



SMAG - Self-Modelling for Assessing Governance - User guide

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► To cite this version:

Syrine Ben Slimane, Nils Ferrand, E. Hassenforder, Sabine Girard. SMAG - Self-Modelling for Assessing Governance - User guide. [0] IRSTEA; INRAE; UMR G-EAU. 2018. hal-03753798

HAL Id: hal-03753798

<https://hal.inrae.fr/hal-03753798>

Submitted on 18 Aug 2022

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SMAG

Self-Modelling for Assessing Governance.

- User guide -

** To be printed recto/verso*





IRSTEA is the French National Research Institute of Science and Technology for Environment and Agriculture. This institute does research in support of public policy.



SPARE is a European project about alpine river protection and development.



As part of the SPARE project, IRSTEA "CoOPLAage" team, which conducts research on the participation of different players in water management, has developed the SMAG tool.

The diagnostic phase in a development project aims to :

« analyze and understand the physical, economic and social structures and processes that condition the territory organization and management, while identifying the issues and possible evolutions of this territory. The diagnosis aims to know before acting. Its objectives are therefore analytical and evaluative » (RESOTER, 2014)*.

SMAG contributes to this diagnosis phase.

*<http://resoter.cirad.fr/>

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WHAT IS SMAG ?

A **participatory tool** developed by IRSTEA as part of the European SPARE project. It is made to be used by **watershed players**. Together, you will use SMAG to **design a global vision of the past governance** of your basin. ⁷

GOAL?

To **better understand the past governance** of a watershed, to **share it** and to identify **key lessons for the future**. ⁶

Together, you will try to model a global vision of the territory and its governance and discuss about what could be the future.

4 STEPS ?

1. The watershed **map** (45 min) :
2. The most significant **decisions** (~45 min):
3. The **timeline** (~75 min):
4. **Summary** and **conclusions** for the **future** (~90 min):

HOW ?

A **one-day workshop** (4h to 6h), with **4 to 10 participants** preferably no longer active in the current water governance, who know the watershed governance history. ¹

The workshop can be facilitated by an outside person, or realized independently, following this guide..

EXPECTED RESULTS ?

- **2 to 3 maps of your watershed**, representing the territory evolutions over time.
- **A list of main decisions** that most impacted the watershed governance.
- **A large timeline** representing dynamics related to these key decisions (causes, player involved, consequences)
- **Questionnaires (individual and collective)** making a review of previous results and identifying possibilities for future governance.

Symbols ^{n°} refer to FAQ p.17



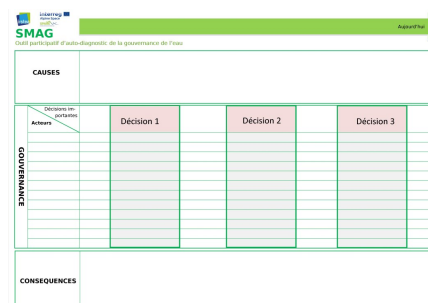
Voir liste des annexes p. 18.

1

Coloured pens; tracing paper ; tape ; scissors ; small post-its ; White sheets (A4) - 1 per participant and one collective.

4

Large timeline
(annexe 2) (A0)



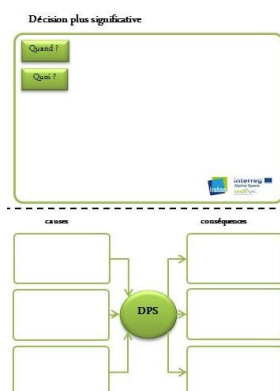
5

Individual Questionnaire (annexe 3)
– 1 per participant
Group questionnaire (annexe 4)
– 1 copy for the group

2

Decision Labels (annexe 1)

– 2 per participant



TO START THE WORKSHOP...

- Make a round table to introduce yourself.
- Read carefully the objectives and main steps of the workshop (p.7).
- Read the following definition of water governance :

Water governance is the set of rules, practices and processes (formal or informal) through which decisions for river ecosystems and water resources are made and implemented at different levels of society (adapted from OECD, 2015 & GWP, 2003).

*OECD Principles on Water Governance, 2015 <http://www.oecd.org>

*GWP, Effective Water Governance, 2003 <https://www.gwp.org>

GOAL ?

