

**Preparatory Action on development of prevention  
activities to halt desertification in Europe**

**Desertification 2012-2013**

Report No 3

(01/07/2014 – 30/09/2014)

**PAWA**

Pilot Arno Water Accounts

## 1. General Information

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- Name of beneficiary of grant agreement: **ISPRA – Italian National Institute for Environmental Protection**
- Official legal form: **Research public body**
- Official registration No: **NA**
- Official address: **Via Vitaliano Brancati, 48 – 00144 Rome, Italy**
- Name and title of the Project Coordinator: **Dr. Stefano Mariani**
- Name of partners in the pilot initiative
  1. **ARBA – Arno River Basin Authority** (contact person: **Lucia Fiumi**)
  2. **EMWIS TU – Technical Unit of Euro-Mediterranean Information System on know how in the Water Sector** (contact person: **Eric Mino**)
- Title of the pilot initiative: **PAWA – Pilot Arno Water Accounts**
- Grant agreement number: **07.0329/2013/671279/SUB/ENV.C.1**
- Start date and end date of the *reporting period*: **01/07/2014 – 30/09/2014**
- Target country/river basin: **Italy/Arno**

## 2. Activities undertaken and problems encountered

This chapter provides an overview of activities carried out in the reporting period, including a brief description and an assessment of their status. The activities and also numbering of activities shall correspond to activities listed in the application and hence in the grant agreement. Furthermore, problems encountered or foreseen that have or will impact an activity (and maybe a related deliverable) should be listed in this chapter, along with the proposed solution. It consists of two tables, namely [Table 1](#) and [Table 2](#) as presented below.

**Table 1 - Status of the planned Activities, period: <01/07/2014 – 30/09/2014>, <PAWA>**

Title	Brief description of activity undertaken within the reporting period	Partners/Stakeholders involved	Status <sup>1</sup> (C, P, NS)
1. Setting the scene	<p>A) The inception workshop and training was successfully organized in Florence on March 20<sup>th</sup>– 21<sup>st</sup> 2014. The workshop was introduced by the representatives of local public institutions, namely the Secretary General of the Arno River Basin Authority and the Councillor for Environment of the Municipality of Florence. The two-days workshop saw the participation and active involvement of a considerable number of local and national stakeholders (around 35 people per day) who participated to the project’s illustration and to a half day of specific training on the SEEA-Water tables. Presentations, pressbook, pictures and video of the event are available in the PAWA website: <a href="http://www.emwis.net/initiatives/pawa/meetings/Inception">http://www.emwis.net/initiatives/pawa/meetings/Inception</a></p> <p>B) Inventory and description of data sources was achieved thanks to the use of a metadata Geonetwork catalogue compliant with INSPIRE directives rules. This catalogue is described in the deliverable D1.1.</p> <p>C) Identification of three sub-basins (Chiana valley, Bisenzio valley and Prato plain, and Pisa area) within the Arno river basin where water accounts will have the best potential; these are described in the deliverable D1.2.</p>	All PAWA partners; local stakeholders and data providers/data producers, water networks operators and planners, water user associations, local government bodies, NGOs, public administrations, water licensing authorities (see list on the <a href="#">inception meeting web page</a> )	C
2. Data collection	Initial data collection has started together with the metadata collection within the Geonetwork catalogue; a data inventory table matching the SEEA-Water main elements with existing data has been prepared and has been filled in. The necessary datasets are shared on the PAWA ftp repository, with private and public access, analysis and validation of the collected data to identify gaps and possible alternative sources for data gaps; testing the use of the Hydrologic Modeling System (HEC-HMS), version 4.0; results of this activity are	All PAWA partners; data providers/data producer	C

<sup>1</sup> C=Completed, P=In Progress, NS=Not Started (for results already achieved reference may be made to previous reports).

