# Assessment Team Response to Public Consultation Comments on the Kaunertal Expansion Project Protocol Assessment Report

Final

Comments received by: 24 April 2017 (see Annex I)

Changes made to the final assessment report? Yes

19/06/2017

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**Please refer to Table 1 for assessors' responses to the comments and section 3 for the need to change / not change the report.**

**Please refer to Annex I for a complete set of original comments received.**

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# Introduction

The Kaunertal Expansion Project HPP was assessed between 29 August to 5 September 2016 using the Preparation tool of the Hydropower Sustainability Assessment Protocol ('the Protocol'). The 1015 MW expansion project in the Inn River basin (Austria) is in the middle of a long prepration phase, with construction not anticipated to start until the late 2020s.

The assessment report is available at: http://www.hydrosustainability.org/Protocol-Assessments.aspx

# Purpose of this Response Document

In accordance with paragraph 8 of the Terms and Conditions (T&C) for the use of the Protocol, 'a 60 calendar day period of Report revision by the accredited assessor in conjunction with the project sponsor is available. The accredited assessor is not obliged to respond to comments. In the event that the accredited assessor chooses to amend the Report in response to comments, the amended Report is published within 60 days on both the Project Sponsor's website and on a website designated by the Management Entity. The final Report must include an annex outlining the changes made/not made in response to comments received.'

This response document represents compliance with paragraph 8 of the T&C.

# Approach to Consultation

The final report was published on 23 February 2017 on the Protocol website http://www.hydrosustainability.org/Protocol-Assessments.aspx and on the TIWAG-Tiroler Wasserkraft AG ("TIWAG") website https://www.tiwag.at/en/about-tiwag/power-stations/expansion-of-hydropower/news/. During the consultation period, comments could be submitted through the Protocol website or through TIWAG. In accordance with the T&C for the use of the Protocol, the 60 calendar day period for public comment on the Kaunertal Expansion Project assessment report, and ran from 23 February 2017 to 24 April 2017.

On receipt of comments, the assessment team had a further 60 calendar day period from the closing date of the public comment period to review and respond to the comments and publish an amended report if the assessment team considers that comments require report amendments. In the case of the Kaunertal Expansion Project Protocol assessment, the comment response report and amended final report were completed on 19 June 2017.

Within the consultation period, two organisations submitted comments on the Kaunertal Expansion Project Protocol assessment report: WWF Austria, and Österreichischer Alpenverein (the Austrian Alpine Association).

# Layout of this Response Document

This document consists of three sections. Section 1 includes general comments, which do not directly correspond to specific Protocol topics; Section 2 contains responses to comments related to specific topics of the Protocol in order of appearance in the Protocol's Implementation tool; and Section 3 indicates whether the report needs amending. There were no comments directly related to the following topics: P-6 Integrated Project Management; P-8 Infrastructure Safety; P-9 Financial Viability; P-10 Project Benefits; P-11 Economic Viability; P-12 Procurement; P-14 Resettlement; P-15 Indigenous Peoples P-18 Public Health; P-22 Reservoir Planning; and P-23 Downstream Flow Regimes.

# 1. Responses to General Comments

Table 1 below presents issues raised, which do not refer to specific Protocol topics findings. Issues have been paraphrased and summarised; Annex I contains a full set of original comments received.

**Table 1 – Responses to Issues Raised that are Not Protocol Topic-Related**

| Issue: Specific Points | Assessor Response |
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| How well does the project Kaunertal compared with similar projects in the overall view? | The Protocol is designed to guide continuous improvement efforts by a project rather than to directly enable cross-project comparisons based on scores. It is not unexpected to find significant gaps in a large complex project part-way through the preparation stage, even in developed country contexts with strong regulatory frameworks. It is the intention to find such gaps when undertaking an evaluation against an international framework. Of considerable interest is how a project proponent responds to the findings of a Protocol assessment, which can also be a notable point of comparison. |
| Where are the biggest gaps without too much detail? | The Table of Significant Gaps on page vii provides a synopsis of all gaps identified in the Protocol assessment. Whilst there is no relative "size" of gaps, actions that would close the gaps against the Basic Good Practice criteria would be recommended as priorities for any follow-up. |
| Has the project been considered in relation to the water management framework (Wasserwirtschaftlicher Rahmenplan) | Topic P-3 Demonstrated Need and Strategic Fit analyses the fit of the project with relevant policies and plans including the water framework directive. |

# 2. Responses to Topic-Related Comments

Table 2 below presents issues raised which are related to specific Protocol topics findings. All issues raised are included here in their entirety.

**Table 2 – Responses to Issues Raised that are Protocol Topic-Related**

| Issue Raised | Assessor Response |
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| **P-1 Communications and Consultation** | |
| Section 1.2.2 Management, page 13-14:<br>"TIWAG is operating a customer service centre with a toll free hotline to respond to all stakeholder questions, and not just questions by TIWAG retail customers. The service centre received 160 inquiries about the KXP between 2011 and 2016. A new database software for customer service management is due to be introduced shortly. If questions on the KXP cannot be covered by service centre staff, they are forwarded to responsible departments. Media inquiries are handled by a press office (a team of two). " [...] "If grievances are not resolved by TIWAG, they can be taken to the courts or into the political process"<br>This customer service centre and hotline does not fulfil the good practise criteria of a grievance mechanism according to IFC guidelines (e.g. concerning project specifity, transparency and accountability, etc.); the IFC also explicitly states that project grievance mechanisms are NOT to be seen in the same line as dispute resolution in legal or political/administrative systems (see http://www.ifc.org/wps/wcm/connect/cbe7b18048855348ae6cfe6a6515bb18/IFC%2BGrievance%2BMechanisms.pdf?MOD=AJPERES&CACHEID=cbe7b18048855348ae6cfe6a6515bb18) | This is not an assessment against IFC guidelines, but against Protocol scoring statements. TIWAG's grievance mechanism is functional and appropriate.<br>No change to text. |
| Section 1.2.3 Stakeholder Engagement, page 15:<br>"There are numerous examples for two-way communications that resulted in siting and design changes (see topic P-4 Siting and Design), where stakeholder suggestions were considered technically and financially feasible."<br>Unfortunately we do not have any knowledge of this examples for two-way communications, so we would like to know more about it, e.g. the specific description of one or two examples (who made which proposition that was taken into account) | See examples in P-4 Siting and Design.<br>No change in text. |
| Section 1.2.4 Conformance / Compliance, page 17:<br>"Similarly, disclosure and consultations on the Water Management Framework Plan for the Upper Tyrol complied with legally prescribed processes. The draft documents were released by the federal government, following a public access to information request by environmental NGOs. Some NGOs have claimed that the integrated strategic environmental assessment of the Plan did not comply with public consultation requirements; however this has been rejected by the federal government and not been confirmed by the courts."<br>We would like to emphasize that this litigation processes in the courts are still ongoing. | Sentence added:<br>"Litigation is still ongoing." |

