

## Detailed suggestions for further improvement of Figure 1.4 that are referred to in the Comment #10587

- change the name of the right column from "rewetted/restored / peatlands/organic soils (Chapter 3)" to "rewetted/restored peatlands/organic soils (Chapter 3)" (correct typing error and erase the central slash). When chapter 3 does not come with separate guidance for restoration, we can limit the name to the simpler "rewetted peatlands/organic soils (Chapter 3)".
- the caption "Blocked forestry drainage" is on second thoughts somewhat confusing, because it could give the impression that "drainage" is the relevant activity, whereas in fact the "blockage" is. So better change to "Forestry drain blocking".
- Under "Other freshwater wetlands" an option "unmanaged" features. "Unmanaged" is no option in the other chapters (and is also no part of chapter 5). As the figure deals with "managed wetland ecosystems" the "unmanaged" option could better be skipped. Furthermore, also "rewetted/restored" is "managed" so the separation between the second and third column is also confusing. So maybe change the captions there to "Managed drained or undrained" and "Managed rewetted/restored", respectively.
- With respect to GHG fluxes: it would indeed be nice to include them, but we should avoid overloading the already crowded picture. A solution could be only using different coloured arrows for different fluxes (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O; DOC?) and indicate with their presence / absence and their direction the emissions /removals to be considered. I would NOT try to indicate volumes by length or width of the arrows, because the absolute and proportional importance of the gases differs too much with type of management, type of peatland and climatic zone.
- If we want to include gases in the figure, we should indeed keep it very simple to avoid overcrowding. This could be reached by:
  - ✓ using different colour arrows for different gases
  - ✓ indicating fluxes only qualitatively: presence (arrow) or absence (no arrow)
  - ✓ omitting DOC, because that efflux exists everywhere (in different quantities)
  - ✓ presenting only fluxes from/to the soil, as this is the main theme of the Supplement.
  - ✓ simplifying strongly: no influxes at all (as CH<sub>4</sub> and N<sub>2</sub>O influx to soil is anyhow hardly existant, whereas CO<sub>2</sub> sequestration in soil under wet conditions is marginal compared to CO<sub>2</sub> emissions under drained). With respect to effluxes: no CH<sub>4</sub> from drained soil, no N<sub>2</sub>O from rewetted/wet soil, no CO<sub>2</sub> from/to rewetted/wet soil.
  - ✓ explaining these restrictions in the caption.
- attached (in the next page) an example of fig. 1.4 for which I have filled in the peatland fluxes following the simplification proposals above (as you will understand green = CO<sub>2</sub>, yellow = CH<sub>4</sub>, red = N<sub>2</sub>O). What do you think and can we do that also for the other wetland types?

