

Common Implementation Strategy

Heavily modified water bodies workshop

12th – 13th March 2009

Draft conclusions

What is this all about?

Water uses can provide important benefits

Improving the status of the water environment is also an important goal

Designation, identifying GEP and setting objectives is about striking the right balance

What is this all about?

Key change to water management introduced by Directive:

Management of adverse ecological impacts of hydromorphological alterations

DESIGNATION

Use of designation

For most Member States, substantial numbers of water bodies are being designated

Proportion of water bodies and reasons (i.e. uses) for designation vary

Designation process

Most Member States appear to have reviewed their provisional designations (Article 5)

Final designations based on better information and fuller assessment

Designated uses

Based on questionnaire results, clarity about “use” is very variable

Use clear	Use not so clear
Hydropower generation - storage	“Agriculture” (<i>e.g. is it land drainage for agriculture; etc?</i>)
Drinking water supply - storage	“Industry”
Flood defence	“Canalisation”
Inland navigation	“Dredging”
Navigation ports	“Morphological alterations”

Good practice - be specific about the use and relate to Article 4.3 list of uses

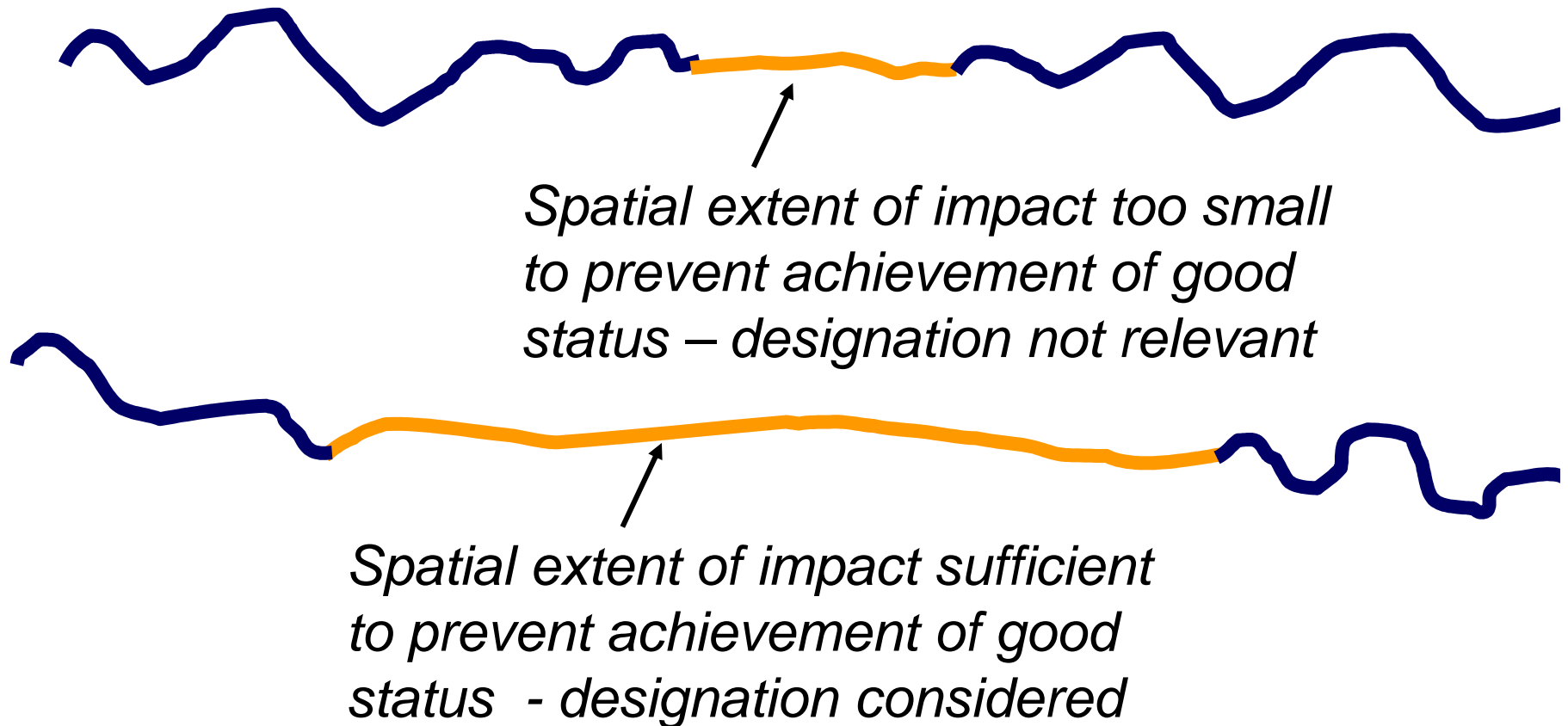
Scale of modification

For designation to be considered, there must be an impact (i.e. which cannot be addressed without a significant adverse impact on use) of sufficient magnitude to prevent achievement of good ecological status