This step will allow you to identify and visualize the **main spatial changes** that have taken place in the watershed in the **last 30 years**, by **mapping** them.

2

EQUIPMENT ?

Use **white sheets**, **coloured pens** and **tracing papers**.

symbols ^{n°} refer to FAQ p.17

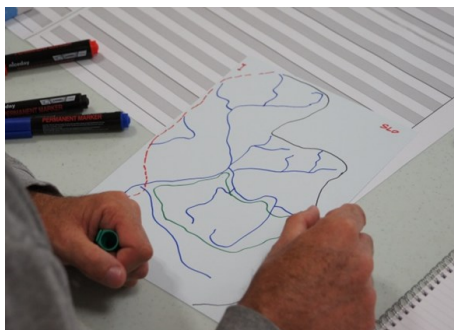


1

INDIVIDUALLY – ~ 15min

Map your watershed as it was 30 years ago. ³

- On a **blank piece of paper**, draw a map of your watershed with **coloured pens** as it was 30 years ago. ⁴
- On this sheet, represent the main elements (as it was 30 years ago), name them and label them (see reverse for examples).
- Then hang your card on the board and show it to others.



2

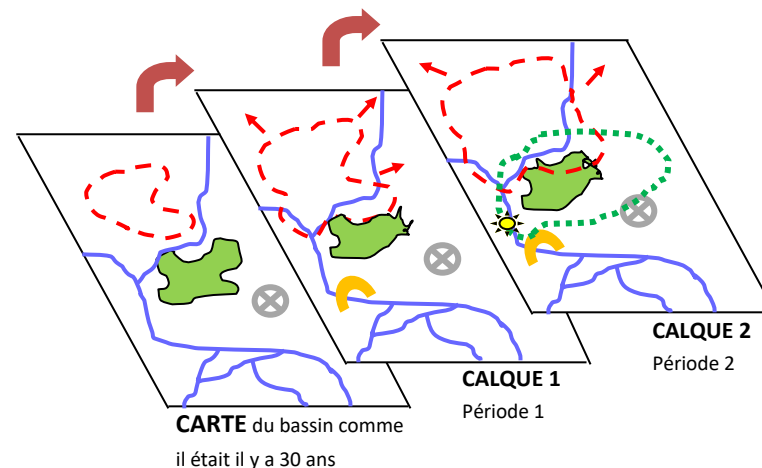
COLLECTIVELY – ~ 30 min

Synthesize the different maps into one, and represent the main evolutions that took place on your watershed using tracing papers.

- Agree on a map of your watershed as it was 30 years ago (choose from one of your individual maps, or draw a new one together). **Everyone must agree with this new collective map. Do not forget to date the map.**

Then think together about one or two decisive periods in the watershed governance, which have marked the territory (dam construction, a protected area, etc.).

Use a **sheet of tracing paper** for each period. On the tracing paper, you can draw the new elements of the territory, the elements that have evolved, etc.



SEE REVERSE


SOME EXAMPLES...


Possible elements to map :


- **Natural elements** : rivers, hydrographic catchment boundaries, wetlands, protected area, groundwater, forests, etc.
- **Uses and activities** : agriculture, industries, tourism, etc.
- **Infrastructures** : cities, dams, hydroelectric plants, wastewater treatment plant, etc.
- **Socio-political elements** : administrative boundaries, legislative framework, etc.





Some examples to map the elements of the basin and their evolutions :

Delimitations : 


Wet area : 


Dams : 

Tourism : 

Industry : 

River : 

Dynamics of expansions : 

Dynamics of regression : 

STEP 2 : MOST SIGNIFICANT DECISIONS ~ 45 min

GOAL ?

At this step, you will identify together the **most significant decisions** in the watershed governance history. 5

EQUIPMENT ?