| **P-2 Governance** | |
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| Section 2.2.3 Stakeholder Engagement, page 25:<br>"As part of its dialogue with the Kaunertal municipality, in 2013 TIWAG collated and responded to a number of areas of stakeholder interest through a Frequently Asked Questions report (available on the municipality website)."<br>We would like to emphasize that this very website states that the questions were NOT sufficiently responded to by TIWAG (see Doc.012 of the documents WWF has sent to the assessors). | Sentence added to end of relevant paragraph:<br>"As the KXP was suspended, this dialogue with the municipality and the discussions on project benefits (see also topic P-10) is also unfinished at this stage." |
| Section 2.2.4 Conformance / Compliance, p.25:<br>"The project has no significant non-compliances. […] The process of submission of the EIS and review by the Authority is in keeping with legally established processes. The Authority concluded that the initially submitted EIS (2012 Revision 0) was not complete, and requested revision work to be done; this is a procedural matter, and is not a legal non-compliance."<br>From a legal point of view, it has to be emphasized that the compliance has not been confirmed by the Authority so far. The completeness check identified several points of current noncompliance with the federal EIA Act (see §6 UVP-G 2000 i.d.g.F.), and asked for revision. While it is true that this happens regularly, it can hardly be concluded that this would not be a question of non-compliance. | Second sentence referred to in comment, under Basic Good Practice, amended to read:<br>"The Authority concluded that the initially submitted EIS (2012 Revision 0) was not complete, and requested revision work to be done. Revisions required on Revision 0 have been made in the updated EIS (2015 Revision 1), but, along with all other aspects of the KXP EIS, will not be confirmed as fully compliant until such a determination is made by the Authority. At this point in time there are no identified non-compliances." |
| Section 2.2.4 Conformance / Compliance, p.26:<br>"TIWAG has experience specific to the KXP of an investigation into whether TIWAG was inappropriately sponsoring an activity in the municipality of Kaunertal for the purposes of getting municipal support for the KXP. This concern was investigated through the provincial auditor general and the courts, and no conclusive evidence was found against TIWAG or the Kaunertal mayor. It was, however, a cautionary experience for the corporation to avoid any perception of inappropriate processes; responses to this risk by TIWAG are reflected in their strengthening of their internal policies, guidelines and controls. "<br>The last sentence, i.e. that TIWAG did strengthen the internal policies, does not seem entirely coherent with the statement made on page 21, that there is no corporate policy concerning transparency issues. | The concern mentioned in the comment related to inappropriate sponsorship. There is plenty of evidence of TIWAG's strengthening of internal policies, as listed on page 21:<br>• Directive for Grants and Conflicts of Interest (2014), which includes requiring a lobbying register;<br>• Guidelines for Sponsorship (2016), specifying terms for sponsorships and requiring a sponsorships register; and<br>• Guidelines for Fraud (2016).<br>No change in text. |

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| **P-3 Demonstrated Need and Strategic Fit** | |
| Section 3.2.1 Assessment, p.32:<br>"The need for improved flood management is particularly relevant for the Ötztal, which has suffered from periodic floods (for example, in 1987 with 13 fatalities), and for the Inntal (for example, in 2005) [...] the combination of reducing the flood peak in the Ötztal by up to 80 m3/s through the diversion tunnels, increasing the flood buffer through additional storage in the Platzertal reservoir, and increasing the ability to manage additional floodwaters in the Gepatsch reservoir through a second tunnel to the Inn River and through increased flood retention space in the reservoir, is seen as effective in reducing flood risks"<br>There is new evidence concerning the benefit for flood management: on January 23th, 2017, the Provincial Government of Tyrol released the result of a large-scale study which found that retention reservoirs in small rivers from most of the Tyrolian valleys, including Upper Ötztal, has NO significant effect for flood mitigation in the Inntal (see https://www.bmlfuw.gv.at/forst/schutz-naturgefahren/alpretention.html, the full study should be available for public in April 2017) | The detailed studies for the KXP show that retaining 80$m^3$/s would have reduced the peaks of the 1987 flood at Sölden by approximately 26% and at Innsbruck by approximately 8%.<br>No change to text. |
| Section 3.2.1 Assessment, p.32:<br>"There are limited non-technical options for flood management in the area, such as flood retention in natural floodplains, because both the Ötztal and the Inntal are relatively narrow with high-value uses."<br>This is not entirely correct. Since 2006, a stakeholder dialogue is in place, coordinated by the provincial government, in order to identify options for ecological flood management, and several measures have already been implemented. | Sentence changed to:<br>“Some non-technical options for flood management in the area, such as flood retention in natural floodplains, have been realized over the past ten years, but these are limited in scale because both the Ötztal and the Inntal are relatively narrow with high-value uses.” |
| **P-4 Siting and Design** | |
| Scoring, page 41-42:<br>Following the logic of the Assessment, the scoring for P4 is not very clear: in the description of criterion 4.2.3 Stakeholder Engagement, as well as 4.2.4 Outcomes, there is stated "criteria [for analysis against proven best practise] met: no", which would be two gaps, but the evaluation of gaps says "1 significant gap". | The uncertainties described under 4.2.3 are a significant gap, but the same gap is already scored under P-1 and P-2. |
| Section 4.2.1 Assessment, page 38:<br>*"The opportunity to contribute to flood protection in the Ötztal and to a lesser extent, the Inntal"*<br>As already said for P3, page 32, there is new evidence concerning the benefit for flood management: on January 23th, 2017, the Provincial Government of Tyrol released the result of a large-scale study which found that retention reservoirs in small rivers from most of the Tyrolian valleys, including Upper Ötztal, has NO significant effect for flood mitigation in the Inntal (see https://www.bmlfuw.gv.at/forst/schutz-naturgefahren/alpretention.html , the full study should be available for public in April 2017) | See response to Comment 7 |

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| Section 4.2.2 Management, p.4:<br>"The list of avoidance, mitigation and compensation measures for impacted forests, moors, pastures and streams is extensive and has evolved considerably over time. Compensation measures also include, where compensation close to a project component is not possible, a number of activities in neighbouring valleys."<br>The assessment does not take into account that the mentioned list disrespects the cascading approach of measures to avoid, minimise, mitigate and compensate for negative environmental impact, which is reflected by the general HSAP criteria requirements. Out of 122 measures described and labelled according to this categorization, there are 04 measures for avoidance, 20 for minimisation rsp. mitigation, but 98 for compensation and offsetting. | Avoidance measures are not limited to those on this list. The most important ones are related to the siting and design of project components (for example, underground instead of aboveground construction).<br>No change to text. |
| **P-5 Environmental and Social Impact Assessment and Management** | |
| Section 5.1 Background Information, page 44:<br>"In Austria, hydropower plants larger than 10 MW require an Environmental Impact Assessment (EIA) and the Provincial Government is the competent authority to licence the project. Hydropower plants less than 10 MW do not require an EIA and licencing falls under the competence of the municipal government."<br>Just a minor remark, without relevance for the Kaunertal Project: this information is not correct, the limit for EIA obligation in Austria is 15 MW (10 MW under some specific circumstances, e.g. in case of accumulating effects with other existing or planned hydropower installations).<br>The competent authority for licencing HPP less than 15 MW is still the Province, for very small ones the District administration, but never the municipality. | Paragraph changed to:<br>"In Austria, hydropower plants larger than 15 MW require an Environmental Impact Assessment (EIA) and the Provincial Government is the competent authority to licence the project. Hydropower plants less than 15 MW do not require an EIA, and in cases the licencing falls under the competence of the District administration." |
| Section 5.1 Background Information, page 44:<br>"KXP should also follow the Alpine convention protocols, but these are not legally binding."<br>There clearly must be a misunderstanding - The Alpine Convention and its protocols are clearly legally binding! The Alpine Convention is an official act of International Law, ratified by the Republic of Austria, and entered into force in March 1995. The last of the Protocols have been ratified, and entered into legal force, in 2002. There are several cases of precedents for litigation because of non-compliance with the AC protocols. It is not comprehensible why it is stated the Convention protocols would not be legally binding. | Sentence changed to:<br>“KXP should also follow the Alpine Convention and its protocols.“ |

