



**Teleconference meeting
Anne-Marie Boulay, Chair
Stephan Pfister, Co-Chair**

WULCA
A LIFE CYCLE
INITIATIVE PROJECT



Monthly meeting
February 26th, 2014

Outline

- **News and logistics**
- **Framework discussion**
- **Sub-Groups summary**
- **Other activities**



NEWS and LOGISTICS

- **New members**
- **ISO 14046 Water Footprint: standard is approved, goes to FDIS**
- **Logistics:**
 - **Monthly active member meeting (this one)**
 - **Monthly meeting for each of sub-working groups (stress, HH, ecosystems)**
 - **Experts invited on specific meetings or to comment on documents**



Framework discussion

- 1- Figure representing the outcome of the last meeting (see Fig.1)**
- 2- Discussion from Jane regarding compensation**
- 3- Proposal from Brad: endpoint modeling and weighting to single parameter (see Fig.2)**

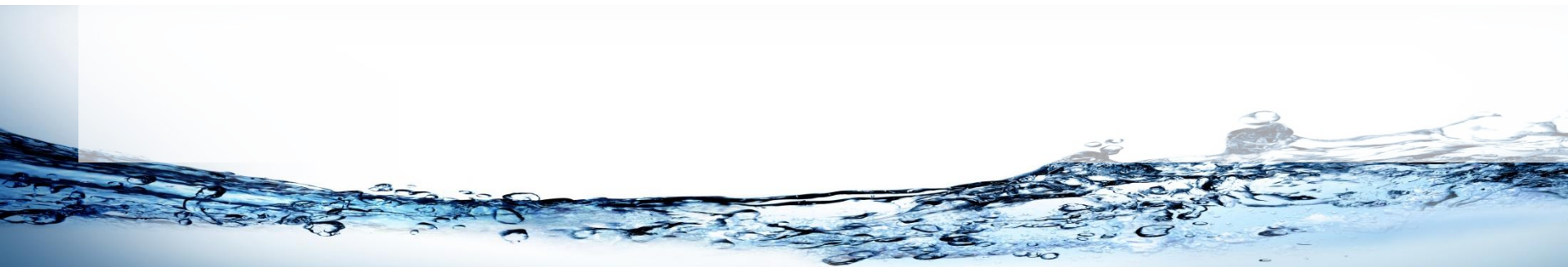


Fig.1: Outcome of kick-off meeting

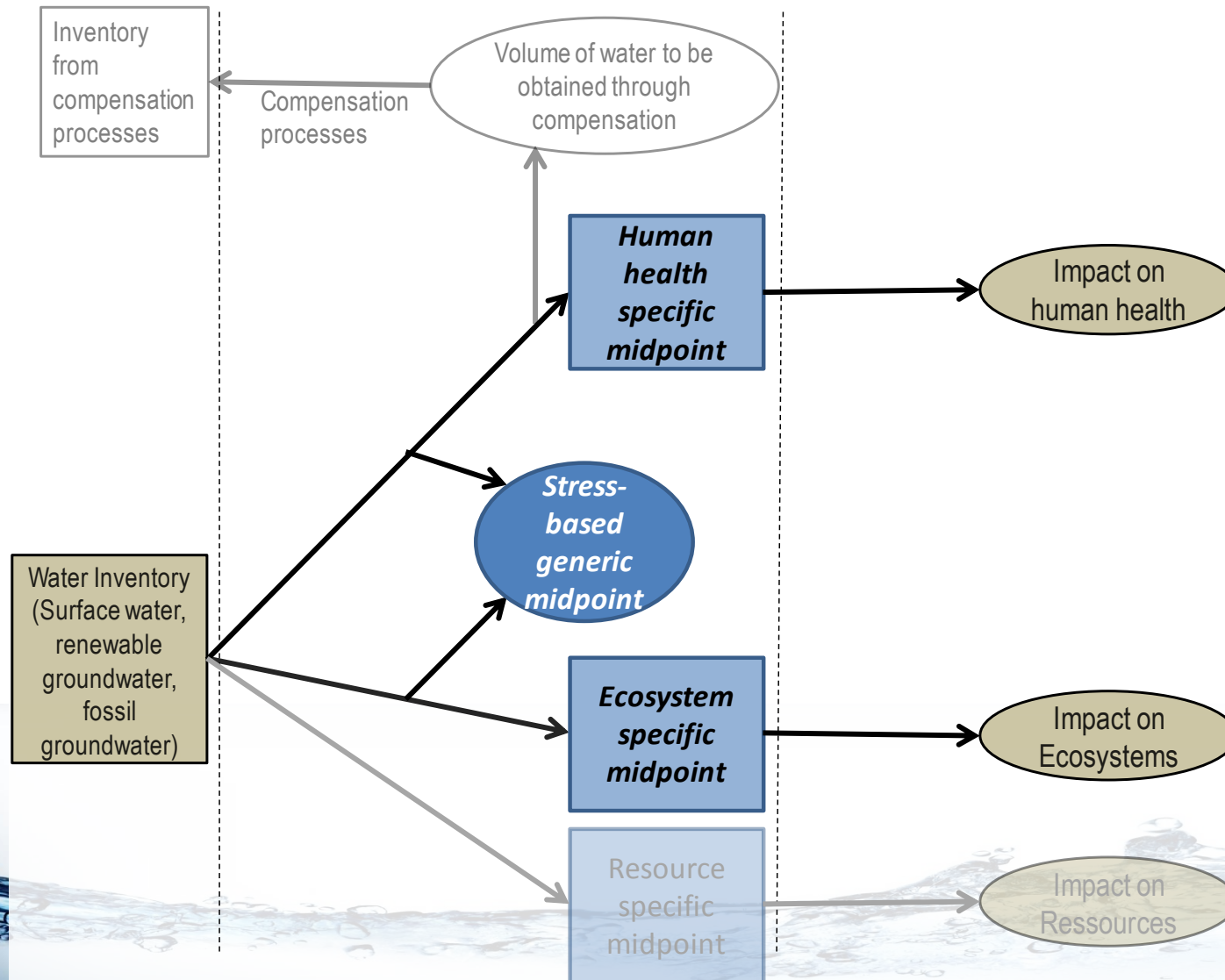
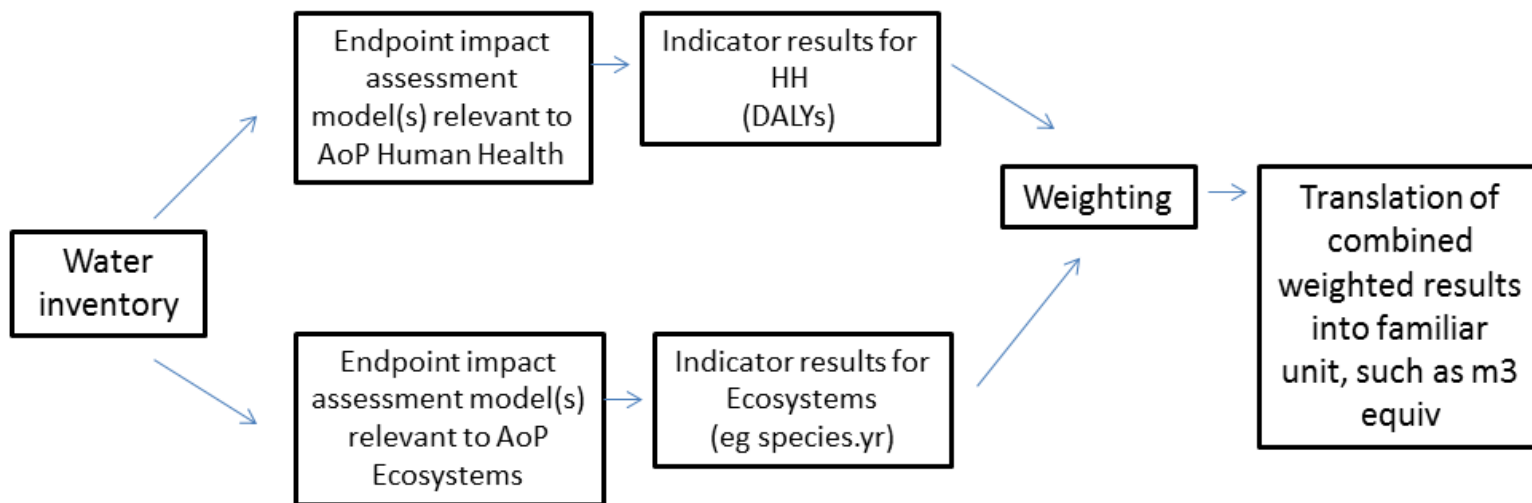


Fig.2: Proposal from Brad

Single indicator for water use

(see Ridoutt and Pfister 2013 IJLCA 18:204-207 for example, also discussion in Ridoutt and Pfister 2013 JIE 17:337-339)



Note: consensus needed on which model(s) are preferred (where more than one model exists for a particular impact pathway) and whether models for new impact pathways are mature enough to include. This fits in with other WULCA activity to reach consensus on models for HH impact of water use, etc

Note on weighting and ISO (14040/44 and 14046): weighting is permitted on the results of category indicators, and these need to be made available along with the weighted results

Framework: way forward?