Use the **decision labels** (annexe 1)

symbols n° refer to FAQ p.17



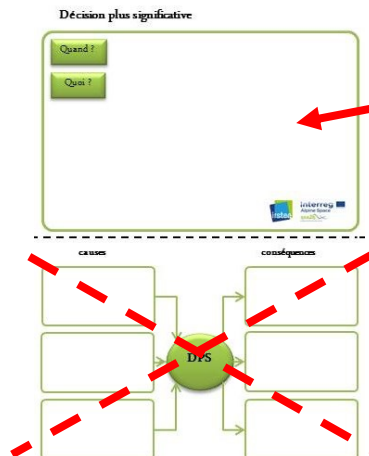
A significant decision is an important decision that concerns the watershed and significantly impacts its water governance. It was taken at the local level, by the local players concerned.

1

INDIVIDUALLY - ~ 15 min

Identify each 2 decisions that you think have had the most impact on your watershed water governance.

- Take 2 **decision labels** (annexe 1) each, then write 2 decisions that you think are key (1 label for a decision).



Description of a decision
(when and what ?)

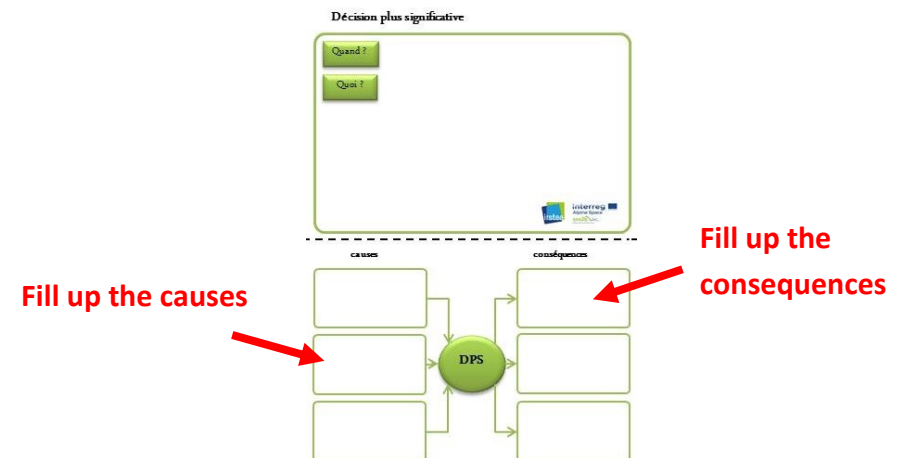
Do not fill the lower part for now

2

COLLECTIVELY - ~ 30 min

Choose together 3 of these significant decisions and describe them.

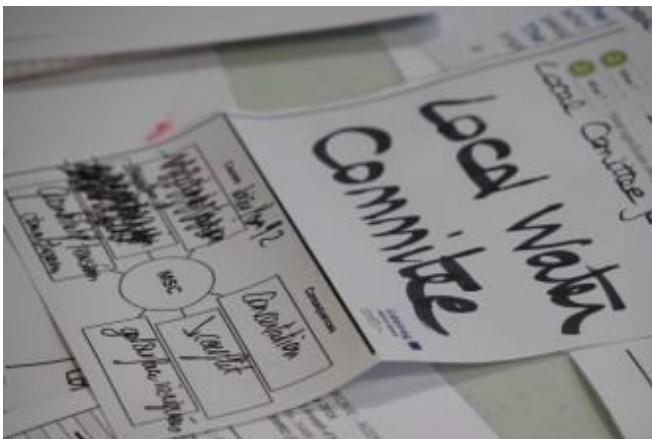
- From the list of previously made decisions, discuss and choose together the 3 that seem most significant to you, then complete the lower part of the **decision labels** together with their causes and consequences (see reverse for examples).