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| **P-7 Hydrological Resource** | |
| Section 7.2.1 Assessment & 7.2.2 Management, p.62-64:<br>"The incorporation of glaciology and climate change into hydrological planning demonstrates a long-term perspective. One of the benefits of the KXP is to manage increased glacier run-off. Run-off is predicted to increase, and move earlier in the year, up to the 2050s, and then decrease by the 2070s, but predictions strongly depend on the scenarios used."<br>We are happy to learn that climate change scenarios have been incorporated into hydrological planning (there is no public available information about this). However, we are puzzled by the statement of increasing runoffs up to the 2050s, and decreases by the 2070s; our own calculations (see Doc. 053 of the documents WWF has sent to the assessors) predict decreases in the run-off already around 2040, and this is confirmed by the scientific paper "Hydrological response of the Ötztal glacierized catchments to climate change" (DOI: 10.2166 /nh.2015.093, published in October 2016 which is co-authored by Dr. Huttenlau, member of the cited project MUSICAL II financed by TIWAG, and lead author of the study doc.290 in the present HSAP assessment report – in this document decreased run-offs are predicted for Obergurgl and Vent in the period 2040-2069 compared to 2010-2039 | This may be due to the differing conclusions of slightly different studies and scenarios. Text in third sentence changed to:<br>"Run-off is predicted to increase, and move earlier in the year, up to the 2040s, and then decrease in the period 2040-2069, but predictions strongly depend on the scenarios used". |
| **P-13 Project-Affected Communities & Livelihoods** | |
| Section 13.2.1 Assessment:<br>Page 98: "Much of the project area has a high alpine character[...] There are no settlements at this elevation, except for some houses near the Gurgler Ache site." Vs Page 99: "With the exception of the Platzertal, which is a largely natural and infrequently visited high alpine valley, all project areas are already affected by settlements, industrial uses, roads, ski lifts, hydropower installations, and other infrastructure"<br>There seem to be a small incoherence in the description - one time, it is said that there is little human activity that might be affected, on the next page it is stated there is too much human activity to classify the area as a natural and undisturbed one. We recommend to clear the information bias. | Not a contradiction. The first statement is about closeness of settlements to project infrastructure, the second about recreational values.<br>No change in text. |
| **P-16 Labour and Working Conditions** | |
| Section 16.2.2 Management:<br>Page 109: "The Betriebsrat at TIWAG has traditionally had a stronger role than work councils at similarly sized or other energy sector companies. It is involved in any change in the organisation as well as staffing and planning for large projects. Works Council members are represented on the Supervisory Board."<br>Just a side remark: this is not a particularity by TIWAG, but the Austrian Labour Legislation. | The background section for this topic (p.107) clearly states the role of the Betriebsrat in Austria: "As required by the Labour Act for all large companies in Austria, TIWAG's internal Workers Council (Betriebsrat), ensures that all regulatory aspects of labour protection are followed and implemented, and provides a conduit for grievances and other issues raised by staff."<br>No change in text. |

| **P-17 Cultural Heritage** | |
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| pages 114- 117:<br>17.2.1 Assessment: "the Platzertal area is classified with moderate to very high sensitivity because of the archaeological potential, soil and historic sites (e.g. Mesolithic hunter resting places, and the disused silver mine). The assessment concludes that reservoir filling and operation activities are likely to have an impact on the presumed alignment of Via Claudia Augusta, and on archaeological remains, particularly at Platzertal and on Mount Pirchhuettberg in the Gurgler area."[...]<br>17.2.2 Management: "Detailed archaeological explorations and excavations will only be undertaken prior to construction. A qualified consultant hired by TIWAG will prepare the detailed plans, and BDA will review them. Excavations and relocation of assets require a permit from BDA, and agreements with landowners." [...]<br>17.2.5 Outcomes: "Significant residual impacts are not expected for construction or operation on physical cultural resources if measures are correctly implemented. No impacts from vibrations are expected. There have not been archaeological or historical findings to date on existing project reservoirs or other recent construction projects in close proximity to the KXP. "<br>The different statements and conclusions in this chapter are not very comprehensible for us:<br>• the assessment confirmed that there are various highly sensitive areas potentially affected by the project (p.114);<br>• TIWAG has no experience with such a high sensitive area from existing reservoirs or recent projects (p.117);<br>• it seems that contacts with the competent Authority, the BDA, are planned but they have not been dealing with this questions so far (p.115);<br>• also, the list of interviews does not show an interview with a BDA representative; so why is it concluded that there might not occur any problems? | 17.2.1 Assessment: No change to text.<br>17.2.2 Management: No change to text.<br>17.2.5 Outcomes: See response in the row below regarding text changes in Outcomes. This clarifies the fact that both BDA and TIWAG have had previous experience in preparing studies in similar areas. BDA and TIWAG are to be in contact through the process. The lead assessor interviewed Mag. Tamara Senfter, who carries out archaeological works on behalf of BDA. |

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| Appendix C: Documentary Evidence, page 173:<br>"Doc.104 - TALPA Gnbr, Archaeological Diggings in the Längental (Kuehtai) 2009";<br>"Doc. 105 - TALPA Gnbr Kuehtai report, archaeological diggings for the Längental"<br>Another point which is not very comprehensible, why is the only Documentary evidence concerning P17 about Längental, which is not in the Project area, but related to another TIWAG project? Even more so as on p.117 it is said that:<br>"There have not been archaeological or historical findings to date on existing project reservoirs or other recent construction projects in close proximity to the KXP."? | Some modifications have been made to the Outcomes section to address this comment and the comment relating to outcomes in the above row. The Outcomes section now reads:<br>"Significant residual impacts are not expected for construction or operation on physical cultural resources if measures are correctly implemented. No impacts from vibrations are expected.<br>Artefacts that will be inundated will be documented, and possibly disseminated through the publications of articles under TIWAG's approval. TIWAG has published results for other recent projects, e.g. Kühtai. The Kühtai archaeological studies are also relevant to KXP given its proximity. Presentation of findings ex-situ will require BDA approvals. Local museums are usually interested in collecting findings e.g. the Tyrolean Provincial Museum, and the Fliess museum in Landeck.<br>Cultural landscapes will be permanently modified particularly in the upper Platzertal and upper Ötztal valleys. To offset the loss of land for Platzertal alpine farm, ground will be cleared, rocks removed and species-rich, well-structured pastureland will be created. These measures will be based on the Alpine pasture development concept drafted for Platzeralm. Impacts on the Platzertal cultural landscape will be avoided, and areas of alpine meadows affected will be compensated (see also topic P-19 Biodiversity and Invasive Species)." |

