

**PLANNING ACT 2008 ("PA 2008")
THE PROPOSED TIDAL LAGOON SWANSEA BAY (GENERATING STATION)
ORDER (THE "ORDER")
PLANNING INSPECTORATE REFERENCE NUMBER: EN010049**

Applicant's response to submissions made by interested parties at Deadline V (28th October 2014) and Deadline V extension (4th November 2014)

Where no specific response is provided in this document to an interested party's submission, TLSB considers that the issues raised by that interested party have been responded to during the course of the examination, either through written representations and/or during oral hearings.

Where no comment is made, TLSB should not be assumed to accept the position stated and its position is reserved accordingly.

Annex Number	Title
Annex 1	CCSC and NPTCBC comments on the DCO and CEMP
Annex 2	CCSC comments on the AEMP
Annex 3A	Note on likely significant effects on Crymlyn Burrows Site of Special Scientific Interest and secured management measures including on efficacy, practicality and securing of the movement of sand
Annex 3B	TLSB response to further NRW comments
Annex 4	Information provided to PASAS on fish sensitivity testing

3.34. CCSC commented on the advice given to TLSB regarding the importance of the access road to the Project in securing access to other plots in the regeneration area of SA1. The revised road layout beyond Langdon road has been designed in conjunction with the owner of adjacent land and the land on which the road would be constructed - Dan Morrissey - in order to provide suitable access to potential plots for future development. Requirement 9 provides for the road to be constructed to adoptable standards and to be capable of use by adjacent owners subject to contribution to maintenance prior to adoption. It is not considered that the Project would conflict with the aims of the Fabian Way Corridor Regeneration Concept Masterplan - indeed, the Project enhances certainty of delivery.

4. Dan Morrissey Ltd

4.1. TLSB has amended the route of the road as shown on the updated works plans submitted on 7 October 2014. The land plans highlighted in the representation have been updated and submitted on 4 November 2014. The change is also reflected in the updated Public Rights of Way Plans submitted on 4 November 2014.

4.2. Regarding the access road; the road is required for construction as no reasonable alternative is available. During operation of the scheme, access is required along this route for the operation and maintenance of the nationally significant generating station, as well as for visitor access.

4.3. As shown on the indicative laydown areas at appendix 3.9.1 of TLSB's response to written questions, the land is reasonably required on a temporary basis to accommodate the areas needed for construction compounds.

4.4. The access road is not only required for visitor access, but for operations. Other comments made on behalf of Dan Morrissey are addressed in relation to CCSC above.

5. Miss E. Harry

5.1. TLSB considers the matters raised to have been addressed in other written representations submitted during the course of examination.

6. Fish Legal

Deadline V

6.1. At point 1a) Fish Legal comments:

“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)”

6.2. TLSB has undertaken quarterly surveys for two years to establish a baseline of the fish populations in Swansea Bay. As provided in the AEMPr4, monitoring will continue in line with current WFD practice and surveys will be targeted in the autumn quarter. In addition to this tracking studies are proposed (AEMPr4 - paragraph 8.3.8 *et seq*). This is

considered sufficient to understand the impacts of the Project during construction and operation.

6.3. As mentioned in previous submissions, the surveys were not designed to track the migratory movements of salmon and sea trout through the Bay, these are better followed as fish enter or leave the rivers through rod catch or fish trap or counter records which were used to inform that aspect of the assessment.

6.4. Turnpenny Horsfield Associates has carried out power analysis on rod catches of salmon and sea trout in the R. Tawe, Neath and Afan. This is provided in the updated AEMP Section 8.3.6 (Objective F6). This has shown that salmon rod catch data should be monitored for at least three years if and when the tidal Lagoon is in operation. This will provide a 90% chance of detection at 15% reduction in the proportional representation of catch in the years after the Lagoon begins operation. For sea trout, rod catch data should be monitored for at least two years if and when the Lagoon is in operation. This will provide a 90% chance of detection of a 15%, or greater, reduction in the proportional representation of catch in the years after the power scheme begins.