SEE REVERSE

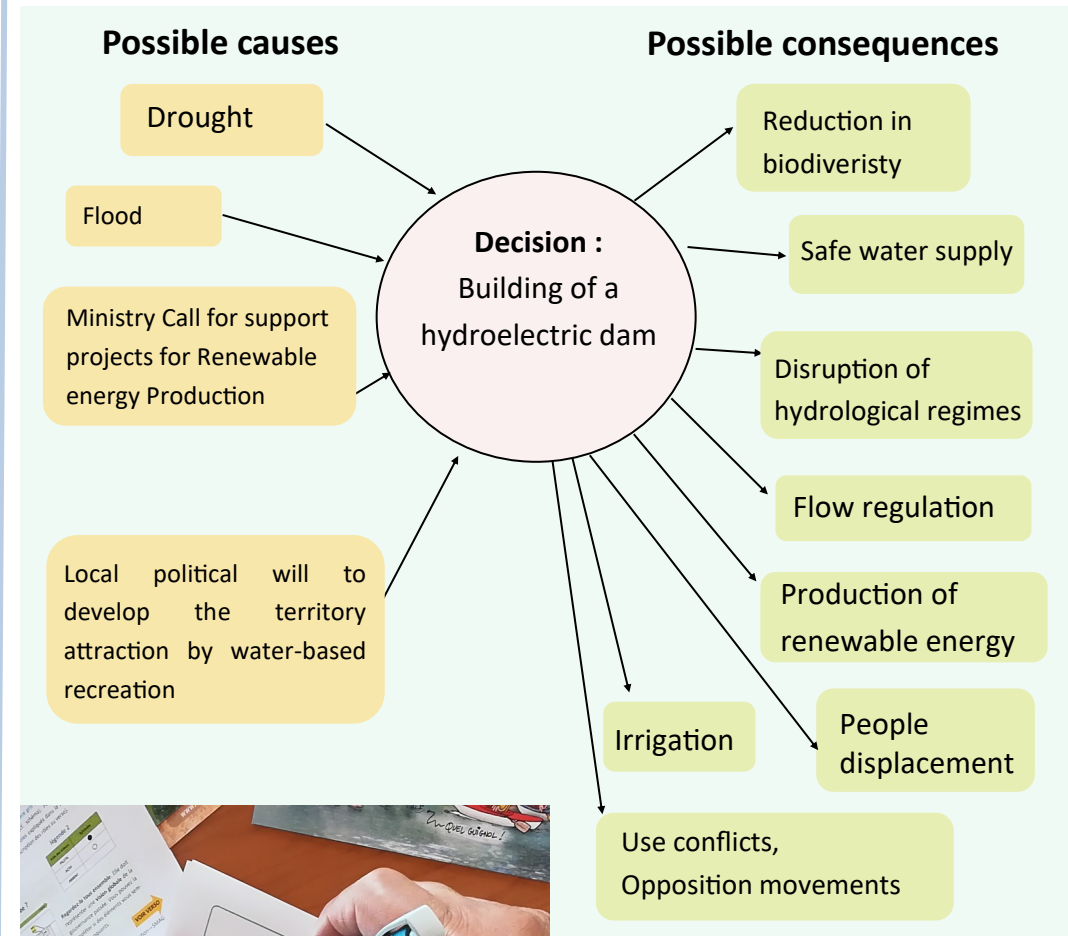
SOME EXAMPLES OF SIGNIFICANT DECISIONS IN TERMS OF LOCAL WATER GOVERNANCE

- Implementation of a new protected area
- Development of a river contract
- Dismantling or construction of a dam
- Awareness campaign for the protection of the river
- Financial incentives for tourism development
- Order for bathing ban
- Order for a periodic ban on irrigation following a drought
- ...



SOME EXAMPLES OF CAUSES AND CONSEQUENCES

The causes and consequences of a decision can be of different kinds: political, socio-economic, environmental, etc.



GOAL ?

At this step, you will be able to **represent in time the dynamics related to the key decisions** that you have identified previously.

EQUIPMENT ?

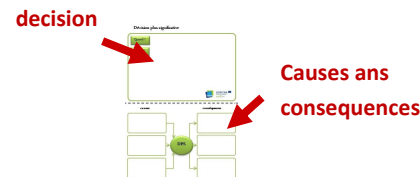
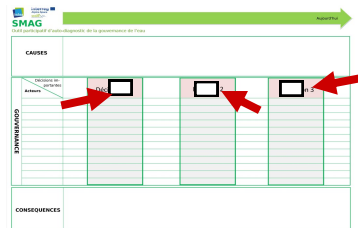
Use the **large timeline** (format A0), the 3 collectively chosen **decision labels**, the **small post-its**, and the **coloured pens**.



