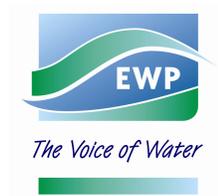


Water Stewardship Program Pilot Studies Summary Report

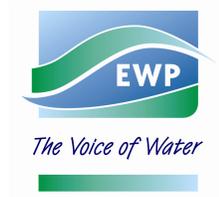


Pilot Studies of European Water Stewardship Program March-November 2010

European Water Partnership (EWP) Water Stewardship Program

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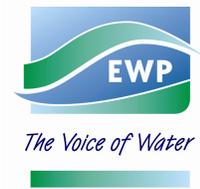
Water Stewardship Program Pilot Studies Summary Report



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Introduction

The implementation of the Water Stewardship Standard version 1.0 has been tested for the first time in 3 pilot studies. Those pilot studies were performed to

- Further develop the Water Stewardship Standard scheme with focus on its applicability on-site and its appropriateness of contents
- Evaluate the on-site performance of the pilot organization according to the currently available draft evaluation scheme. This evaluation scheme is still under development. Outcomes of this study can therefore not be considered and communicated as approved certification results.

This report aims to

- Define the main feedback of the pilot operations regarding the applicability of the Water Stewardship scheme on industrial production sites
- Verify and summarize the performance of the pilot organizations according to the requirements of the draft Water Stewardship Standard v1.0.
- Identify the opportunities, needs and open discussions points in standard development and next steps for future pilot studies.

Pilot studies characteristics

BASF SE, Ludwigshafen/Rhine, Germany

- Chemical production site (250 production units)
- The Rhine river basin is not considered as water scarce

Coca-Cola Erfrischungsgetränke AG (CCE AG), Genshagen, Germany

- Bottling factory (processing and bottling of soft drinks)
- The Elbe river basin is not considered as water scarce

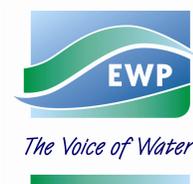
HOLMEN Paper Madrid S.L., Madrid, Spain

- Paper Mill (100% newsprint recovered paper)
- The Tagus river basin is considered as water scarce



Figure 1 - Pilot Studies Location

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Part I: Pilots feedback regarding the applicability of the Water Stewardship Standard and Documents

- **General feedback of pilot organizations:**
 - Standard: The standard is comprehensible and in general complete
 - Checklists: Checklist Industry and referring documents are comprehensible and applicable on-site. However, there is a need to develop an applicable, data-based tool including the checklist, annexes and information. This tool is needed if the scheme should be applied by more water users and SMEs
 - Compatibility with other Environmental Management Systems: The Water Stewardship scheme is compatible with existing environmental monitoring systems but the terms used in the Stewardship scheme should be aligned with the terms e.g. used in ISO 14001.
 - Good Management Practices (GMP): Additional GMPs should be provided within the checklists as guidance for Stewardship organizations
 - Indicator set: Additional social aspects would be appreciated also in terms of future conflicts about water use with other stakeholders in order to achieve a holistic sustainability approach.

Table 1: General feedback of the pilot studies

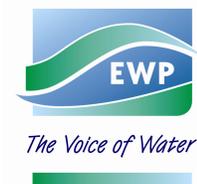
	Feedback	Need
Standard	Is comprehensible and in general complete	Develop an applicable, data-based ready-to-use tool including the checklist, annexes and information
Checklists & referring documents	Are comprehensible and applicable on-site	Adapt documents to improve applicability on-site
Compatibility of standard	Is adequate with existing environmental monitoring systems	Align terminology to terms used in ISO 14001
Good Management Practices (GMP)	Are useful to provide guidance	Additional GMP should be included in the checklists
Set of indicators	Additional social aspects would be appreciated	Develop social aspects in terms of water use and potential conflicts

- **Active contributions of pilot organizations to improve the Water Stewardship scheme:**

The three pilot organizations actively provided information and guidance documents in order to improve and enlarge the Water Stewardship scheme with the following documents:

- Questionnaire for survey of external water suppliers (Indicator 1.1.1)
- Procedure to report on potential pollutants (Indicator 2.1.1)
- Procedure and standard on handling wastewater within the production site (Indicator 2.1.1)
- Basic criteria for wastewater treatment plants (Indicator 2.1.1)
- Evaluation of impact on biodiversity in high conservation value areas and ecosystems (Indicator 3.1.1)

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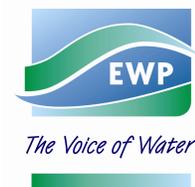
- **Deliverables of the pilot studies**

The discussions and feedback of the pilot organizations revealed open points and needs for a follow up. Table 3 summarizes the major outcomes and deliverables of the first pilot studies:

Table 2: Major Outcomes of the pilot studies

	New procedure included	Checklist format adapted	Editorial changes	Open discussion points
Principle 1	Questionnaire for external water suppliers	Annex 1 restructured and new indices introduced (e.g. ratio of total water consumed to total water abstracted)	Term “consent” replaced by “permit”	- Boundaries of survey for external water supply - Identification of sensitive sources and threshold limits
Principle 2	- Procedure to identify and monitor substances and potential pollutants - Basic criteria for wastewater treatment plants (WWTP)	Annex 2 restructured and a new index introduced (yearly load of pollutant)	- Indicator 2.1.2 (Eutrophication potential) from “Minor” to “Recom.” - “Foam” was included in indicator 2.3.1 as local issue of pollution	
Principle 3	Procedure to assess the organization’s impact on high-value conservation areas	Text of principle 3 has been restructured		
Principle 4		- Indicator 4.5.1 was simplified - Numeration of indicators 4.5.3, 4.6.1, 4.6.2 changed	- Module 3 (internal transparency) was deleted and information integrated in indicator 4.6.2 - Indicator 4.1.1 was partially deleted	Requirements for transparency towards

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Part II: Study on evaluation systems to assess on-site performance of water users

To evaluate the on-site performance of the pilot organizations, EWP together with WG Industry developed a first proposal of an evaluation scheme.

