

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

Desertification 2012-2013

Report No 4

(01/10/2014 – 31/12/2014)

PAWA

Pilot Arno Water Accounts

1. General Information

- 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*: **01/10/2014 – 31/12/2014**
- 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: <01/10/2014 – 31/12/2014>, <PAWA>

Title	Brief description of activity undertaken within the reporting period	Partners/Stakeholders involved	Status ¹ (C, P, NS)
1. Setting the scene	<p>A) The inception workshop and training was successfully organized in Florence on March 20th– 21st 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: http://www.emwis.net/initiatives/pawa/meetings/Inception</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 inception meeting web page)	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

¹ 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 ¹ (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 nd Stakeholder Workshop.	All PAWA partners	C
4. Optimisation of measures	Scenario-generation options based on measures and climate change parameters has been added into the <i>Arno Water Accounts</i> VBA; Preparing climate change scenarios, based on the outcomes of the latest IPCC “Climate Change 2014 Report, to be also considered in the water account calculation; Drafting the deliverable on “Water efficient targets for future revisions of the Arno RBMP”	All PAWA partners	P
5. Assessment and reporting	Production of four quarterly interim reports (at T0+3, T0+6, T0+9, and T0+12) with a synthesis of the activities and outcomes.	All PAWA partners	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: http://pawa.emwis.net ; in addition, ISPRA and ARBA hosted two pages (in Italian) dedicated to the project in their web sites: http://www.isprambiente.gov.it/it/progetti/pawa and http://www.adbarno.it/adb/ ; in addition, information on PAWA can be addressed to the official email address (pawa@isprambiente.it); an official Facebook page has been also created (https://www.facebook.com/pages/Pilot-Arno-Water-Accounts/767559079938950); 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 and newsletters; 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: <01/10/2014 – 31/12/2014>, <PAWA>

Problem encountered or foreseen:	Being climate change a pivotal factor that can strongly affect water scarcity and drought conditions, it has been considered of the utmost importance to produce complex climate change scenarios based on the outcomes of the latest IPCC “Climate Change 2014 Report”. Hence, a highly qualified external assistance has been selected to carry out this task. Since this activity was not foreseen when the project proposal was submitted, a relocation of some funds (no more necessary for translation costs and the overall organization of the final workshop) has been requested to DG ENV. This relocation/revision of the budget has produced a delay in the completion of Activity 4.
Activity and/or Deliverable affected:	Activity 4 and Deliverable D4.1.
Planned/suggested solution:	The publication of the Deliverable D4.1 has been postponed to February 2015.

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: <01/10/2014 – 31/12/2014>, <PAWA>

# Deliverable	Name of Deliverable	Status (C, P, NS)	Brief description of the activities implemented in relation to the Deliverable	Problems, Constraints, Comments
D3.2	Geo-referenced database for water accounts	C	<ul style="list-style-type: none"> This deliverable describes the Geo-referenced database that has been designed, developed and populated for the calculation of the SEEA-Water tables: The attention is focused on the evaluation of advantages and needs, as well as on the structural and technical choices. The deliverable is available in the project website and in the public ftp repository 	The publication of this deliverable was delayed with respect to the date originally indicated in the project programme. This delay has no effect on the other technical activities.
D6.3	Detailed list of dissemination activities,	P	<ul style="list-style-type: none"> This deliverable will be completed and finalised, as foreseen in the grant, at the end of the project (T0+15) 	-

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

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, <01/10/2014 – 31/12/2014>, <PAWA>

Meeting name	Purpose of the meeting	Partners/Stakeholders involved	Location	Dates
Conference “ <i>La ricarica della falda: l’esperienza italiana nel contesto Europeo</i> ”	Presenting the ARBA experience in implementing the SEEA-Water methodology (PAWA framework) and in managing groundwater	ARBA, stakeholders, river basin authorities, experts in the field of aquifer recharge	Piacenza, IT	03 OCT 2014
CIS WG “Water Accounts” – 2 nd Meeting	Defining an EU Guidance on “Water Account” and sharing first outcomes from the grantees of the two DG ENV calls	ISPRA, ARBA, delegates of the EU Member States, DG ENV	Brussels, BE	21 OCT 2014
4 th Meeting of the OECD Water Governance Initiative	Presenting and sharing projects, lessons and good practices in support of better governance in the water sector	ARBA, international delegates of the OECD Water Governance Initiative	Paris, FR	24–25 NOV 2014
3 rd Stakeholder Workshop	Presenting to Italian River Basin Authorities the PAWA activities and the outcomes related to the application of the SEEA-Water to three sub-basins of the Arno River Basin	All PAWA partners, River Basin Authorities,	Rome, IT	01 DEC 2014

5. Other issues

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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
Activities															
1. Setting the scene															
2. Data collection															
3. Building SEEA															
4. Optimisation of measures															
5. Assessment and reporting															
6. Dissemination and concertation															
Meetings²															
PAWA Kick-off Meeting – 1 st Team Working Meeting (28 JAN 2014)	X														
Programme Kick-off Meeting – 1 st EU Concertation Meeting (05 FEB 2014)		X													
1 st Stakeholder Workshop and Training Session + 2 nd Team Working Meeting (20–21 MAR 2014)			X												
CIS WG “Water Accounts” – 1 st Meeting (4 APR 2014)				X											
Sub-DG on E-flows guidance (28 APR 2014)				X											
3 rd Meeting of the OECD Water Governance Initiative (28–29 APR 2014)				X											
3 rd Team Working Meeting via Skype (06 MAY 2014)					X										
1 st National SEEA-Water Meeting (11 JUN 2014)						X									
2 nd Stakeholder Workshop + 4 th Team Working Meeting (01–03 JUL 2014)							X								
34 th Italian Conference of Hydraulics and Hydraulic Construction (IDRA14; 08–10 SEP 2014)									X						
EMWIS Steering Committee (09 SEP 2014)									X						
CoastEsonda 2014 (17– 19 SEP 2014)									X						
Conference “La ricarica della falda: l’esperienza italiana nel contesto Europeo” (03 OCT 2014)										X					

² 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
5 th Team Working Meeting via Skype (07 OCT 2014)										X					
CIS WG "Water Accounts" – 2 nd Meeting (21 OCT 2014)										X					
Euro-INBO (12–15 NOV 2014)											X				
4 th Meeting of the OECD Water Governance Initiative (24–25 NOV 2014)											X				
3 rd Stakeholder Workshop (01 DEC 2014)												X			
6 th Team Working Meeting (04 DEC 2014)												X			
7 th Team Working Meeting via Skype (30 JAN 2015 & 02 FEB 2015)													X	X	
CIS WG "Economics" (23 FEB 2015)														X	
Meeting with Regional Stakeholders – Liguria Region (19 FEB 2015)														X	
International Meeting "Improving the Water Accounting at Basin Scale" (23–24 FEB 2015)														X	
Team Working meetings (date tbc, FEB–MAR)														X	X
CIS WG "Water Accounts" – 3 rd Meeting (19 MAR 2015)															X
4 th European Water Conference (23–24 MAR 2015)															X
PAWA Final Meeting (30 MAR 2015)															X