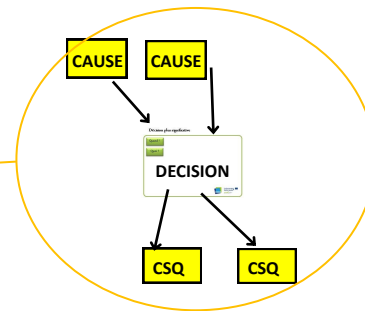
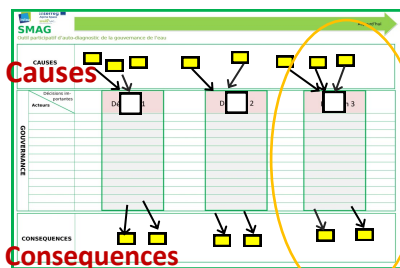
1 COLLECTIVELY – ~ 35 min

Place the decisions on the Timeline and represent the dynamics related to it.

- Place the 3 **significant decisions labels** selected earlier in chronological order on the timeline, in the area reserved for that.



- Then, take up the causes and the consequences of each decision, previously written on the **decision labels** (cf. figure). Write each cause and consequence on **small post-its**, and place them on the **timeline**, above (for the causes) or below (for the consequences) of the decision corresponding.

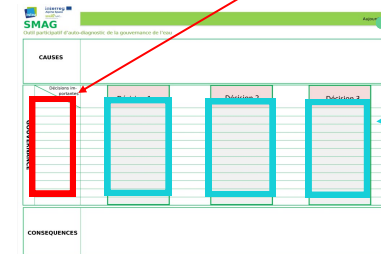


You can now represent the causal links between causes, decisions and their consequences.

2 COLLECTIVELY – ~ 40 min

Identify together the main players involved in watershed governance and their role.

- List the 12 **main players** concerned, more or less directly, by the watershed governance in the **"actor" area** of the **timeline** (cf. figure). (see reverse for players exemples and details).

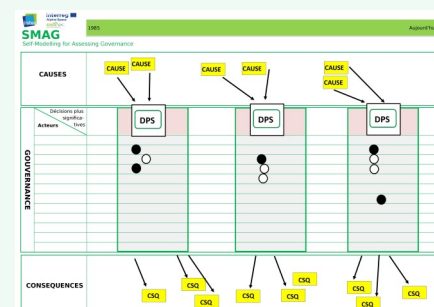


Then indicate the role played by each player in each decision (pilot, active, absent), in the **gray area** below each decision (see figure). To do this, use **the symbols** explained in **legende 2** (see reverse for roles description and details).

legende 2

Rôle des acteurs	Symboles
PILOTE	●
ACTIF	○
ABSENT	

Your timeline is over ?



Look at it all together. It must represent a global vision of past governance. You can complete it if any elements seem missing.

SEE REVERSE

CHOICE OF PLAYERS CONCERNED

(being impacted or impacting, positively or negatively, decision processes)

A Player can be :

- **One person** (the president of a structure, the mayor...),
- **A group of people** (farmers, inhabitants...) or
- **An organization** (water agency, syndicate, association...).

Use the **legend** to indicate the role of each stakeholder.

THE LEGEND



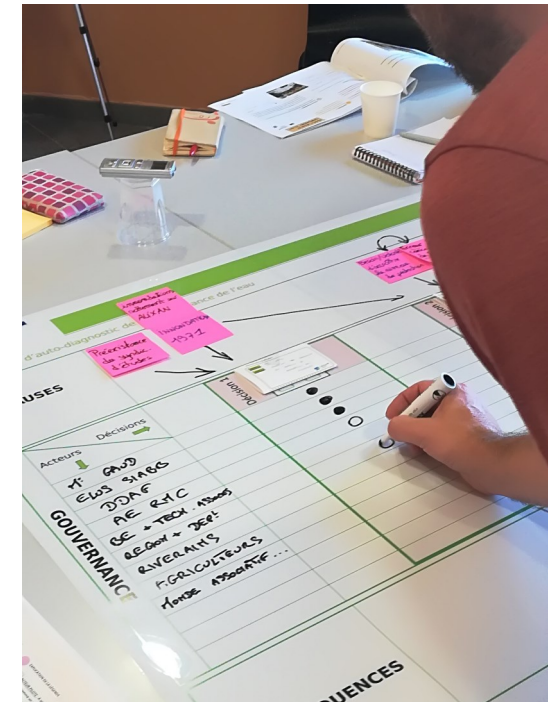
PILOT ACTOR : Organized / conducted decision-making, acted as an engine.