The major drawbacks restraining a 100% performance of water users were identified and described by the pilot organizations as follows:

Table 4: Major drawbacks defined by the pilot organizations

Principle 1	<ul style="list-style-type: none">- Reporting of water abstraction at river basin level- Reporting on water that is abstracted by external water suppliers
Principle 2	<ul style="list-style-type: none">- Report of potential pollutants- Description of impacts on water quality
Principle 3	<ul style="list-style-type: none">- Identification of high conservation value areas
Principle 4	<ul style="list-style-type: none">- Combination of water & energy management strategy- Public reporting on operational water management- Participation in river basin activities or river basin committees

The proposed evaluation scheme allows benchmarking (see example in figure 2) the performance of a water user by principle and provides a list of improvement points together with a response strategy in the end report of the operational evaluation. However, the scheme has to be further revised and approved under different conditions and in different organizations before it can be positioned as general evaluation system for the Water Stewardship system.

Pilot organizations receive as major outcome an exhaustive analysis of the major drawbacks of the operational water management and the referring improvement points. Therefore, the pilot organizations can use the evaluation results as basis to adapt and develop their water management strategy.

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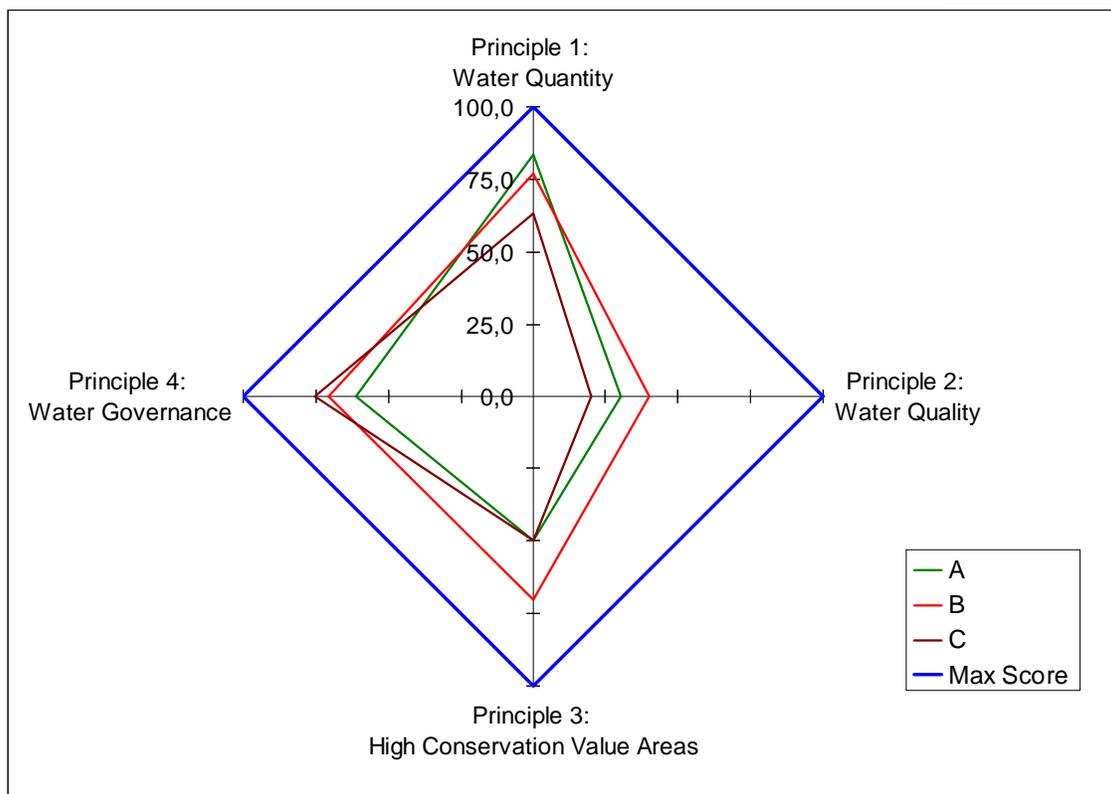


Figure 2: Percentage of achieved score by principle

Summary

The first pilot studies provided crucial input for the development of the EWP Water Stewardship scheme. The general applicability of the entire scheme has been approved by all pilots together with the need to improve the practical use of the proposed documents on-site. The reporting on potential pollutants and the requirements for public transparency of water users towards the public are still open discussion points that need a further follow up by the Water Stewardship team. Additional guidance documents provided by the EWP Water Stewardship Program will facilitate the compliance and reporting on these points in future.

The outcomes of the pilot studies discussions and feedback were integrated in the revision of the EWP Water Stewardship Program documents. The revised documents will be exposed to a second round of pilot testing by selected pilot organizations.

All pilots emphasized that the evaluation scheme provides a strong support to improve the operational water management performance - even under highly regulated conditions as in Europe and even in well-managed organizations. The Water Stewardship scheme provides added value by giving a new, comprehensive and far-reaching view on the sustainability of the water management inside the operation and on the level of the referring water shed. It is also considered as useful tool to improve the performance of private water users in coherence with the requirements of the Water Framework directive (WFD).