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| Section 17.2.3 Stakeholder Engagement, page 116:<br>"Planning for cultural heritage resources has involved appropriately timed, and often twoway, engagement with [...] and research organisations, particularly the University of Innsbruck that has an interest in mining."<br>At the University of Innsbruck, various research institutes are dealing with archaeology, sociocultural history of mountain agriculture, evolution of glaciers, water run-off and ecological habitats in the upper Ötztal area since the Ice Ages, etc. The Universities Research Center at Obergurgl concentrates on environmental and climatologic sciences, cultural, economical and historical research as well as studies about sociological aspects in the high mountain regions for scenario modelling, and part of the he national and international platform LTER/LTSER (Long-term Ecosystem Research, Long-term Socio-economic and Ecosystem Research).(see https://www.uibk.ac.at/afo/index.html.en ) Therefore we are a little puzzled to read the statement that the Universities interest is focussing on "mining". | Sentence in Outcomes changed to:<br>"Planning for cultural heritage resources has involved appropriately timed, and often two-way, engagement with BDA, landowners affected by the prospections, municipalities, the mining association, and research organisations, particularly the University of Innsbruck, who has an interest in archaeology, and sociocultural history of mountain agriculture." |
| **P-19 Biodiversity and Invasive Species** | |
| p.125 & 127:<br>19.2.1 Assessment: "According to Article 6 of the EU Habitats Directive, developments that are likely to cause significant effects on Natura 2000 sites require an 'appropriate assessment', and the Provincial Government will determine whether it is required. The assessment indicates that impacts on the resources protected by the Natura 2000 area and its conservation status are not expected."[...]<br>19.2.2 Management: "Measures were included in the KXP design to avoid impacts, for example: avoiding construction impacts on Natura 2000 areas during construction;"<br>Neither the EIS, nor any other study did evaluate if there is a risk of significant effects on Natura 2000 sites due to the underground diversion galleries. We do not know if there might by effects of drilling vibrations, given that many of the animals in the area are much more sensitive to vibrations than humans. It has simply never been assessed. The same is true for possible drainage effects due to diversion galleries, negatively effecting habitats and species of community interest. | No change to text.<br>Section 5.2.4 Outcomes indicates "Impacts of noise, vibration and dust on habitats and protected monuments are not considered significant."<br>Experts concluded that there will not be impacts from vibrations or excavations on the Natura 2000 area. |
| Section 19.2.1 Assessment, page 126:<br>"The assessment identified highly sensitive species such as: crickets (Tetrix turquoise and Tetrix tuerki) that may be present on dynamic gravel banks on the Ötztal; western capercaillie (Tetrao urogallus); cicadas (Pseudodelphacodes flaviceps); and species of ants, beetles, and grasshoppers (Chortippus pullus). The assessment found that a type of flush mire (Caricion bicoloris-atrofuscae) is not in the study area, but this is disputed by WWF."<br>As WWF emphasized in the interview, several other highly sensitive species in the area are not sufficiently taken into account in the EIS, and no mitigation or compensation measures are planned concerning those species. This include Tettigonia caudate, Pseudodelphacodes flaviceps, Alectoris graeca (Rock partridge) or Lagopus mutus helveticus (Alpine Rock ptarmigan). | No change to text.<br>*Pseudodelphacodes flaviceps* is mentioned in the text.<br>*Tettigonia caudate*, *Alectoris graeca*, and *Lagopus mutus* helveticus are also considered in the impact assessment. The assessors are not able to list all species considered in the findings, but used *Pseudodelphacodes flaviceps* as an example. |

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| Section 19.2.1, p.125<br>"According to Article 6 of the EU Habitats Directive, developments that are likely to cause significant effects on Natura 2000 sites require an 'appropriate assessment', and the Provincial Government will determine whether it is required. The assessment indicates that impacts on the resources protected by the Natura 2000 area and its conservation status are not expected."<br>These seem to be just conjectures, for no investigations were made on it. Long term effects are not known because there are studies on them. | The EIS has looked into potential effects on the Natura 2000 sites, and it does not foresee 'significant effects' (as defined in the EU Habitats Directive) on Natura 2000 sites. Ultimately, Provincial Government will determine if a more detailed assessment is required. |
| Section 19.2.1, p.126<br>"The assessment indicates that there is one possible endemic species of beetle, and six of spiders, but these have not been found."<br>Who states those are not found, the EIS declaration? There are other sources that indicate the contrary. | The surveys undertaken for the EIS did not find the prensence of these endemic species. |
| **P-20 Erosion and Sedimentation** | |
| Section 20.2.2, p.134<br>"The sediment studies and hybrid modelling (numerical and physical) of the diversion weirs at the Venter and Gurgler Ache have contributed to the development of operating rules for the sediment flushing gates during flood flows, to ensure sediment from these catchments does not reach the Gepatsch reservoir. The physical modelling has determined that the low level flushing gates should be operated after the flood peak when flows start to recede at around 70-80% of the peak flow. In addition, sediment transport modelling indicates that dredging in the Ötztal River may be required, and a plan is in place to monitor the effects of decreased flows in the flatter river reaches along the Ötztal River. The Sediment Management Concept (in EIS document B.04.20.1010) establishes the monitoring and potential dredging locations on the Inn River (2 locations) and in the Ötztal river. The potential locations that may need dredging during KXP operations include the Scheiber licensed aggregate extraction site downstream of Sölden (where extraction of river bed material takes place now), the town of Sölden and the confluence of the Venter Ache and Gurgler Ache (where the authorities already dredge in these areas when needed to avoid flooding), and at Längenfeld near the Aquadome (where dredging may be necessary every 10 years to ensure permissible river bed levels are maintained for adequate flood protection)."<br>Which ecosystems are influenced by the dredging operations, especially in the surrounding of Längenfeld?<br>Has it been taken into account that further measures will be necessary every 10 years? | Dredging is currently carried out at different locations along the Ötztal River to avoid flooding, as well as at the commercial gravel extraction and processing site. Dredging is (and will continue to be) minimized to avoid geomorphologic effects that may cause negative effects to river hydrodynamics and aquatic habitat. Monitoring of the river bed and sediment transport is and will continue to be ongoing in the river system. Modeling indicates that dredging may be required every 10 years and include the potential effects of climate change. Monitoring will indicate if dredging is required more or less frequently. |

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| Section 20.2.2, p.135<br>"The Gepatsch reservoir was built in the 1960's with a total volume of 138 Mm3 and has been monitored closely due to sedimentation and slope stability issues. After 50 years, the reservoir has lost 3 Mm3 of storage capacity."<br>What are the arrangements to prevent the sedimentation and slope stability? | Slope stability is currently monitored closely at Gepatsch reservoir using a "total station" that uses surveying equipment (located on the dam) that measures horizontal and vertical angles, along with the capability to measure distance with help of Electromagnetic Distance Measurement (EDM) system and detects slope movement surrounding the reservoir. Please refer to the topic on Infratrsucture Safety (P-8) which includes a discussion on lope stability.<br><br>The KXP project will not cause increased sediment transport into the Gepatsch reservoir. |
| Section 20.2.3, p. 136<br>"The design and operation of the diversion weirs at the Venter Ache and Gurgler Ache includes flushing gates that allow the accumulated sediment to be passed downstream and reach the Ötztaler Ache"<br>How fast is the rising water surface, in case of the initiation of the flushing gates? | Flood flows in the Venter Ache and Gurgler Ache will continue to be discharged over the weirs and not cause the downstream water depths and flows to change. The sediment accumulated behind the structure during lower flow periods will be allowed to pass downstreamn through a small flusing gate located at the bottom of the structure during higher flow periods. Flushing will take place when the floods begin to recede therefore water level rise would be similar to natural flows. Refer to the topic on Downstream Flows (P-23) for a discussion of the details of downstream flows. |