Consideration of the spatial extent of impacts is relevant in deciding if this is the case (*e.g. kms of river impacted; km² of transitional waters; etc*)

Some evidence that similar criteria are being used (e.g. Norway, Austria and UK 1 – 2 km)

Good practice – be transparent about ecological status classification criteria



Types of modifications

All States considering designation if impacts clearly result from morphological alterations

Abstraction with no morphological alteration is not normally considered for designation

“For less clear cases” (abstraction with small dam at intake) some States “yes” some “no”

But ecological flow objective should not be affected unless significant adverse impact on use is accepted by States not designating

Significant adverse impact on use

Everyone agrees it cannot mean no impact on use

Fixing common thresholds at EU level for “significance” is not practical or appropriate

Ultimately, involves some element of political judgement

Reasons for judgement should be made clear

States trying to maximise improvement with the minimum of impact on use

Significant in relation to what?

Good practice – being clear on what is taken into account when making judgement

....for example: several factors appear to be possible considerations for hydropower

Proportion of scheme's total output

Proportion of annual variation in scheme's total output

Proportion of renewable energy targets

Cumulative impact on renewable energy targets

Scale of benefit to the water environment

Including of possible alternative options

Impact on output large

Careful assessment needed

Designation obviously appropriate

Benefit of use small

Benefit of use large

Designation unlikely to be justified

Careful assessment needed

Impact on output small

Ecological
potential

Good ecological potential

Designation is not an excuse for doing nothing

Good ecological potential means the best that can be done for ecology without significant adverse impact on use

Can be an ambitious objective – e.g. if only limited mitigation is currently in place

Ecological continuum

“There must be fish” – fish (in particular, migratory species) seen as a good indicator of ecological continuum

Good practice to consider ecological continuum at river basin scale - but act at local scale

Lateral connectivity (e.g. with shore zone; etc) also relevant for ecological continuum - in at least some water body types

Everyone agrees that ecological continuum is a relevant consideration in defining GEP

GEP – comparability between methods

Everybody believes that the two methods should give comparable results

The two methods are:

- (1) reference-based biological monitoring systems method; and
- (2) mitigation measures method

GEP – reference-based method

Use of reference-based biological method will be limited in first cycle

Examples where it will be used include:

Assessment of pollution in all HMWBs

Many water bodies with very similar modifications (e.g. canals and ditches in NL)

Change of water category but otherwise similar to natural water bodies (e.g. some reservoirs)

GEP – mitigation measure method

Most Member States basing GEP on mitigation measures method

Most Member States link mitigation measures to ecological improvement targets

Various approaches to describing ecological targets (*e.g. simple qualitative descriptions; modified ecological quality ratio class boundary values*)

GEP – mitigation measure method

Environmental objective is not just a list of mitigation measures

It is the ecological change those measures are designed to achieve

Both of the above are part of the “Prague” or mitigation measures method

GEP – practical challenges

Large number of water bodies to be classified in short time

No time for overly complicated approaches

Need to prioritise – i.e. identify water bodies that are clearly not at GEP and then direct effort to these

Experience from a number of States indicates mitigation measures method is easier to understand and apply by water managers

Examples of approaches being used

Screening using simple checklists of mitigation measures

Involving experts from sectors & other interests

Focusing on mitigation measures with clearest ecological benefits



*Distinguishing
two classes*

Good or better

Not good



Plan for review in
future cycles



Targeted identification of detailed
measures tailored to water body

GEP – comparability between States

Comparability of ecological quality achieved depends on:

- *the specific modifications associated with the use and the specific adverse ecological impacts caused (given the characteristics of the water body concerned);*
- *the level of mitigation already in place; and*
- *judgements about the significance for the use of mitigation – and hence on what additional mitigation can be applied*