- **Efforts to model impacts to endpoint for both human health and ecosystems**
- **Efforts to develop the stress indicator as agreed on at the last meeting**
- **Based on results developed, agree on the desire or not to propose a normalised and/or weighted indicator, and accordingly, compare with stress indicator**

Note:

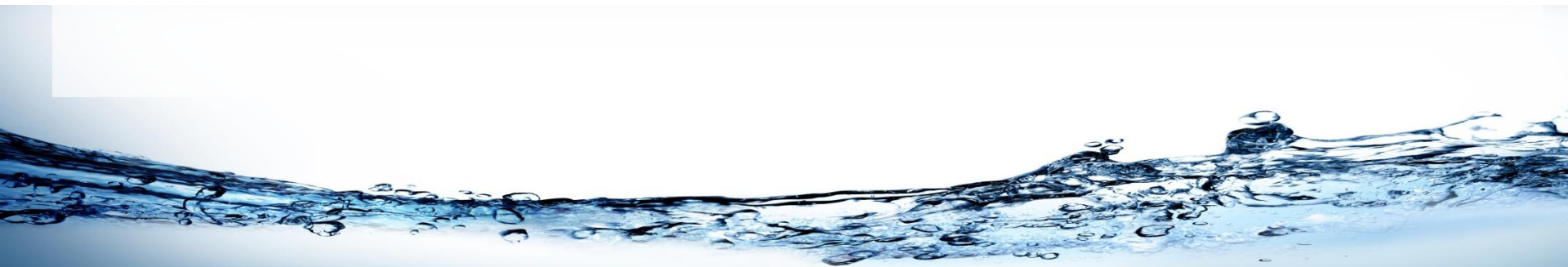
- Normalisation refers to endpoint results presented with “consistent units”
- Weighting refers to the use of a weighting scheme to combine ecosystem and human health impacts in one indicator

Sub-group summary: Stress

- **Two approaches have emerged from the discussions, to be explored (see next slides)**
- **Need for one single and simple parameter**

Note: simple to use and to communicate/explain does not mean that the model is simple!

- **Jane Bare to share her ongoing work at the next meeting**



Approach (b1): generic midpoint

Include Vulnerability Factors for HH (VF_{HH}) and EQ (VF_{EQ}) based on endpoint modelling

The general structure could be:

$$WIF_{\text{midpoint}} = f \left[\frac{\text{Consumption}}{\text{Availability}} \times VF_{HH} \times VF_{EQ} \right]$$

The factors need to account for regional specific circumstances

PROS: Represents elements of both ecosystems and human health impacts

CONS: care should be used to avoid implicit weighting

Approach (b2): stress based on the ratio of all water user's needs to available water

$$\text{STRESS} = F \left(\frac{\text{Water needs (humans + ecosystems)}}{\text{Renewable water availability}} \right)$$

Water needs- humans: water consumption

Water needs -ecosystems: needs to be investigated how this can be done with reliable science

Renewable water availability: considering only renewable water allows to reflect aquifer overuse

PROS: Generic – no weighting – simple

CONS: Challenge of representing ecosystems water needs in a reliable way, consult with ecologists?

Sub-group summary: Human Health

- **No agreement on how/where to model the midpoint yet**
- **The group decides to model all the way to endpoint**
- **A midpoint can be proposed later, either a point along the impact pathway, or a normalized endpoint**
- **Masaharu Motoshita to share his recent work at the next meeting**

Sub-group summary: Ecosystems

- **Framework is still in need of work and consensus**
- **CIRAIG will translate and present the results of their work on ecosystem aiming to clarify the different impact pathways and gaps before the next meeting**
- **Problem of coverage for most methods**
- **Latest work from Francesca Verones and Danielle Tendall to be considered**

Other activities

- **Training: South Africa in March (UNEP) and SETAC Basel, May**
 - **Training material soon to be available on website**
- **Montpellier Chair opening (March 25rd)**
- **Sponsorship: Press release in preparation**
- **Website is being re-designed**
- **Next meeting: April 2, 3, 4, 7?**





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***THANK YOU FOR YOUR
PARTICIPATION***