| **P-21 Water Quality** | |
|---|---|
| Section 21.2.1 Assessment, page 140:<br>"The project has identified opportunities to improve the ecological status of the river Inn with the regulation of hydropeaking, and improving water quality at Platzertal. […] During operation, water from upstream of the Platzertal reservoir, i.e. from Öbgrubenbach, will be diverted to provide a residual flow in Platzertal with similar quality to current flow, thereby avoiding the introduction of glacial water from Ötztal and Kaunertal into the valley."<br>From this statement, it is not very clear which water at Platzertal shall be improved in quality, and how? Neither in the rest of the present assessment document, nor in any other document we know, there is a hint of measures planned in regard of those small rivers other than to divert their riverbed due to the new reservoir, so how is this improving overall water quality? We acknowledge that it might be a good idea to improve wastewater treatment at Längenfeld, but this is completely independent from the Kaunertal expansion project. The only link might be financing through compensation measures, but this is already counted for in P10-Project benefits. Concerning Platzeralm, it is said on page 142 that the planned wastewater treatment facility has to be built due to construction works, i.e. is a measure necessary for impact mitigation (see P5), not a measure for improving water quality. | No change to text.<br>The water quality is generally good in the project area as described in the background section.<br>As mentioned in the findings:<br>• KXP will improve the ecological status of the Inn River in part relating to water quality characteristics, contributing to WFD objectives on the Inn River.<br>• The project will install a treatment facility downstream of the reservoir where domestic wastewater from the Alm buildings is currently discharged directly to the Platzerbach.<br>Since there will be a reduction of flows and an increased population and tourism, it is important to ensure that wastewater treatment at Längenfeld has enough capacity. Model predictions showed that this was one of the potential impacts in the long term considering the reduced flows and less diluting capacity. |
| **Appendix B: Verbal Evidence** | |
| page 161, interview 54, "Christoph Walder, WWF"<br>This is just a little, negligible detail, but as everybody else in the list of interviewed persons is listed with his/her academic titles and field of expertise, we would appreciate if the record could say "Mag. Christoph Walder, expert in River ecology, WWF", rather than "Christoph Walder, WWF" | Text amended as suggested to read: "Mag. Christoph Walder, expert in River ecology, WWF" |

# 3. Conclusions

The assessors concluded that some amendments will be made to the assessment report. The amended assessment report will be uploaded on the Protocol website www.hydrosustainability.com and will replace the version on which these comments were provided.

# ANNEX I: ORIGINAL COMMENTS RECEIVED

**WWF Austria comments to HSAP Report Kaunertal expansion**

***Comment 01:***

P1-Communications & Consultation, 1.2.2 Management, page 13-14:

*"TIWAG is operating a customer service centre with a toll free hotline to respond to all stakeholder questions, and not just questions by TIWAG retail customers. The service centre received 160 inquiries about the KXP between 2011 and 2016. A new database software for customer service management is due to be introduced shortly. If questions on the KXP cannot be covered by service centre staff, they are forwarded to responsible departments. Media inquiries are handled by a press office (a team of two). " [...] "If grievances are not resolved by TIWAG, they can be taken to the courts or into the political process"*

This customer service centre and hotline does not fulfil the good practise criteria of a grievance mechanism according to IFC guidelines (e.g. concerning project specifity, transparency and accountability, etc.); the IFC also explicitly states that project grievance mechanisms are NOT to be seen in the same line as dispute resolution in legal or political/administrative systems (see http://www.ifc.org/wps/wcm/connect/cbe7b18048855348ae6cfe6a6515bb18/IFC%2BGrievance%2BMechanisms.pdf?MOD=AJPERES&CACHEID=cbe7b18048855348ae6cfe6a6515bb18)

***Comment 02:***

P1-Communications & Consultation, 1.2.3 Stakeholder Engagement, page 15 :

*"There are numerous examples for two-way communications that resulted in siting and design changes (see topic P-4 Siting and Design), where stakeholder suggestions were considered technically and financially feasible."*

Unfortunately we do not have any knowledge of this examples for two-way communications, so we would like to know more about it, e.g. the specific description of one or two examples (who made which proposition that was taken into account)

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P1-Communications & Consultation, 1.2.4 Conformance / Compliance, page 17 :

*"Similarly, disclosure and consultations on the Water Management Framework Plan for the Upper Tyrol complied with legally prescribed processes. The draft documents were released by the federal government, following a public access to information request by environmental NGOs. Some NGOs have claimed that the integrated strategic environmental assessment of the Plan did not comply with public consultation requirements; however this has been rejected by the federal government and not been confirmed by the courts."*

We would like to emphasize that this litigation processes in the courts are still ongoing.

***Comment 04:***

P2-Governance, 2.2.3 Stakeholder Engagement, page 25 :

*"As part of its dialogue with the Kaunertal municipality, in 2013 TIWAG collated and responded to a number of areas of stakeholder interest through a Frequently Asked Questions report (available on the municipality website)."*

We would like to emphasize that this very website states that the questions were NOT sufficiently responded to by TIWAG (see Doc.012 of the documents WWF has sent to the assessors).

***Comment 05:***

P2-Governance, 2.2.4 Conformance / Compliance, p.25:

*"The project has no significant non-compliances. […] The process of submission of the EIS and review by the Authority is in keeping with legally established processes. The Authority concluded that the initially submitted EIS (2012 Revision 0) was not complete, and requested revision work to be done; this is a procedural matter, and is not a legal non-compliance."*

From a legal point of view, it has to be emphasized that the compliance has not been confirmed by the Authority so far. The completeness check identified several points of current non- compliance with the federal EIA Act (see §6 UVP-G 2000 i.d.g.F.), and asked for revision. While it is true that this happens regularly, it can hardly be concluded that this would not be a question of non-compliance.

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*"TIWAG has experience specific to the KXP of an investigation into whether TIWAG was inappropriately sponsoring an activity in the municipality of Kaunertal for the purposes of getting municipal support for the KXP. This concern was investigated through the provincial auditor general and the courts, and no conclusive evidence was found against TIWAG or the Kaunertal mayor. It was, however, a cautionary experience for the corporation to avoid any perception of inappropriate processes; responses to this risk by TIWAG are reflected in their strengthening of their internal policies, guidelines and controls. "*

The last sentence, i.e. that TIWAG did strengthen the internal policies, does not seem entirely coherent with the statement made on page 21, that there is no corporate policy concerning transparency issues.

***Comment 07:***

P3-Demonstrated Need & Strategic Fit, 3.2.1 Assessment, p.32:

*"The need for improved flood management is particularly relevant for the Ötztal, which has suffered from periodic floods (for example, in 1987 with 13 fatalities), and for the Inntal (for example, in 2005) […] the combination of reducing the flood peak in the Ötztal by up to 80 m3/s through the diversion tunnels, increasing the flood buffer through additional storage in the Platzertal reservoir, and increasing the ability to manage additional floodwaters in the Gepatsch reservoir through a second tunnel to the Inn River and through increased flood retention space in the reservoir, is seen as effective in reducing flood risks"*

There is new evidence concerning the benefit for flood management: on January 23th, 2017, the Provincial Government of Tyrol released the result of a large-scale study which found that retention reservoirs in small rivers from most of the Tyrolian valleys, including Upper Ötztal, has NO significant effect for flood mitigation in the Inntal (see

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This is not entirely correct. Since 2006, a stakeholder dialogue is in place, coordinated by the provincial government, in order to identify options for ecological flood management, and several measures have already been implemented.

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P4-Siting & Design as well as P5-ESIA & ESIM, scoring, page 41-42 rsp. 49-50:

Following the logic of the Assessment, the scoring for P4 is not very clear: in the description of criterion *4.2.3 Stakeholder Engagement*, as well as *4.2.4 Outcomes*, there is stated "*criteria [for analysis against proven best practise] met: no*", which would be two gaps, but the evaluation of gaps says "*1 significant gap*".