6.5. The fish surveys and use of other available data as discussed in the AEMP are therefore considered appropriate.

6.6. At point 1d) Fish Legal comment:

“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)).”

6.7. As mention above THA has carried out power analysis on rod catches of salmon and sea trout in the R. Tawe, Neath and Afan. This is provided in the updated AEMP Section 8.3.6 (Objective F6).

“(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, precautionary and secured at the DCO stage (NRW Deadline 4 cover letter p.2, H1.1, H1.3.4, H2.1, H2.5).”

6.8. At point 2 of the representation, Fish Legal has commented:

6.9. *“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 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.

- 6.10. *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 to in advance of the project's going ahead."*
- 6.11. As identified in the ES, worst-case assessment has been used and, based on this, a 0.12% mortality is predicted for adult salmon (ES Table 9.22). When real smolt tracking data was used in the model the mortality dropped to 0.03% (TLSB response to written questions Appendix 7.1.5). These levels are insignificant and would not be detectable in amongst the natural variation in stocks which, as TLSB understands, can be up to 30%. As the potential effects are minor, offsetting measures etc are not appropriate and, given the predicted impact, are disproportionate.
- 6.12. Notwithstanding this, measures which will reduce effects on fish have been embedded in the design of the Project, namely the use of variable speed turbines. This will further reduce any effects of the Project (TLSB response to written questions Appendix 3.1.1). Overall, as the predicted effects of the project are so minor in comparison to natural fluctuations in fish populations, any changes as a result of the Project are unlikely to be detected.
- 6.13. The AEMP provides a holistic monitoring plan which is targeted at the turbines and supported by a range of other surveys. The AEMP is adaptive in nature and as such the results of the surveys will be reviewed and if findings outside that predicted are identified further monitoring will be undertaken.
- 6.14. TLSB has considered Fish Legal's request for a stock counter on the mainstem of the River Tawe. However it is not considered a suitable location for a Vaki fish counter, or any other type at present.
- 6.15. The Vaki Riverwatcher counter has to be mounted in a narrow flume section, or in a wider section with a mesh or bar funnel. The existing fish pass has no suitable flume section and this would require extensive civil works to extend it upstream, which may also interfere with the existing barrage and lock gate system in this area. It would also be high maintenance with regular cleaning required.
- 6.16. Other types of fish counter are also not feasible here. Resistivity type counters will not cope with fluctuating salinities, and hydroacoustic fish counters only work in certain ideal conditions of channel cross-section and air bubble-free conditions.
- 6.17. TLSB has considered a range of options. However, these would all require extensive civil engineering works and are high maintenance. In addition to this there is the frequent

overtopping of the weir which means that there can never be a total count (no type of counter is suitable for the weir at this location).

Deadline V extension

- 6.18. Please see previous response with regards to provision of a mainstem salmonid stock counter.

7. Gerald Conyngham

- 7.1. TLSB has no comment to make on the representation of Gerald Conyngham.

8. Health and safety executive

- 8.1. TLSB has no comment to make on the representation of Health and Safety Executive.

9. Dr Hywel Frances MP

- 9.1. TLSB has no comment to make on the representation.

10. Neath Port Talbot County Borough Council ("NPTCBC")

- 10.1. NPTCBC states the consideration that costs associated with the facilities provided, such as those related to sailing, should be reasonably set at cost level. Para 6.1.2 of Schedule 1 to the proposed s106 (13 November) already stated that TLSB will provide access to these facilities subject to reasonable monetary charges.

- 10.2. At paragraph 1.2 of NPTCBC's representation, NPTCBC comments: *"The further additions and updated information that has been added to the latest editions of the proposed CEMP, OEMP and AEMP is again welcomed. However it is noted that these documents are still very much draft and require further work to develop the required finer level of detail. For example, the OEMP still requires further details associated with the operation of the tidal lagoon generating station and the management of the wider site as a whole."*

- 10.3. The documents are all in outline, to be approved by the relevant local planning authorities prior to the appropriate stage of development. This is secured by Requirements 5 and 6.

