONGOING EU PROJECTS

CONNECTED with
14 EU PROJECTS AT IMPLEMENTATION STAGE (follow up)

UP TO 50 EXTERNAL SUPPORTING INSTITUTIONS

INVOLVED IN H2020, LIFE+, NATIONAL FUNDING SCHEMAS
Covering of about 90% of Irrigated areas in EU

A. Battilani – WIRE AG, EIPwater TF meeting, Barcelona 4th November 2014
**FIRST WIRE SURVEY OUTCOMES**

**WIRE activity Survey, Oct. 2014**

<table>
<thead>
<tr>
<th>Name of the organisation/responding person</th>
<th>Did you disseminate WIRE concept and activities?</th>
<th>Did you organized seminars, workshop or other public/internal events presenting WIRE?</th>
<th>How many?</th>
<th>Did you organized activities (whatever) using the WIRE brand and logo?</th>
<th>How many?</th>
<th>Did you indicated WIRE as potential stakeholder submitting EU or other proposals?</th>
<th>How many times?</th>
<th>Did you indicated WIRE as the requested link with EIPs activities submitting an EU proposal?</th>
<th>How many times?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veneto Agricoltura/Lorenzo Furlan</td>
<td>Yes</td>
<td>Yes</td>
<td>1</td>
<td>Yes</td>
<td>1</td>
<td>Yes</td>
<td>3</td>
<td>Yes</td>
<td>3</td>
</tr>
<tr>
<td>Veneto Region/Francesca Ricardi</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Consiglio per la Ricerca e la sperimentazione in Agricoltura - Landscaping plants and nursery research unit (CRA-VIV)/Daniele Massa</td>
<td>Yes</td>
<td>Yes</td>
<td>2</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>3</td>
<td>Yes</td>
<td>3</td>
</tr>
<tr>
<td>Wageningen UR Greenhouse Horticulture/Illen Beerling, Jos Balendonck</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>ISA, University of Lisbon/Maria Isabel Ferreira</td>
<td>Yes</td>
<td>Not yet</td>
<td>Not yet</td>
<td>Not yet</td>
<td>Not yet</td>
<td>Not yet</td>
<td>Not yet</td>
<td>Not yet</td>
<td>Not yet</td>
</tr>
<tr>
<td>Instituto de Ingeniería del Agua y del Medio Ambiente (IIAMA)/Hernando Martinez Alzamora</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>UNIBO dept. of Agricultural Sciences/Davide Viaggi</td>
<td>Yes</td>
<td>Yes</td>
<td>1</td>
<td>Yes</td>
<td>1</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>EUWMA European Union of Water Management Associations / Jörg Janning</td>
<td>Yes</td>
<td>Yes</td>
<td>2</td>
<td>No</td>
<td>Yes</td>
<td>4</td>
<td>Yes</td>
<td>4</td>
<td>Yes</td>
</tr>
<tr>
<td>Consorzio Bonifica CER / Adriano Battilani</td>
<td>Yes</td>
<td>Yes</td>
<td>1</td>
<td>Yes</td>
<td>Yes</td>
<td>2</td>
<td>Yes</td>
<td>2</td>
<td>Yes</td>
</tr>
<tr>
<td>CIHEAM Mediterranean Agronomic Institute of Bari/ Nicola Lamaddalena</td>
<td>Yes</td>
<td>Yes</td>
<td>2</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Fondazione Amga / Nicola Bazzurro</td>
<td>Yes</td>
<td>Yes</td>
<td>1</td>
<td>Yes</td>
<td>Yes</td>
<td>1</td>
<td>Yes</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td>ConfAgri Portugal / Catia Rosas</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>2</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Presented in **17 workshops/seminars/events**

**10 events branded WIRE**

Involved as Stakeholder in **23 new EU project proposals**

Indicated as link with EIP water in **15 EU project proposals**
Diagnosis of barriers and bottlenecks for Innovation in the Water Sector

European Innovation Partnership Water (EIP Water)

Diagnosis of barriers and bottlenecks for Innovation in the Water Sector

A. Battilani – WIRE AG, EIPwater TF meeting, Barcelona 4th November 2014
Mapping of the deficiencies and barriers hampering innovation in EU irrigated agriculture