The same is found for P5 - *"criteria met: no"* for *5.2.3 Stakeholder Engagement* as well as *5.2.4 Outcomes*, but the evaluation of gaps only states "*1 significant gap"*

***Comment 10:***

P4-Siting & Design, 4.2.1 Assessment, page 38:

*"The opportunity to contribute to flood protection in the Ötztal and to a lesser extent, the Inntal"*

As already said for P3, page 32, there is new evidence concerning the benefit for flood management: on January 23th, 2017, the Provincial Government of Tyrol released the result of a large-scale study which found that retention reservoirs in small rivers from most of the Tyrolian valleys, including Upper Ötztal, has NO significant effect for flood mitigation in the Inntal (see https://www.bmlfuw.gv.at/forst/schutz-naturgefahren/alpretention.html , the full study should be available for public in April 2017)

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*"The list of avoidance, mitigation and compensation measures for impacted forests, moors, pastures and streams is extensive and has evolved considerably over time. Compensation measures also include, where compensation close to a project component is not possible, a number of activities in neighbouring valleys."*

The assessment does not take into account that the mentioned list disrespects the cascading approach of measures to avoid, minimise, mitigate and compensate for negative environmental impact, which is reflected by the general HSAP criteria requirements. Out of 122 measures described and labelled according to this categorization, there are 04 measures for avoidance, 20 for minimisation rsp. mitigation, but 98 for compensation and offsetting.

***Comment 12:***

P5-ESIA, ESIM, 5.1 Background Information, page 44:

*"In Austria, hydropower plants larger than 10 MW require an Environmental Impact Assessment (EIA) and the Provincial Government is the competent authority to licence the project. Hydropower plants less than 10 MW do not require an EIA and licencing falls under the competence of the municipal government."*

Just a minor remark, without relevance for the Kaunertal Project: this information is not correct, the limit for EIA obligation in Austria is 15 MW (10 MW under some specific circumstances, e.g. in case of accumulating effects with other existing or planned hydropower installations). The competent authority for licencing HPP less than 15 MW is still the Province, for very small ones the District administration, but never the municipality.

***Comment 13:***

P5-ESIA, ESIM, 5.1 Background Information, page 44:

*"KXP should also follow the Alpine convention protocols, but these are not legally binding."*

There clearly must be a misunderstanding - The Alpine Convention and its protocols are clearly legally binding! The Alpine Convention is an official act of International Law, ratified by the Republic of Austria, and entered into force in March 1995.. The last of the Protocols have been ratified, and entered into legal force, in 2002. There are several cases of precedents for litigation because of non-compliance with the AC protocols. It is not comprehensible why it is stated the Convention protocols would not be legally binding.

***Comment 14:***

P7-Hydrological Resource, 7.2.1 Assessment & 7.2.2 Management, p.62-64 :

*"The incorporation of glaciology and climate change into hydrological planning demonstrates a long-term perspective. One of the benefits of the KXP is to manage increased glacier run-off. Run-off is predicted to increase, and move earlier in the year, up to the 2050s, and then decrease by the 2070s, but predictions strongly depend on the scenarios used."*

We are happy to learn that climate change scenarios have been incorporated into hydrological planning (there is no public available information about this). However, we are puzzled by the statement of increasing runoffs up to the 2050s, and decreases by the 2070s; our own calculations (see Doc. 053 of the documents WWF has sent to the assessors) predict decreases in the run-off already around 2040, and this is confirmed by the scientific paper "*Hydrological response of the Ötztal glacierized catchments to climate change*" (DOI: 10.2166 /nh.2015.093, published in October 2016 which is co-authored by Dr. Huttenlau, member of the cited project MUSICAL II financed by TIWAG, and lead author of the study doc.290 in the present HSAP assessment report – in this document decreased run-offs are predicted for Obergurgl and Vent in the period 2040-2069 compared to 2010-2039

***Comment 15:***

P-13 Affected Communities & Livelihoods, 13.2.1 Assessment:

Page 98: "*Much of the project area has a high alpine character[…] There are no settlements at this elevation, except for some houses near the Gurgler Ache site."* Vs Page 99: *"With the*

*exception of the Platzertal, which is a largely natural and infrequently visited high alpine valley, all project areas are already affected by settlements, industrial uses, roads, ski lifts, hydropower installations, and other infrastructure"*

There seem to be a small incoherence in the description - one time, it is said that there is little human activity that might be affected, on the next page it is stated there is too much human activity to classify the area as a natural and undisturbed one. We recommend to clear the information bias.

***Comment 16:***

Labour & Working Conditions, 16.2.2 Management, page 109:

*"The Betriebsrat at TIWAG has traditionally had a stronger role than work councils at similarly sized or other energy sector companies. It is involved in any change in the organisation as well as staffing and planning for large projects. Works Council members are represented on the Supervisory Board. "*

Just a side remark: this is not a particularity by TIWAG, but the Austrian Labour Legislation.

***Comment 17:***

Cultural Heritage, 17.2.1 Assessment & 17.2.2 Management & 17.2.5 Outcomes, page 114-117:

*"the Platzertal area is classified with moderate to very high sensitivity because of the archaeological potential, soil and historic sites (e.g. Mesolithic hunter resting places, and the disused silver mine). The assessment concludes that reservoir filling and operation activities are likely to have an impact on the presumed alignment of Via Claudia Augusta, and on archaeological remains, particularly at Platzertal and on Mount Pirchhuettberg in the Gurgler area."[...] "Detailed archaeological explorations and excavations will only be undertaken prior to construction. A qualified consultant hired by TIWAG will prepare the detailed plans, and BDA will review them. Excavations and relocation of assets require a permit from BDA, and agreements with landowners." [...] "Significant residual impacts are not expected for construction or operation on physical cultural resources if measures are correctly implemented. No impacts from vibrations are expected. There have not been archaeological or historical findings to date on existing project reservoirs or other recent construction projects in close proximity to the KXP."*

The different statements and conclusions in this chapter are not very comprehensible for us: the assessment confirmed that there are various highly sensitive areas potentially affected by the project (p.114); TIWAG has no experience with such a high sensitive area from existing reservoirs or recent projects (p.117); it seems that contacts with the competent Authority, the BDA, are planned but they have not been dealing with this questions so far (p.115); also, the list of interviews does not show an interview with a BDA representative; so why is it concluded that there might not occur any problems?

***Comment 18:***

P-17 Cultural Heritage, Appendix C: Documentary Evidence, page 173:

*"Doc.104 - TALPA Gnbr, Archaeological Diggings in the Längental (Kuehtai) 2009"; "Doc. 105*

*- TALPA Gnbr Kuehtai report, archaeological diggings for the Längental"*

Another point which is not very comprehensible, why is the only Documentary evidence concerning P17 about Längental, which is not in the Project area, but related to another TIWAG project? Even more so as on p.117 it is said that "There have not been archaeological or historical findings to date on existing project reservoirs or other recent construction projects in close proximity to the KXP."?

***Comment 19:***

P-17 Cultural Heritage, 17.2.3 Stakeholder Engagement, page 116:

*"Planning for cultural heritage resources has involved appropriately timed, and often two- way, engagement with [...] and research organisations, particularly the University of Innsbruck that has an interest in mining."*

At the University of Innsbruck, various research institutes are dealing with archaeology, socio- cultural history of mountain agriculture, evolution of glaciers, water run-off and ecological habitats in the upper Ötztal area since the Ice Ages, etc. The Universities Research Center at Obergurgl concentrates on environmental and climatologic sciences, cultural, economical and historical research as well as studies about sociological aspects in the high mountain regions for scenario modelling, and part of the he national and international platform LTER/LTSER (Long-term Ecosystem Research, Long-term Socio-economic and Ecosystem Research).(see https://www.uibk.ac.at/afo/index.html.en ) Therefore we are a little puzzled to read the statement that the Universities interest is focussing on "mining".