Title	Brief description of activity undertaken within the reporting period	Partners/Stakeholders involved	Status <sup>1</sup> (C, P, NS)
	summarised in the deliverables 2.1 and 2.2. The data collection activities will be formally closed at the end of July.		
3. Building water accounts	A MS-Excel based db and a Visual Basic Application (VBA), called <i>Arno Water Accounts</i> , have been developed to test the calculation water account and potential indicators (available through the PAWA ftp site, together with a “step-by-step” document for the compilation of the SEEA-Water tables); Production of first draft of the water flow diagrams and the associated SEEA-Water tables for the three sub-basins of the Arno river basin (Bisenzio, Chiana and Pisa); Limitations on the results have been analysed and recommendations and possible modifications (e.g., incl. new/additional data series) have been proposed. A preliminary list of potential indicators have been drafted and finalized during the 2 <sup>nd</sup> Stakeholder Workshop.	All PAWA partners	C
4. Optimisation of measures	Preliminary discussion to include into the <i>Arno Water Accounts</i> VBA scenario-generation options based on measures and climate change parameters; data item reliability linked with percentages of water efficiency improvements to build scenarios.		P
5. Assessment and reporting	First draft of the water account tables for the Bisenzio, Chiana and Pisa sub-basins; Production of three quarterly interim reports (at T0+3, T0+6, and T0+9) with a synthesis of the activities and outcomes.		P
6. Dissemination	A series of initiatives has been carried on to promote and disseminate the project aims and results; an official web page has been created and hosted in the EMWIS web site: <a href="http://pawa.emwis.net">http://pawa.emwis.net</a> ; in addition, ISPRA and ARBA hosted two pages (in Italian) dedicated to the project in their web sites: <a href="http://www.isprambiente.gov.it/it/progetti/pawa">http://www.isprambiente.gov.it/it/progetti/pawa</a> and <a href="http://www.adbarno.it/adb/">http://www.adbarno.it/adb/</a> ; in addition, information on PAWA can be addressed to the official email address ( <a href="mailto:pawa@isprambiente.it">pawa@isprambiente.it</a> ); an official Facebook page has been also created ( <a href="https://www.facebook.com/pages/Pilot-Arno-Water-Accounts/767559079938950">https://www.facebook.com/pages/Pilot-Arno-Water-Accounts/767559079938950</a> ); the PAWA project and the relevant events were announced in different press agencies and newsletters, on EMWIS electronic news flash, and in the ISPRA and ARBA websites; an updated list of the dissemination activities is available in the third interim version of deliverable 6.3	All PAWA partners	P

**Table 2 - Problems encountered or foreseen and suggested solution, period: <01/07/2014 – 30/09/2014>, <PAWA>**

<b>Problem encountered or foreseen:</b>	-
<b>Activity and/or Deliverable affected:</b>	-
<b>Planned/suggested solution:</b>	-

### 3. Deliverables

This chapter provides a comprehensive overview of the specific outputs of the project in the reporting period in terms deliverables (reports, databases, models, conferences, meetings, leaflets, newsletters, etc.) The progress in terms of deliverables is presented in the form of [Table 3](#), below. The table provides an overview of all project deliverables (even those not started yet), specifying which ones have been completed and which ones are in progress, and the activities undertaken in relation to those deliverables. It highlights potential problems that may have occurred or other constraints, to enable timely corrective actions. The Deliverables shall correspond to the ones listed in the application and hence in the grant agreement.

**Table 3 - Deliverables, period: <01/07/2014 – 30/09/2014>, <PAWA>**

# Deliverable	Name of Deliverable	Status (C, P, NS)	Brief description of the activities implemented in relation to the Deliverable	Problems, Constraints, Comments
D2.2	Assessment of data availability	C	<ul style="list-style-type: none"> <li>Data collected for building the water account tables have been analysed and validated in order to identify gaps, alternative and/or additional data sources</li> <li>The deliverable is available in the project website<sup>2</sup> and in the public ftp repository</li> </ul>	<ul style="list-style-type: none"> <li>Water abstraction data is mainly based on permits (i.e. maximum and constant values)</li> </ul>
D3.1	1 <sup>st</sup> draft water flow diagrams and associated SEEA-Water tables	C	<ul style="list-style-type: none"> <li>Analysis of the flow diagrams for the three sub-basin (Bisenzio, Chiana, and Pisa)</li> <li>Implementation of the Visual Basic Application tool and realization of a “step-by-step” guideline</li> <li>Compiling of SEEA-Water tables and summary statistics for the three sub-basins.</li> <li>The deliverable is available in the project website<sup>3</sup> and in the public ftp repository</li> </ul>	-
D6.3	Detailed list of dissemination activities, including project presentations	P	<ul style="list-style-type: none"> <li>This deliverable will be completed and finalised, as foreseen in the grant, at the end of the project (T0+15)</li> <li>An updated interim version is online<sup>4</sup> to provide the status of the dissemination</li> </ul>	-

<sup>2</sup> <http://www.emwis.net/initiatives/pawa/deliverables/D2.2%20Assessment%20of%20data%20availability>.

<sup>3</sup> <http://www.semide.net/initiatives/pawa/deliverables/d3.1>

# Deliverable	Name of Deliverable	Status (C, P, NS)	Brief description of the activities implemented in relation to the Deliverable	Problems, Constraints, Comments
	during events		<p>and concertation actions implemented during the first three activity periods (T0+9)</p> <ul style="list-style-type: none"> <li>• The deliverable is available in the project website and in the public ftp repository</li> <li>• The deliverable contains either hyperlinks to the actions or indication where to find further information</li> </ul>	

#### 4. Meetings

This chapter provides an overview of the meetings that took place in the reporting period, including a brief description of their purpose. It consists of one table, namely [Table 4](#) as presented below.