GEP – comparability between States

Ecological quality at GEP may be more comparable for some uses than others

Most comparable for uses involving very similar modifications to very similar types of water bodies

For example, may be comparable for inland navigation (e.g. canals; large rivers) serving similar types of vessel and with similar use-levels; etc

GEP – improving understanding

Short term - transparency about the mitigation measures for GEP considered applicable by different States

At higher level of description, mitigation measures already appear comparable for at least some uses (*e.g. hydropower*)

GEP – improving understanding

Medium term - develop/improve biological monitoring systems for assessing hydromorphological alterations [*e.g. take account abundance + composition*]



Intercalibration of good ecological status boundaries for the above systems



Classify ecological status of HMWBs (as well as ecological potential)

GEP – improving understanding

Use results to:

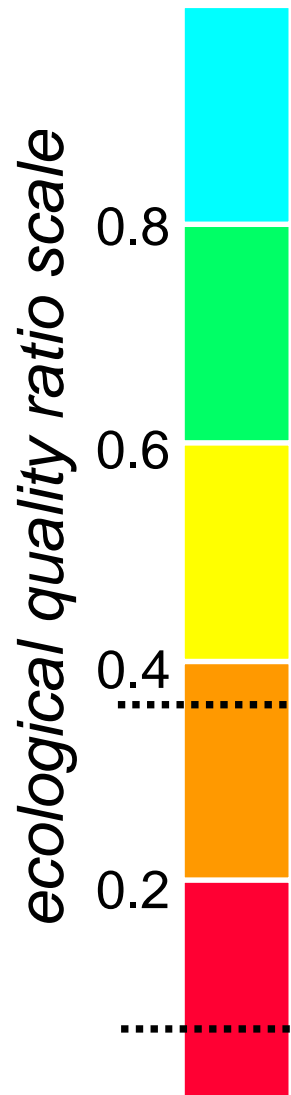


- describe ecological improvements;
- refine mitigation measures; and
- identify uses/water body types for which GEP is comparable between water bodies

Challenge: Requires ecological status biological monitoring systems that fully reflect the impact of hydromorphological alterations

Recommendation – Exchange of information between States with such systems and those without

Ecological status (ES) class boundaries



Step 4: Measure ecological improvement

Compare with ES values for GEP in similar HMWBs

Step 3: Apply ES monitoring system to HMWB at GEP

Step 2: Take mitigation measures

Step 1: Apply ES monitoring system to HMWB not at GEP

Objective setting

Objective setting – time extensions

Time derogations will be used.

Main reasons for time derogations appear to be:

- 1. natural recovery times*
- 2. need to phase major investment programmes*

Time derogations can deliver prioritised improvements – e.g. target where get large and clear benefits; etc.

Simple criteria & expert judgement used to set objectives. Complicated analysis for each water body has not proved necessary or practical.

Objective setting – less stringent

In principle, possible to apply less stringent objectives (tests similar to extended deadlines)

Not expected to be applied before 2027

Review need for less stringent objectives in third cycle

Exception may be where adverse impact caused by severe pollution

Stakeholder involvement

Stakeholder involvement in process

Benefits

Sector's knowledge of uses

Understanding of value to other stakeholders
of improving water environment

Detailed design of mitigation measures

Stakeholder involvement in process

Examples of good practice:

Involvement in development of methods and criteria.

Workshops with users and other stakeholders to apply methods.

Consultation on detailed design of improvements as part of licence reviews.

Good practice – be clear on the criteria on which expert judgements are based

Manage expectations

Not going to be perfect
first time

Update and improve for
future planning cycles

Proposals for Further Work

(e.g. in the Mandates ECOSTAT/HYMO 2010-12)

- Continue Info-Exchange During Implementation of POM's, Next Cycle(s), e.g. on:
 - Methods for Hydromorphological Assessment
 - Minimum Flow Regulations
 - Simplifications ??
- Collate Checklists of Mitigation
 - Effectiveness
 - Practicality
 - Good/Bad Examples
- Comparison of GEP
 1. Common Understanding
 2. Methods
 3. Probably Also: Results for same Type+Use?
- Deal with Hydromorphological Aspects of Agriculture
 - And probably also other Uses (e.g. Fisheries, Shellfish ...)