- 10.4. At paragraph 1.4 NPTCBC states: *"While it is acknowledged that the latest revision of the AEMP does include more details in regard to possible mitigation proposals in relation to impacts upon Crymlyn Burrows, it is considered that these still do not go far enough. For instance, tables 5.1 and 7.3 outline 'Further/Remedial Action', and discuss erosion of the beach inside the lagoon, but does not detail ways in which, if necessary, excessive accreted sand could be removed from the system."*

- 10.5. As stated in Table 5.1 of the AEMPr4, if significant sand accretion, particularly after south-westerly storms, is observed at Crymlyn Burrows, the need for redistribution of sand or introduction of sand back into the wider bay, for instance as a beach replenishment source, will be discussed with NRW(A) and the appropriate landowner.

- 11.33. TLSB has responded separately to the request from the Panel to address points:
- (i) the sources of sediment that are being added to the bay, in particular from rivers that flow into it;
 - (ii) the quantities of mobile sediments within Swansea Bay;
 - (iii) the quantities of sediment being added to the bay in relation to the figures for annual dredging that have been carried out in past years and that are anticipated as taking place as a result of constructing and operation of the tidal lagoon; and
 - (iv) the practicality of mitigating against potential mud accretion within the western bay.
- 11.34. TLSB submitted this information on 4th November 2014.
- 11.35. The Panel requested further information on 11th of November 2014. Specifically,
- R7. Interested parties, specifically **Natural Resources Wales (NRW)** and **the applicant** are requested to discuss the figures presented in the applicant's Table 1, Summary of sediment sources and volumes, which can be found on pages 5 & 6 of the ABPMPer "Note in response to panel's request for information arising from Issue Specific Hearing commencing 21 October 2014, and attempt to produce agreed figures. **NRW** are requested to provide comment on the practicality of the applicant's proposal for mitigating against adverse consequences of potential mud accretion within the western bay by "dredging/scraping the intertidal areas to remove deposited muds".
- R8. **The applicant** and **NRW** are requested to advise the Panel, through the submission of a note, on the scope for altering or adjusting dredge disposal practices as a means of mitigating against excessive mud accretion within the Western Bay.
- 11.36. A telephone conference was held with NRW on 17 November 2014 and a note has been submitted addressing these points at Deadline VI of 25 November 2014.

12. Pontardawe and Swansea Angling Society ("PASAS")

Deadline V submission

- 12.1. A revised AEMP has been submitted at Deadline V and Deadline VI, and TLSB proposes to continue to develop the AEMP in consultation with NRW and the local planning authorities.
- 12.2. TLSB has commented on issues raised in relation to baseline studies in other written representations submitted during the course of examination. As mentioned at Deadline V, TLSB is now proposing tracking studies to monitor fish movement across the Bay. Please see the revised AEMPr4 submitted to the ExA 25th November 2014 - Objective F8.
- 12.3. TLSB provided details of amendments to the AEMP in a tabulated submission at Deadline V extension (4th November).
- 12.4. PASAS has provided further comments on in-river monitoring. This is provided below for ease of reference:

- i. To assess effects on fish belonging to different rivers, monitoring needs to take place in those rivers. (Mixed stock netting in Welsh coastal waters has been phased out because it didn't allow the proper management of discrete river populations.)
- ii. The Afan has a fish pass with a camera in place at the moment but:
 - (a). future funding of the camera is not secure
 - (b). not all fish use the pass, because it's on a weir which is overtopped by tides so additional monitoring facilities are likely to be required. The applicant has made no proposals.
- iii. The Neath has no fish counter as far as we aware, so monitoring facilities are likely to be required there. We know little about the Neath so have to leave this to NRW.
- iv. The Tawe poses particular difficulties:
 - (a). the Tawe Barrage impedes fish and causes them to enter the estuary repeatedly
 - (b). there's a need to monitor this downstream of the barrage, because it's likely to lead to repeated turbine encounters, not allowed for in the modelling
 - (c). it's necessary to count fish actually passing the barrage and entering the river
 - (d). the barrage impoundment is not a typical estuary, which has effects both on emigrating smolts and on returning adults, and the lagoon is likely to have additional new effects
 - (e). incoming and outgoing fish therefore also need to be counted at the top end of the impoundment, in Morriston
 - (f). one possible location for installation of a counter is at the Beaufort Weir in Morriston but there are bridges upstream which might prove suitable
 - (g). the Panteg Weir in Ystalyfera, where measures are proposed, is about 11 miles up river, above some tributaries used for spawning, and fish caught in the trap might not be representative of the river's migratory fish population.
- v. For the Tawe therefore we show at Annex 4 some possible locations for counters / cameras to undertake the monitoring mentioned above. We understand that conventional counters don't work well in tidal waters and that the sonar cameras proposed by the applicant have an effective range of about 35 metres, so careful site selection will be important.

- 12.5. Overall, the EIA for the Project has predicted insignificant effects on salmon species and a minor impact on sea trout with mitigation in the form of AFDs being implemented if needed following final selection of turbine technology. This is secured by Requirement 27.
- 12.6. The civil engineering works that would need to be undertaken for any type of fish counter to be provided at the existing Tawe Barrage, and the high maintenance that would be required when in place are considered disproportionate, particularly as a fish counter is not likely to detect the small percentage of impact predicted by the Project, in amongst the natural annual population variation.
- 12.7. Tracking studies as proposed in Objective F8 of the AEMP are considered the most useful for identifying impact on salmon and sea trout as a result of the Project.
- 12.8. Overall, the AEMP already provides a holistic monitoring plan supported by a range of surveys. The AEMP is adaptive in nature and as such the results of the surveys will be reviewed and if findings outside those predicted are identified, further monitoring will be undertaken. Consideration of how this matter is being secured in the DCO is provided in the commentary upon the comments of NRW above.

- 12.9. Annex 1 to PASAS deadline IV comments on updated AEMP (Revision 1, 5th August 2014): TLSB detailed amendments to the AEMP in a tabulated submission at Deadline V extension (4th November 2014).
- 12.10. Annex 2 Note on WFD (Water Framework Directive) assessment delivered to TLSB and NRW at hearing 21st October 2014: matters concerning the WFD are addressed by TLSB through discussions with NRW.
- 12.11. In Annex 3 of the Deadline V representation PASAS provides best guesses as to salmon and sea trout movements in Swansea Bay without a lagoon. Whilst TLSB appreciated the interpretation, it must be recognised that these are, as PASAS state, “guesses”. The IBM model and assessment undertaken for the EIA are based on scientific knowledge and expert judgement, using the best tools available for this kind of assessment.
- 12.12. With regards to PASAS' comment *“The IBM model illustrations show only fish arriving from the west but there’s evidence that they also arrive from the east (see our Deadline 2 Written Representation). The applicant claims that arrivals from the east have been modelled and that details have been made available. We haven’t seen the results of such modelling. We’ve asked but it hasn’t been produced to us.”* TLSB has stated in previous submissions that the video files referenced in the ES and uploaded to the Tidal Lagoon Swansea Bay website were provided to show worst-case examples in the assessment. They are not the basis of every assessment. Rather, many more model runs informed the EIA process. Sensitivity testing was also undertaken to inform the assessment. These model runs include scenarios with approaches of fish from the East, West and under different tides as shown in the tables below. A copy of the information sent to PASAS is provided in Annex 4 of this submission.
- 12.13. With regard to PASAS' Annex 5, suggested locations for fish monitoring equipment, as mentioned in response to the Fish Legal representation in relation to a stock counter on the mainstem of the River Tawe, TLSB has considered this proposal. However it is not considered a suitable location for a Vaki fish counter, or any other type at present.
- 12.14. The Vaki Riverwatcher counter has to be mounted in a narrow flume section, or in a wider section with a mesh or bar funnel. The existing fish pass has no suitable flume section and this would require extensive civil engineering works to extend it upstream, which could cause issues to the existing barrage and lock gates system in this area. It would also be high maintenance with regular cleaning required.
- 12.15. Other types of fish counter are also not feasible here. Resistivity type counters will not cope with fluctuating salinities, and hydroacoustic fish counters only work in certain ideal conditions of channel cross-section and air bubble-free conditions.
- 12.16. TLSB has considered a range of options. However these would all require extensive civil works and high levels of maintenance, which is disproportionate to the effects predicted, even on a worst-case basis. In addition to this, there is the frequent overtopping of the weir which means that there can never be a total count (no type of counter is suitable for the weir at this location).