***Comment 20:***

P-19 Biodiversity & Invasive Species, 19.2.1 Assessment & 19.2.2 Management, p.125 & 127:

*"According to Article 6 of the EU Habitats Directive, developments that are likely to cause significant effects on Natura 2000 sites require an 'appropriate assessment', and the Provincial Government will determine whether it is required. The assessment indicates that impacts on the resources protected by the Natura 2000 area and its conservation status are not expected."[...] "Measures were included in the KXP design to avoid impacts, for example: avoiding construction impacts on Natura 2000 areas during construction;"*

Neither the EIS, nor any other study did evaluate if there is a risk of significant effects on Natura 2000 sites due to the underground diversion galleries. We do not know if there might by effects of drilling vibrations, given that many of the animals in the area are much more sensitive to vibrations than humans. It has simply never been assessed. The same is true for possible drainage effects due to diversion galleries, negatively effecting habitats and species of community interest.

***Comment 21:***

P-19 Biodiversity & Invasive Species, 19.2.1 Assessment, page 126:

*"The assessment identified highly sensitive species such as: crickets (Tetrix turquoise and Tetrix tuerki) that may be present on dynamic gravel banks on the Ötztal; western capercaillie (Tetrao urogallus); cicadas (Pseudodelphacodes flaviceps); and species of ants, beetles, and grasshoppers (Chortippus pullus). The assessment found that a type of flush mire (Caricion bicoloris-atrofuscae) is not in the study area, but this is disputed by WWF. "*

As WWF emphasized in the interview, several other highly sensitive species in the area are not sufficiently taken into account in the EIS, and no mitigation or compensation measures are planned concerning those species. This include *Tettigonia caudate, Pseudodelphacodes flaviceps, Alectoris graeca* (Rock partridge) or *Lagopus mutus helveticus* (Alpine Rock ptarmigan).

***Comment 22:***

P-21 Water Quality, 21.2.1 Assessment, page 140:

*"The project has identified opportunities to improve the ecological status of the river Inn with the regulation of hydropeaking, and improving water quality at Platzertal. […] During operation, water from upstream of the Platzertal reservoir, i.e. from Öbgrubenbach, will be diverted to provide a residual flow in Platzertal with similar quality to current flow, thereby avoiding the introduction of glacial water from Ötztal and Kaunertal into the valley."*

From this statement, it is not very clear which water at Platzertal shall be improved in quality, and how? Neither in the rest of the present assessment document, nor in any other document we know, there is a hint of measures planned in regard of those small rivers other than to divert their riverbed due to the new reservoir, so how is this improving overall water quality? We acknowledge that it might be a good idea to improve wastewater treatment at Längenfeld, but this is completely independent from the Kaunertal expansion project. The only link might be financing through compensation measures, but this is already counted for in P10-Project benefits. Concerning Platzeralm, it is said on page 142 that the planned wastewater treatment facility has to be built due to construction works, i.e. is a measure necessary for impact mitigation (see P5), not a measure for improving water quality.

***Comment 23:***

Appendix B: Verbal Evidence, page 161, interview 54, "*Christoph Walder, WWF"*

This is just a little, negligible detail, but as everybody else in the list of interviewed persons is listed with his/her academic titles and field of expertise, we would appreciate if the record could say "Mag. Christoph Walder, expert in River ecology, WWF", rather than "Christoph Walder, WWF"

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# WWF comments to HSAP Report Kaunertal expansion

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This customer service centre and hotline does not fulfil the good practise criteria of a grievance mechanism according to IFC guidelines (e.g. concerning project specifity, transparency and accountability, etc.); the IFC also explicitly states that project grievance mechanisms are NOT to be seen in the same line as dispute resolution in legal or political/administrative systems (see http://www.ifc.org/wps/wcm/connect/cbe7b18048855348ae6cfe6a6515bb18/IFC%2BGrievance%2BMechanisms.pdf?MOD=AJPERES&CACHEID=cbe7b18048855348ae6cfe6a6515bb18)

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P7-Hydrological Resource, 7.2.1 Assessment & 7.2.2 Management, p.62-64 :

*"The incorporation of glaciology and climate change into hydrological planning demonstrates a long-term perspective. One of the benefits of the KXP is to manage increased glacier run-off. Run-off is predicted to increase, and move earlier in the year, up to the 2050s, and then decrease by the 2070s, but predictions strongly depend on the scenarios used."*

We are happy to learn that climate change scenarios have been incorporated into hydrological planning (there is no public available information about this). However, we are puzzled by the statement of increasing runoffs up to the 2050s, and decreases by the 2070s; our own calculations (see Doc. 053 of the documents WWF has sent to the assessors) predict decreases in the run-off already around 2040, and this is confirmed by the scientific paper "*Hydrological response of the Ötztal glacierized catchments to climate change*" (DOI: 10.2166 /nh.2015.093, published in October 2016 which is co-authored by Dr. Huttenlau, member of the cited project MUSICAL II financed by TIWAG, and lead author of the study doc.290 in the present HSAP assessment report – in this document decreased run-offs are predicted for Obergurgl and Vent in the period 2040-2069 compared to 2010-2039

Comment 15:
P-13 Affected Communities & Livelihoods, 13.2.1 Assessment:

Page 98: "*Much of the project area has a high alpine character[...] There are no settlements at this elevation, except for some houses near the Gurgler Ache site."* Vs Page 99: *"With the*

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*exception of the Platzertal, which is a largely natural and infrequently visited high alpine valley, all project areas are already affected by settlements, industrial uses, roads, ski lifts, hydropower installations, and other infrastructure"*

There seem to be a small incoherence in the description - one time, it is said that there is little human activity that might be affected, on the next page it is stated there is too much human activity to classify the area as a natural and undisturbed one. We recommend to clear the information bias.

Comment 16:
P-16 Labour & Working Conditions, 16.2.2 Management, page 109:

*"The Betriebsrat at TIWAG has traditionally had a stronger role than work councils at similarly sized or other energy sector companies. It is involved in any change in the organisation as well as staffing and planning for large projects. Works Council members are represented on the Supervisory Board. "*

Just a side remark: this is not a particularity by TIWAG, but the Austrian Labour Legislation.

Comment 17:
P-17 Cultural Heritage, 17.2.1 Assessment & 17.2.2 Management & 17.2.5 Outcomes, page 114-117:

*"the Platzertal area is classified with moderate to very high sensitivity because of the archaeological potential, soil and historic sites (e.g. Mesolithic hunter resting places, and the disused silver mine). The assessment concludes that reservoir filling and operation activities are likely to have an impact on the presumed alignment of Via Claudia Augusta, and on archaeological remains, particularly at Platzertal and on Mount Pirchhuettberg in the Gurgler area."[...] "Detailed archaeological explorations and excavations will only be undertaken prior to construction. A qualified consultant hired by TIWAG will prepare the detailed plans, and BDA will review them. Excavations and relocation of assets require a permit from BDA, and agreements with landowners." [...] "Significant residual impacts are not expected for construction or operation on physical cultural resources if measures are correctly implemented. No impacts from vibrations are expected. There have not been archaeological or historical findings to date on existing project reservoirs or other recent construction projects in close proximity to the KXP. "*

The different statements and conclusions in this chapter are not very comprehensible for us: the assessment confirmed that there are various highly sensitive areas potentially affected by the project (p.114); TIWAG has no experience with such a high sensitive area from existing reservoirs or recent projects (p.117); it seems that contacts with the competent Authority, the BDA, are planned but they have not been dealing with this questions so far (p.115); also, the list of interviews does not show an interview with a BDA representative; so why is it concluded that there might not occur any problems?

Comment 18:
P-17 Cultural Heritage, Appendix C: Documentary Evidence, page 173:

*"Doc.104 - TALPA Gnbr, Archaeological Diggings in the Längental (Kuehtai) 2009"; "Doc. 105 - TALPA Gnbr Kuehtai report, archaeological diggings for the Längental"*

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Another point which is not very comprehensible, why is the only Documentary evidence concerning P17 about Längental, which is not in the Project area, but related to another TIWAG project? Even more so as on p.117 it is said that "There have not been archaeological or historical findings to date on existing project reservoirs or other recent construction projects in close proximity to the KXP."?