ACTIVE ACTOR : Has given his opinion, actively participated in decision-making.



ABSENT ACTOR : did not participate in the decision making.



STEP 4 : SUMMARY AND CONCLUSION ~ 75 min

15

GOAL?

By building together the **timeline and the map**, you have mobilized information on the watershed past governance.

The **questionnaires (individual et collective)** will allow to **review this information**. By querying these results you will **discuss and identify together keys for future governance**.

EQUIPMENT ?

For this step, each use an **individual questionnaire** (annexe 3) and together the **group questionnaire** (single) (annexe 4).



1 INDIVIDUALLY -

Answer each **individual questionnaire** (annexe 3).

- Use the **timeline** and the **map** to answer them (see reverse for clarification of questions).

Annexe 4 – questionnaire individuel (anonyme)

Date et Nom :

1 - Qu'est-ce qui a bien fonctionné dans la gouvernance passée et pourquoi ?	3 - Tous les acteurs ont-ils pu contribuer aux prises de décisions ?
2 - Comment les décisions prises ont-elles modifié : les usages et les activités sur le bassin versant ? l'état des ressources et milieux naturels sur le bassin versant ?	4 - Qu'est-ce qui a été mis en place pour faire face aux difficultés ?
5 - Qu'avez-vous pensé de cet atelier ? Très utile <input type="checkbox"/> Utile <input type="checkbox"/> Inutile <input type="checkbox"/> Très inutile <input type="checkbox"/> Je ne sais pas <input type="checkbox"/>	



2 COLLECTIVELY –

Discuss lessons for the future together by following the **group questionnaire** (annexe 4).

- Start by comparing your answers from the individual questionnaire. Then read aloud the collective questions to answer them together and discuss lessons from the past to identify key lessons for the future (see reverse for clarification of questions).

Annexe 5 – Discussion collective

Date :

1 – Que retenir-vous du passé pour en tirer des leçons ?	2 - A l'avenir, que faudrait-il mettre en place pour la gouvernance de votre bassin versant ?
--	---

SEE REVERSE

WHY THESE QUESTIONS ?

The different steps of SMAG and the final questionnaires (individual and collective) can lead you to discuss the following aspects of watershed governance :

► Territorial changes

Impact of water governance on the different aspects of the territory (economic activities, landscapes, natural resources, organization, uses ...).

► Management of conflict situations

Question the provenance of conflicts and the effectiveness of conflicts resolution mechanisms; Possible improvements in this area.

► Involvement of local actors

Contribution of local players to decisions ;
Inclusion and exclusion of local players in the decision-making process ;
The effectiveness of collective choice system ;
The emergence of a player in the decision-making process ;

► Improvements and lessons for the future

What in the past has worked more or less well, what is to maintain, to develop and to improve for the future ?



1 Is it necessary to have a SMAG workshop with participants who are no longer active in watershed governance ?

Some aspects of governance can be strategic, even confrontational, and the goal of SMAG is not to recreate tensions around the table. In addition, participants who are no longer active are often more available and have a certain perspective on current issues. However, if it seems appropriate to do so with active participant, this is quite possible.

2 Is it mandatory to go back over the last 30 years or can we choose a longer or shorter period?

The goal is for participants to have a sufficiently detailed knowledge of decisions and major events. The period must be large enough to allow important decisions to be examined. This period can therefore vary according to the context (15 years, 20 years, 30 years). The essential thing is to choose a period allowing a relevant retrospective.

3 What should be the perimeter of the study area ?

We propose to carry out the analysis at the river basin level. However, you should discuss to choose together a relevant perimeter according to the particularities of your territory and the issues you want to address.

4 Why a basemap is not proposed ?

You are invited to draw a map of your watershed on a blank sheet of paper, without a background map, so that you can freely reflect together on a relevant analysis perimeter. This will allow you to present your vision of the watershed and to acknowledge other's point of view.