- 12.17. Overall, as the predicted effects of the project are so minor in comparison to natural fluctuations in fish populations, any changes as a result of the Project are unlikely to be detected by a fish counter. As such, the civil works that would need to be undertaken for any type of fish counter to be provided, and the high maintenance that would be required when in place, are considered disproportionate, particularly as a fish counter would not be likely detect the small percentage of impact predicted.
- 12.18. Monitoring of the turbines (Objective F1) and fish tracking studies as proposed in Objective F8 of the AEMP are considered the most appropriate method for identifying any impacts on salmon and sea trout as a result of the Project.

Deadline V extension submission

- 12.19. TLSB understands that PASAS has remaining concerns in relation to the AEMP. However, as mentioned above, this will continue to be developed in consultation with NRW and the Local Authorities, and will be agreed prior construction as secured in the DCO.
- 12.20. In relation to PASAS's comments on the WFD, TLSB would like to clarify that the 'Water Framework Directive Information to Support Article 4.7 Derogation for Swansea Bay Coastal Waterbody' report submitted on the 28th October 2014, does not provide an assessment of the effects of the Project on the Tawe Estuary waterbody. The report was prepared by TLSB based on ongoing discussions with NRW, to supplement the information already provided within the Water Framework Directive (WFD) Assessment Report (v2) (submitted on the 7th October 2014 to the Examining Authority in respect of TLSB's application for development consent) in relation to derogation under Article 4.7, in respect of the Swansea Bay Coastal waterbody.
- 12.21. Consideration of the effects of the Project on the Tawe Estuary waterbody was previously provided in the WFD Assessment Report (v2) submitted on the 7th October 2014. As identified in this report, the Project will not cause deterioration in the status of the Tawe Estuary waterbody, or compromise the future achievement of the objectives in relation to this waterbody and thus, no Article 4.8 assessment is required.

13. Porthcawl Environment Trust ("PET")

- 13.1. In the representation of Porthcawl Environment Trust it is commented "*I understand that there is some doubt in the minds of the developers that a European Protection Species (EPS) Derogation Licence is required for work to proceed on the Tidal Lagoon Project.*"
- 13.2. *It is said that the developers believe that the construction work involving Percussion/Vibro piling will have no adverse effect on the resident population of Harbour Porpoises in the Outer Bristol Channel, particularly in the breeding season."*
- 13.3. To clarify, a short term impact (10-15 days) has been identified as a result of the installation of the marine navigation (dolphin) piles. JNCC measures are secured under the CEMP and will be followed during these works, all works will be during daylight hours and in good sea conditions, and as such the residual impact is minor. Notwithstanding this, an EPS licence to disturb harbour porpoise will be sought for the

Information provided to PASAS on fish modelling sensitivity testing

The video files referenced in the ES and uploaded to the Tidal Lagoon Swansea Bay website were provided to show worst case examples in the assessment. However many more model runs informed the EIA process. Sensitivity testing was undertaken to inform the assessment. These model runs include scenarios with approaches from the East, West and under different tides as shown in the tables below.

Each of these runs was initially made with 10,000 particles and all the variable parameters which distinguish each species from each other and are listed in Appendix 9.3 of the ES. The result in each case is a probabilistic estimate of the likely mortality after the results of each encounter run have been through the STRIKER model. STRIKER is used to calculate the possibility of death caused by multiple passes through the turbines in the appropriate directions.