Comment 19:
P-17 Cultural Heritage, 17.2.3 Stakeholder Engagement, page 116:

*"Planning for cultural heritage resources has involved appropriately timed, and often two-way, engagement with [...] and research organisations, particularly the University of Innsbruck that has an interest in mining."*

At the University of Innsbruck, various research institutes are dealing with archaeology, socio-cultural history of mountain agriculture, evolution of glaciers, water run-off and ecological habitats in the upper Ötztal area since the Ice Ages, etc. The Universities Research Center at Obergurgl concentrates on environmental and climatologic sciences, cultural, economical and historical research as well as studies about sociological aspects in the high mountain regions for scenario modelling, and part of the he national and international platform LTER/LTSER (Long-term Ecosystem Research, Long-term Socio-economic and Ecosystem Research).(see https://www.uibk.ac.at/afo/index.html.en ) Therefore we are a little puzzled to read the statement that the Universities interest is focussing on "mining".

Comment 20:
P-19 Biodiversity & Invasive Species, 19.2.1 Assessment & 19.2.2 Management, p.125 & 127:

*"According to Article 6 of the EU Habitats Directive, developments that are likely to cause significant effects on Natura 2000 sites require an 'appropriate assessment', and the Provincial Government will determine whether it is required. The assessment indicates that impacts on the resources protected by the Natura 2000 area and its conservation status are not expected."[...] "Measures were included in the KXP design to avoid impacts, for example: avoiding construction impacts on Natura 2000 areas during construction;"*

Neither the EIS, nor any other study did evaluate if there is a risk of significant effects on Natura 2000 sites due to the underground diversion galleries. We do not know if there might by effects of drilling vibrations, given that many of the animals in the area are much more sensitive to vibrations than humans. It has simply never been assessed. The same is true for possible drainage effects due to diversion galleries, negatively effecting habitats and species of community interest.

Comment 21:
P-19 Biodiversity & Invasive Species, 19.2.1 Assessment, page 126:

*"The assessment identified highly sensitive species such as: crickets (Tetrix turquoise and Tetrix tuerki) that may be present on dynamic gravel banks on the Ötztal; western capercaillie (Tetrao urogallus); cicadas (Pseudodelphacodes flaviceps); and species of ants, beetles, and grasshoppers (Chortippus pullus). The assessment found that a type of flush mire (Caricion bicoloris-atrofuscae) is not in the study area, but this is disputed by WWF. "*

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As WWF emphasized in the interview, several other highly sensitive species in the area are not sufficiently taken into account in the EIS, and no mitigation or compensation measures are planned concerning those species. This include *Tettigonia caudate, Pseudodelphacodes flaviceps, Alectoris graeca* (Rock partridge) or *Lagopus mutus helveticus* (Alpine Rock ptarmigan).

Comment 22:
P-21 Water Quality, 21.2.1 Assessment, page 140:

*"The project has identified opportunities to improve the ecological status of the river Inn with the regulation of hydropeaking, and improving water quality at Platzertal. […] During operation, water from upstream of the Platzertal reservoir, i.e. from Öbgrubenbach, will be diverted to provide a residual flow in Platzertal with similar quality to current flow, thereby avoiding the introduction of glacial water from Ötztal and Kaunertal into the valley."*

From this statement, it is not very clear which water at Platzertal shall be improved in quality, and how? Neither in the rest of the present assessment document, nor in any other document we know, there is a hint of measures planned in regard of those small rivers other than to divert their riverbed due to the new reservoir, so how is this improving overall water quality? We acknowledge that it might be a good idea to improve wastewater treatment at Längenfeld, but this is completely independent from the Kaunertal expansion project. The only link might be financing through compensation measures, but this is already counted for in P10-Project benefits. Concerning Platzeralm, it is said on page 142 that the planned wastewater treatment facility has to be built due to construction works, i.e. is a measure necessary for impact mitigation (see P5), not a measure for improving water quality.

Comment 23:
Appendix B: Verbal Evidence, page 161, interview 54, "*Christoph Walder, WWF"*

This is just a little, negligible detail, but as everybody else in the list of interviewed persons is listed with his/her academic titles and field of expertise, we would appreciate if the record could say "Mag. Christoph Walder, expert in River ecology, WWF", rather than "Christoph Walder, WWF"

**Alpenverein comments to HSAP Report Kaunertal expansion**

**In General**:

- How well does the project Kaunertal compared with similar projects in the overall view?
- Where are the biggest gaps without too much detail?
- Has the project been considered in relation to the water management framework (Wasserwirtschaftlicher Rahmenplan)

**In Detail:**

| Page | Sub-item | Quotation | Question |
|---|---|---|---|
| 125 | 19.2.1 | According to Article 6 of the EU Habitats Directive, developments that are likely to cause significant effects on Natura 2000 sites require an 'appropriate assessment', and the Provincial Government will determine whether it is required. The assessment indicates that impacts on the resources protected by the Natura 2000 area and its conservation status are not expected. | These seem to be just conjectures, for no investigations were made on it.<br>Long term effects are not known because there are studies on them. |
| 126 | 19.2.1 | The assessment indicates that there is one possible endemic species of beetle, and six of spiders, but these have not been found. | Who states those are not found, the EIS declaration? There are other sources that indicate the contrary. |
| 134 | 20.2.2 | The sediment studies and hybrid modelling (numerical and physical) of the diversion weirs at the Venter and Gurgler Ache have contributed to the development of operating | Which ecosystems are influenced by the dredging operations, especially in the |

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|---|---|---|---|
| | | rules for the sediment flushing gates during flood flows, to ensure sediment from these catchments does not reach the Gepatsch reservoir. The physical modelling has determined that the low level flushing gates should be operated after the flood peak when flows start to recede at around 70-80% of the peak flow. In addition, sediment transport modelling indicates that dredging in the Ötztal River may be required, and a plan is in place to monitor the effects of decreased flows in the flatter river reaches along the Ötztal River. The Sediment Management Concept (in EIS document B.04.20.1010) establishes the monitoring and potential dredging locations on the Inn River (2 locations) and in the Ötztal river. The potential locations that may need dredging during KXP operations include the Scheiber licensed aggregate extraction site downstream of Sölden (where extraction of river bed material takes place now), the town of Sölden and the confluence of the Venter Ache and Gurgler Ache (where the authorities already dredge in these areas when needed to avoid flooding), and at Längenfeld near the Aquadome (where dredging may be necessary every 10 years to ensure permissible river bed levels are maintained for adequate flood protection). | surrounding of Längenfeld?<br><br>Has it been taken into account that further measures will be necessary every 10 years? |
| 135 | 20.2.2 | The Gepatsch reservoir was built in the 1960's with a total volume of 138 Mm3 and has been monitored closely due to sedimentation and slope stability issues. After 50 years, the reservoir has lost 3 Mm3 of storage capacity. | What are the arrangements to prevent the sedimentation and slope stability? |
| 136 | 20.2.3 | The design and operation of the diversion weirs at the Venter Ache and Gurgler Ache includes flushing gates that allow the accumulated sediment to be passed downstream and reach the Ötztaler Ache | How fast is the rising water surface, in case of the initiation of the flushing gates? |

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# Hydropower Sustainability Assessment Protocol Official Assessment TIWAG – Tiroler Wasserkraft AG Kaunertal Expansion Project

## Alpenverein comments to HSAP Report Kaunertal expansion

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