PAWA project

"Pilot Arno Water Accounts"

2nd Stakeholder Workshop

Autorità di Bacino del Fiume Arno
Florence, 2 July 2014

Agenda

10:00 – 10:15	*Registration*
10:15 – 10:30	Welcome Dott.ssa Gaia Checcucci, *Segretario Generale Autorità di Bacino del Fiume Arno*
10:30 – 10:45	State of the Art of the PAWA project Dott. Stefano Mariani – project leader, *ISPRA* Ing. Bernardo Mazzanti, *Dirigente, Autorità di Bacino del Fiume Arno*
10:45 – 11:00	Approach for building water accounts Ing. Eric Mino, *Unità Tecnica SEMIDE*
11:00 – 11:15	Introduction on water flow diagrams for the three pilot basins Carolina Cardete, Unità Tecnica *SEMIDE*
11:15 – 11:30	*Coffee break*
11:30 – 12-15	Exercise • Validation of flow diagrams • Putting data item codes on each flow • Known sources of data for each flow
12:15 – 13:30	*Lunch break*
13:30 – 14:15	Solution of the exercise and discussion on data gaps Ing. Eric Mino, *Unità tecnica SEMIDE*
14:15 – 14:45	Building SEEA-Water tables with existing data Carolina Cardete, Unità tecnica, *SEMIDE*
14:45 – 15:15	Discussion on potential indicators and data needed Ing. Eric Mino, *Unità tecnica SEMIDE*
15:15 – 15:30	Meeting closure

Meeting languages: English/Italian

PAWA partnership: ISPRA Istituto Superiore per la Protezione e la Ricerca Ambientale; Autorità di Bacino del Fiume Arno; SEMIDE EMWIS

For details please visit **http://www.emwis.org/initiatives/pawa** or contact **pawa@isprambiente.it**.

Preliminary list of indicators addressing each pilot sub-basin

List of priority indicators to be discussed during the workshop as well as data availability

Chiana (high agricultural use)

Indicator	Issue addressed
Tons of pollution generated (BOD5) per unit of physical agricultural output (for instance, tons of wheat produced) and per unit of value added.	Pollution intensity
Total of P and N removed and target.	Treatment efficiency
Water resources available and Total volume of ground and surface water abstracted for water agricultural uses as a percentage of the total monthly renewable volume of freshwater.	Exploitation
GDP derived from agriculture and total GDP per sub-basin.	Important irrigation abstraction
Agricultural GDP per [m3] water used and employment.	Water productivity ratios
Total agricultural abstractions and total abstractions for industry, services, etc.	Agricultural withdrawals

Bisenzio (high industrial use)

Indicator	Issue addressed
Tons of pollution generated (BOD5) by industry and per unit of value added.	Pollution intensity
Groundwater abstraction vs. groundwater recharge	Exploitation: fluctuations on groundwater abstraction
GDP derived from industry and total GDP per sub-basin.	Important industrial water abstraction
Industry GDP per [m3] water used and employment.	Water productivity ratios
Total industrial abstractions (for own use or for distribution) and total abstractions for agriculture, services, etc.	Industrial withdrawals

Pisa (high groundwater abstraction)

Indicator	Issue addressed
Total monthly volume of groundwater abstracted for water uses as a percentage of the total monthly renewable volume of freshwater.	Exploitation: Important groundwater abstraction
Groundwater abstraction vs. groundwater recharge.	Exploitation: Fluctuations on groundwater abstraction
Specific water quality test meant to evaluate salinity at the pointed aquifer.	Aquifer saline intrusion

All

Indicator	Issue addressed
Water discharged, reuse and water losses.	Increase effectiveness of water supply
Relative water stress index: DIA/Q D: domestic water demand I: industrial A: Agricultural Q: Renewable freshwater resources	Water stress
Index of total water use, population and GDP per sub-basin/province.	Water use productivity

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