**Table 4 - Meetings, <01/07/2014 – 30/09/2014>, <PAWA>**

Meeting name	Purpose of the meeting	Partners/Stakeholders involved	Location	Dates
2 <sup>nd</sup> Stakeholder Workshop + 4 <sup>th</sup> Team Working Meeting	Concertation with local stakeholders and data providers/data producers for: i) analysing and validating the draft of the water flow diagrams for the three sub-basins; ii) presenting how to build SEEA-Water tables with the existing data; and iii) discussing on potential indicators; Definition and planning (only PAWA partners) of the actions to be undertaken during the following three months (T0+7-T0+9)	All PAWA partners, River Basin authorities, ISTAT (Italian National Institute of Statistics), local stakeholders and data providers	Florence, IT	1–3 JUL 2014
34 <sup>th</sup> Italian Conference of Hydraulics and Hydraulic Construction (IDRA14)	Presenting the PAWA activities during the IDRA14 session on drought and water scarcity ( <i>“Siccità e scarsità idrica: previsione, monitoraggio e mitigazione degli effetti sui sistemi di approvvigionamento idrico”</i> )	ISPRA, stakeholders and experts in the field of Hydraulics, Hydraulic Construction, Hydrology	Bari, IT	8–10 SEP 2014
EMWIS Steering Committee	Review of South Med water authorities in PAWA activities and results	EMWIS, water directors representatives from South and East Med countries, France, Italy, Malta and Spain.	Valencia, ES	9 SEP 2014
CoastEsonda 2014	Presenting the PAWA activities (ARBA stand)	ARBA, policy makers, stakeholders and experts in the field of coastal zone and sea	Ferrara, IT	17–19 SEP 2014

<sup>4</sup> <http://www.emwis.net/initiatives/pawa/deliverables/d6.3-detailed-list-dissemination-activities-including-project-presentations>.

		management and protection, hydrogeological instability and endangered territory maintenance		
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## 5. Other issues

Since 1<sup>st</sup> of September 2014, Ms Carolina Cardete is part of the EMWIS staff working on the project, as junior hydro-informatics expert. She was already working on the project as an intern and she will continue on activities 4 (scenarios for optimisation of measures) and 5 (final water accounts tables).

## 6. Updated Work Plan

This chapter provides an updated outlook of the work plan ([Table 5](#)) regarding the whole period of implementation. If the work plan is unchanged, you may simply refer to the previous report or to the application work plan.

**Table 5 - Work plan, <01/01/2014 – 31/03/2015>, <PAWA>**

Months	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>Activities</b>															
1. Setting the scene															
2. Data collection															
3. Building SEEAW															
4. Optimisation of measures															
5. Assessment and reporting															
6. Dissemination and concertation															
<b>Meetings<sup>5</sup></b>															
PAWA Kick-off Meeting (1 <sup>st</sup> Team Working Meeting; 28 JAN 2014)	X														
Programme Kick-off Meeting (1 <sup>st</sup> EU Concertation Meeting; 05 FEB 2014)		X													
1 <sup>st</sup> Stakeholder Workshop and Training Session + 2 <sup>nd</sup> Team Working Meeting (20–21 MAR 2014)			X												
CIS WG "Water Accounts" – 1 <sup>st</sup> Meeting (4 APR 2014)				X											
Sub-DG on E-flows guidance (28 APR 2014)				X											
3 <sup>rd</sup> Meeting of the OECD Water Governance Initiative (28–29 APR 2014)				X											
3 <sup>rd</sup> Team Working Meeting via Skype (6 MAY 2014)					X										

<sup>5</sup> The meeting list does not contain the EU Concertation Meetings (dates tbc by DG ENV) and other dissemination meeting at national, European and international levels not yet defined/selected.

Months	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1 <sup>st</sup> National SEEA-Water Meeting (11 JUN 2014)						X									
2 <sup>nd</sup> Stakeholder Workshop + 4 <sup>th</sup> Team Working Meeting (1–3 JUL 2014)							X								
34 <sup>th</sup> Italian Conference of Hydraulics and Hydraulic Construction (IDRA14; 8–10 SEP 2014)									X						
EMWIS Steering Committee (9 SEP 2014)									X						
CoastEsonda 2014 (17– 19 SEP 2014)									X						
Conference “ <i>La ricarica della falda: l’esperienza italiana nel contesto Europeo</i> ” (3 OCT 2014)										X					
5 <sup>th</sup> Team Working Meeting via Skype (7 OCT 2014)										X					
CIS WG “Water Accounts” – 2 <sup>nd</sup> Meeting (21 OCT 2014)										X					
OECD 4 <sup>th</sup> Meeting of the OECD Water Governance Initiative											X				
Euro-INBO (12–15 NOV 2014)											X				
3 <sup>rd</sup> Stakeholder Workshop + 6 <sup>th</sup> Team Working Meeting (20 NOV, date tbc)											X				
Mediterranean Water Forum (26–27 NOV 2014)											X				
CIS WG “Water Accounts” – 3 <sup>rd</sup> Meeting (19 MAR 2015)															X
3 <sup>rd</sup> European Water Conference (23–24 MAR 2015)															X
PAWA Final Meeting (dates tbc)														X	