

Heavily Modified Water Bodies

Common Implementation Strategy Workshop
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Working Group I

Hydropower

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SCOTTISH EXECUTIVE

defra

Department for Environment
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eco
logic

Key issues on HMWB designation

Q1: provisional identification VS designation

Q2: scale of modification

– criteria and thresholds –

Q3: significant adverse effects on use or wider environment

– criteria and thresholds –

Q4: significantly better environmental options

- criteria nad thresholds –

good examples ??? difficulties ??? gaps

Key issues on HMWB designation

Q1: provisional identification VS designation

Situation 1: List is shorter

- ecological status of WB was in fact good;
- discussions on possible targets took place;
- provisional identification was simply too ambitious;
- regrouping of water bodies.

- FSB, ES, NO, EE, SE, RO
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Situation 2: List is the same

Situation 3: List is longer

- complicated HP schemes

- UK

Key issues on HMWB designation

good practice for start up the HP HMWB process

Differentiation of HP plants (pressures / impacts):

- run of river plants / impoundments,
- diversion plant / residual flow,
- storage plants / flow fluctuations, residual flows, continuity interruptions.

A priori generic lists:

- criteria for substantially changed in character;
- list of restoration / mitigation measures for each pressure type;
- list of possible adverse effects on use or wider environment;
- criteria for significance;
- criteria for better environmental options.

Diversification of criteria:

- impact related criteria;
- pressure related criteria.

Key issues on HMWB designation

Q2: scale of modification – criteria and thresholds

Impact related criteria

- length of HM modification of the river;
- intensity of river fragmentation;
- flow variations etc.

Pressure related criteria

- Length of dammed section;
- Morphology altered into reservoir;
- Height of weirs;
- Change of hydrological regime;
- Reduction of flow etc.

Criteria and thresholds are based on:

research projects;

- evaluation of existing projects;
- interdisciplinary expert working group (university, ministry);
- decision as a combination of scientific information and administrative articulation.

- A, ES, NO, UK, SI

Key issues on HMWB designation

Q3: significant adverse effects on use or wider environment

- criteria and thresholds –

- Significant* losses of electricity production base load
- (**more than natural variation due to natural flow variations*),
- Decrease of peak load production and ancillary services,
- Decrease in security of electricity supply on regional or national level.

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- fish passes,

•habitat creation,

•water balance reservoirs.....

...ARE NOT having adverse significant effects on use or wider environment, based on case by case,

•results of researches,

•expert based interpretations,

•explanatory discussions (the locked in hotel room approach)

•early beginning active involvement of stakeholders into the discussion,

•consensus omnium of partners, involved into the discussion

(administration, experts, HP operators and stakeholders).

Key issues on HMWB designation

Q4: significantly better environmental options

- criteria nad tresholds -

- no sophisticated and robust method developed;
 - decisions are intelectually based;
 - “magnitude logic”;
 - “renewable / non renewable” sources.
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- A, NO, FSB, SI

Key issues on HMWB designation

Stakeholders feed back

(EURELECTRIC; ESHA; EEB)

EURELECTRIC

- WFD implementation a challenge for the HP industry;
- designation of HMWB plays an important role.

ESHA

- definitions of fundamental terms are not harmonised;
- approaches and thresholds are not harmonised.

EEB

- no planned HMWBs;
- verify HMWB option with biological data