

Fish Legal Deadline 5 submission

1. Significant risks to migratory salmonids remain unresolved. Fish Legal agrees with the conclusions in NRW's Deadline 4 submission that:
 - (a) Baseline evidence on fish populations, and their behaviour, should be long-term and quantitative enough to assess natural variability and to be able to attribute impacts to the project (H2.2), and the fish surveys in the present case fail in both respects (especially as regards salmonids, which were virtually unsampled in the surveys);
 - (b) There are large gaps in the evidence about how migratory salmonids may behave in Swansea Bay. For example, the applicant's modelling assumes, based on data from fjords/confined estuaries, that in-migrating salmonids are "incautiously motivated to reach the river" (H1.3.1(b)) – whereas evidence from Swansea Bay itself (Mee et al, 199?) found that delays, possible disorientation and repeat approaches were the norm. NRW adds that "random behaviours... such as foraging sea trout" are too complex even to model (H1.3.1(c)), and that over-simplistic assumptions, using 'expert judgment', have been made for example about sea trout out-migration.
 - (c) Given the above and the inherent high level of uncertainty in the modelling, much less confidence can be ascribed to the modelling than the applicant claims (H1.1);
 - (d) No sufficient 'power analysis' of the ability of the proposed monitoring mechanisms – assessing rod catch data, and utilising fish counter, etc data at the Panteg trap and Afan Green Park – to detect salmonid stock changes resulting from the project has been done, but these mechanisms are likely to be inadequate for that purpose (H2.3 (5)-(6)).
 - (e) The relatively high level of remaining uncertainty and thus risk (as regards salmonids) means that, if permission for the project is not to be refused, monitoring and resulting mitigation and offsetting needs to be robust, precautionary¹ and secured at the DCO stage (NRW Deadline 4 cover letter p.2, H1.1, H1.3.4, H2.1, H2.5).
2. The present monitoring, mitigation, compensation and offsetting proposals:

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 are clear (Reg. 2) that the environmental statement must include "at least the information referred to in Part 2 of Schedule 4", amongst which is "a description of the measures envisaged in order to avoid, reduce and, if possible, remedy significant adverse effects"; and should include "such of the information referred to in Part 1 of Schedule 4 as is reasonably required to assess the environmental effects of the development", amongst which is "a description of the measures

¹ The ExA's Note following the 21-23 Oct. 2014 issue specific hearings notes that the Rochdale Judgment advises a precautionary approach in relation to mitigation measures. The UK courts are also now applying the precautionary principle in relation to EIA issues (in line with Member States' EC Treaty obligations). Thus in R (Loader) v SSCLG [2012] EWCA Civ 869, Pill LJ said (at para 43, in relation to EIA screening):

"The decision maker must have regard to the precautionary principle and to the degree of uncertainty, as to environmental impact, at the date of the decision. Depending on the information available, the decision maker may or may not be able to make a judgment as to the likelihood of significant effects on the environment. There may be cases where the uncertainties are such that a negative decision cannot be taken. Subject to that, proposals for ameliorative or remedial measures may be taken into account by the decision maker."

envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment". The Environmental Statement in the present case, in our opinion, should therefore have included a description of mitigation and offsetting measures, and of the monitoring measures which provide much of the data on which the mitigation and offsetting have to be based.

None of these things were of course covered in any detail (in relation to salmonids) in the ES provided at the submission of the application, and therefore they were not consulted on according to the formalities for ES consultation provided in the Regulations. We have concerns that the belated, and continually evolving mitigation/monitoring/offsetting plans (as in the various iterations of the AEMP) will therefore not have been adequately developed, consulted on and committed to by the time the DCO must be formalised, and that the time pressure could well lead to plans that do not meet NRW's requirements that they are robust, precautionary and fully committed to² in advance of the project's going ahead.

In terms of monitoring, as we have said before, we believe that a migratory salmonid stock counter on the mainstem of the R. Tawe is needed. Given the lack of baseline data (see NRW Deadline 4 at H2.2), this should be installed on the Tawe as soon as possible, to obtain stock data BEFORE the lagoon becomes operational. A stock counter would give a precise salmon and sea trout upstream migration count; plus a smolt and kelt downstream count. Ultimately, only a stock counter has the 'power' to establish impacts attributable to (a) lagoon direct mortality (together with the proposed turbine DIDSON monitoring arrangements); and (b) indirect (eg. non-mortality) impacts (see NRW H1.3.1(c)); and has the ability to assess the success of offset arrangements (such as opening up tributaries), by quantifying increased smolt production levels and survival rates. By contrast, the AEMP (presently) proposes for migratory salmonid assessment on the Tawe a fish counter at the Panteg Trap, which would sample only a tributary of the river – which is planned to be enhanced and so will not be representative of impacts – plus mobile DIDSON monitoring "potentially in the mouth of the River Tawe to investigate migratory behaviour of salmon and sea trout" (AEMP, 8.3.1.8). The latter 'plans' have evidently not been fully thought-through, developed or committed to, even at this late stage of the application.

Given these inadequacies – and others, such as the lack of (precautionary) assessment of offset requirements and feasibility – we think a lot of attention now needs to be paid to securing an advance commitment to an adequate level of monitoring, offsetting etc., and to proper planning of those measures. We think some of that commitment could be provided by substantially strengthening requirement 6 of the DCO, perhaps by making the approval of the AEMP by NRW a precondition before any development can begin. Thought should also be given to whether the applicant should make a "subsequent application" (to the local authorities) for pre-development approval of the AEMP measures (see EIA Regulations 2009 at Regs. 2, 18-19).

Fish Legal
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² NRW refers to the need to ensure the "deliverability, effectiveness and enforceability" of the AEMP, which would encompass issues such as setting up an independent review group, and how that should be funded and secured in the consenting process.