1. Setting the context
2. Guiding questions when addressing innovation barriers
3. Innovation barriers to overcome in view of an integrated agricultural water management under drought
4. Innovation barriers for efficient water reuse in irrigation
5. Innovation barriers to achieve energy saving in irrigation
6. Detailed description of innovation barriers and identification of pathways for possible solutions
Mapping of the deficiencies and barriers hampering innovation in EU irrigated agriculture

Guiding questions when addressing innovation barriers

Reuse:
- How to embed internal and external water reuse concepts in line with the circular economy
- How to overcome safety issues and the lack of commonly accepted standards for water reuse (only food products respecting strict quality standards can access the market).
- How to design flexible agricultural production systems that adapt to water quality (i.e. salinity, valuable nutrients content) in a perspective of reuse.
- What are well performing IT tools dedicated to water reuse
Mapping of the deficiencies and barriers hampering innovation in EU irrigated agriculture

Innovation barriers for integrated agricultural water management under drought

1. Lack of knowledge on drought phenomena
2. Risk of yield and quality losses leading to decreasing sales
3. Lack of knowledge on water-soil-plant-atmosphere interactions under drought
4. Assessment of environmental performance
5. Need to increase water use efficiency and productivity
6. Adaptive crop-water management techniques at field level
7. Lack of profitability of improved irrigation technology
8. Need for a supportive political framework
Mapping of the deficiencies and barriers hampering innovation in EU irrigated agriculture

**Innovation barriers for efficient water reuse in irrigation**

1. Need to optimize use of alternative water resources
2. Negative perception / lack of acceptance of water reuse
3. Lack of knowledge to manage irrigation using alternative water
4. Lack of financial incentives
5. Lack of legislation facilitating water reuse for irrigation
Mapping of the deficiencies and barriers hampering innovation in EU irrigated agriculture

Innovation barriers to achieve energy saving in irrigation

1. Lack of awareness and knowledge for energy saving opportunities
2. Lack of tools for efficient and smart energy management
3. Irrigation managers are not energy managers
4. Need to adapt irrigation technology to allow energy saving
Mapping of the deficiencies and barriers hampering innovation in EU irrigated agriculture

- **Wire Plenary Meeting**
  - Diagnosis Document approved by participants

- **Final Version Revision**
  - Final Version circulated among partners

- **Irrigated Agriculture Standalone Diagnosis**
  - Document sent to the EIP secretariat, shared with TF member collecting criticism and contributions

- **EIP Water Approval**
  - The document is approved by EIP water and disseminated through the Market Place
  - Integration into the overall Diagnosis document
**ONGOING ACTIVITIES:**

**MAPPING DEMONSTRATION SITES**

**A. Battilani** — WIRE AG, EIPwater TF meeting, Barcelona 4th November 2014

### 27 projects and demo sites until now

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Permanent Exhibition on Irrigation Technologies</th>
</tr>
</thead>
<tbody>
<tr>
<td>In this project, a state-of-the-art digital platform is developed for on-demand irrigation. It is designed to improve the efficiency of irrigation systems.</td>
<td>The permanent exhibition on irrigation technologies highlights the latest advancements and innovations in the field of irrigation.</td>
</tr>
</tbody>
</table>

### Success Factors

- Enhanced water efficiency and reduced costs for farmers.
- Improved soil moisture control and crop yield.

### Results Obtained so far

- Increased crop yields by 15%.
- Reduced water usage by 30%.
- Cost savings for farmers up to 20%.

### Further references

http://www.consortuni.it

---

**Project and Demo Sites**

---

**WIRE**

---

**Efficiency-driven pumping station regulation in on-demand irrigation systems**

**Permanent Exhibition on Irrigation Technologies**

**Promoter**

Consorzio di Bonifica di secondo grado per il Canale Emiliano Romagnolo-CER

**Period**

Since June 2010

**Location**

Emilia-Romagna - Bolgheri

**Objective**

Demonstration and training in irrigation technologies.

**Target Audience**

Farmers, technicians, students.

**Level**

International, National, Local

**Accessibility**

Open days are organized from October. On site visits organized.

**Contact**

www.wire-ag.it
WIRE CORE TASK: BRIDGING EIP WATER and SUSTAINABLE AGRICULTURE

A. Battilani – WIRE AG, EIPwater TF meeting, Barcelona 4th November 2014
THANKS