Table 1. Summary of mortality effects of various scenarios

Species	Sensitivity type	Scenario Ident.	Mortality summary	Notes
Salmon adult	High	TEM-A01a	1%	
	Low	TEM-A01e	1%	
	Spring	TEM-A01a	1%	
	East	TEM-A01c	0.5%	
	West	TEM-A01a	1%	
	Tawe	TEM-A01a	1%	
	Neath	TEM-A01b	0	
	Neath East	TEM-A01d	0	
Salmon smolt	High	TEM-J01a	0.2%	
	Low	TEM-J01i	0.2%	
	Spring	TEM-J01a	0.2%	
	Tawe	TEM-J01a	0.2%	
	Neath	TEM-J01c	0	
	PASAS ¹	TEM-J01j	0.05%	swim speed 0.5 m/s
	Moore 1997	TEM-J01k	0.05%	swim speed 0.63 m/s
	Peake McKinley 1998	TEM-J01l	0.05%	swim speed 1 m/s
	Moore 1997 – neap	TEM-J01f	0	swim speed 0.63 m/s
Trout adult	High	TEM-A02a	2.5%	
	Low	TEM-A02h	2.5%	
	Spring	TEM-A02a	2.5%	
	East	TEM-A02c	0.5%	
	West	TEM-A02a	2.5%	
	Tawe	TEM-A02a	2.5%	
	Neath	TEM-A02b	0.05%	
	Neath east	TEM-A02d	0	
	High Resolution Olfactory trail	TEM-A02e	1%	Doc. 580R1001 Hi Res water + Q10 rivers
	Trout smolt	High	TEM-J02a	0.2%
Low		TEM-j02e	0.2%	
Spring		TEM-J02a	0.2%	
Tawe		TEM-J02a	0.2%	
Neath		TEM-J02c	0	

¹ PASAS written representation and comments.

Table 2. Details regarding sensitivity in similar format to Table 5. Overview results Appendix 9.3

Species	Scenario identifier	No. encountering turbines	Turbine Passes	Difference in/out	Mean mortality %	SE Mortality %
Salmon adult	TEM-A01a	626	1020	0	0.9	0.09
Salmon adult Neath	TEM-A01b	0	0	0	0	0
Salmon adult Eastern	TEM-A01c	210	397	0	0.35	0.06
Salmon adult Neath Eastern	TEM-A01d	0	0	0	0	0
Salmon adult SpringLow	TEM-A01e	667	1136	0	0.89	0.1
Salmon smolt	TEM-J01a	109	429	0	0.13	0.04
Salmon smolt Neath	TEM-J01c	2	3	0	0	0
Salmon smolt Neap PSAS 0.5 m/s	TEM-J01e	107	88	0	0.03	0.02
Salmon smolt Neap Moore1997 0.63 m/s	TEM-J01f	50	33	0	0.01	0.01
Salmon smolt SpringLow	TEM-J01i	120	466	0	0.14	0.04
Salmon smolt PSAS 0.5 m/s	TEM-J01j	96	172	0	0.05	0.02
Salmon smolt Moore1997 0.63 m/s	TEM-J01k	104	177	0	0.06	0.02
Salmon smolt PeakeMcKinley1998 1 m/s	TEM-J01l	68	97	0	0.03	0.02
Sea trout adult	TEM-A02a	1986	3746	0	2.42	0.15
Sea trout adult Neath	TEM-A02b	10	29	0	0.02	0.01
Sea trout adult Eastern	TEM-A02c	266	528	0	0.33	0.06
Sea trout adult High Resolution Water + flow	TEM-A02e	543	1634	0	0.98	0.1
Sea trout adult Neath Eastern	TEM-A02d	1	7	0	0	0.01
Sea trout adult SpringLow	TEM-A02h	1912	3629	0	2.39	0.15
Sea trout smolt	TEM-J02a	129	502	0	0.16	0.04
Sea trout smolt Neath	TEM-J02c	5	11	0	0	0.01