5 Why look at decisions ?

The analysis of the decisions makes it possible to account for the implication of the different players (inclusion / exclusion) in the decision-making process and the changes at the origin of these decisions or induced by these. Thus, looking at decisions makes it possible to highlight the dynamics related to local water governance.

6 When is it appropriate to organize a SMAG workshop ?

SMAG is a diagnostic tool. It comes upstream from a project or planning process. The goal is to make a governance analysis in a relatively limited time, in order to identify the stakes and the possible evolutions of this territory. This analysis may subsequently be shared with other players, or even rediscussed. SMAG has an analytic and evaluative purpose.

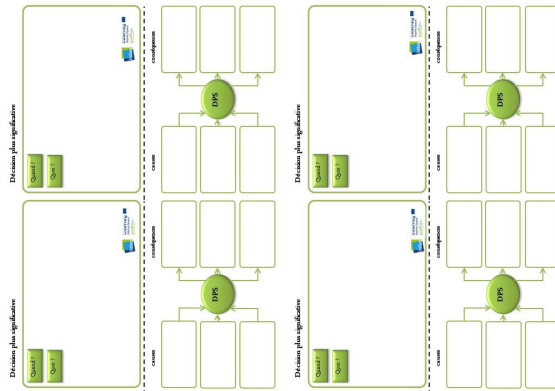
7 What is the status of SMAG in a consensus-building process or a public participation process?

SMAG is a tool for participation. It is an interactive expertise tool that provides knowledge to inform local water governance in a watershed.



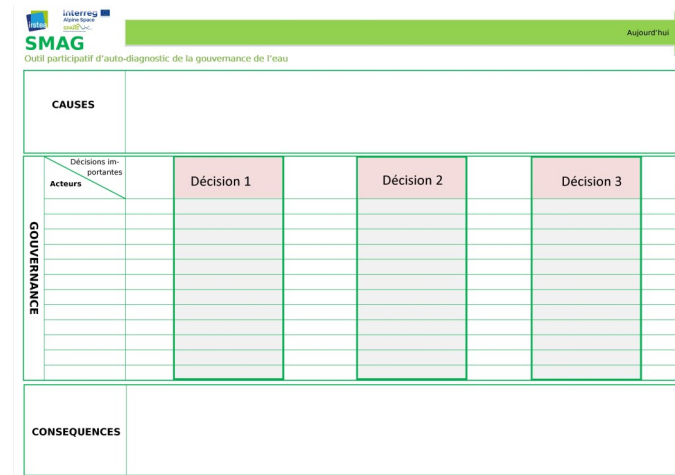
ANNEX 1 : decision label (A4).

An A4 containing 4 labels (to be cut). Each participant needs 2 labels (so print 1 copy for 2 participants)



ANNEX 2 : Timeline (A0).

Print 1 copy in A0 format.



ANNEX 3 : individual Questionnaire (A4).

Print a copy for each participant in A4 format.

Annexe 4 – questionnaire individuel (anonyme)

Date et Nom :

1 - Qu'est-ce qui a bien fonctionné dans la gouvernance passée et pourquoi ?	3 - D'après vous, tous les acteurs pertinents ont-ils pu contribuer aux prises de décisions ? - Si non, lesquels manquaient ?
2 - Les décisions prises ont-elles modifié : > les usages et les activités sur le bassin versant ? - Si oui, comment ? - Si non, pourquoi ? > l'état des ressources et milieux naturels sur le bassin versant ? - Si oui, comment ? - Si non, pourquoi ?	4 - Quelles ont été les principales difficultés dans la prises de décisions ? - Qu'est-ce qui a été mis en place pour y faire face ?

5 - Qu'avez-vous pensé de cet atelier ?

Très utile ☐ Utile ☐ Inutile ☐ Très inutile ☐ Je ne sais pas ☐

ANNEX 4 : Group Questionnaire (A4).

Print 1 copy in A4 format.

Annexe 5 – Discussion collective

Date :

1 - Que retenir-vous du passé pour en tirer des leçons ?	2 - A l'avenir, que faudrait-il mettre en place pour la gouvernance de votre bassin versant ?
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AND NOW, PLAY ON !