

7. Action Plan


Up to December 2023, the Concessionaire has resolved some actions remaining from the previous biannual report’s action plan. The Concessionaire is making efforts to close gaps for actions still in progress. The action plan has been updated based on the site visit carried out in January 2024 and the desktop review. The status of the activities is shown in Table 6 and has been evaluated with the following color coding.

● Solved
 ● On Track
 ● Pending
 ● New action



Table 6. Action Plan

ID	Proposed Action	Deadline	Arup’s Observations on Status (up to December 2023)	Status
1	<p>Property Acquisition- Compensation mechanisms: The Concessionaire is complying with the resettlement processes and land acquisition according to the national Resolution no. 545, 2008 - ANI and the appendixes 7 and 8 for the Concession Agreement. The Concessionaire should evaluate economic, legal, and social aspects of the new resettlement properties and follow up the adaptation of their owners for at least one year.</p> <p>Arup request the Concessionaire to report in the next period all the strategies are being implemented for the relocation processes in UF 5, the approval of the EER regarding delays in the construction schedule and the results of the negotiation process (“ amigable componedor ”).</p> <p>UF: 5 PS/EP:PS5</p>	Biannual – Next E&S report.	<p>During this period, the Concessionaire continued working on the relocation of Social Units. To date, 99% of social units in UF 5 have been relocated. The signed agreements have helped guarantee that socioeconomic compensations are given to the affected communities. This action is marked as “on track” until all resettlements and relocations are finished and the Concessionaire completes the follow-up visits</p>	●
2	<p>Archaeology: On June 18th, 2019, archaeological rescue activities started in the area denominated “El Indial” (Tesalia intersection UF 2 - UF3.1). Considering that it is not possible to estimate a date of termination of the archaeological activities, since it depends on the findings of each exploration, the Concessionaire has an EER approved on December 20th, 2019, that gives additional 2 months and 24 days to complete works once archaeological activities are completed.</p> <p>Regarding La Caucana archeological site and considering the Concessionaire didn’t monitor the archeological material in an appropriate way, Arup requests the Concessionaire to continue reporting the progress and management of the archaeological activities and findings.</p> <p>UF: All PS/EP:PS8</p>	Biannual – Next E&S report.	<p>The activities have continued following Resolution 0401 which grants ownership of archaeology licenses to the Concessionaire. Inventory for archaeological material recovered for UFs 2.3, 3.1, 3.2 and 4 have been annexed to the information sent by the Concessionaire.</p> <p>The Concessionaire sent information regarding ICANH’s visit to the archaeological risk areas and no further requirements were prescribed. As stated by the Concessionaire, given that no other requirements have been bestowed; they continued with activities such as monitoring, archeological inspections, and activities regarding public archeology in the areas to better safeguard archeological chance finds.</p> <p>This action is marked as “solved” and all topics will continue to be reviewed within the norm until Final Report approvals are evidenced for all licenses. It is</p>	●



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			important that if any new archeological finding is recorded or any affectations occur these be reported to Arup.	
3	Environmental sanctioning process- Trompeta Bridge: In November 2018, ANLA opened a punitive process related to the construction of the Trompeta's bridge piles in UF 1. It is within the licensed area, but the construction activity was not allowed in the environmental license. In Arup's opinion considering that the UF 1 construction activities were finished, the sanctioning process does not represent a high risk in the development of the project. The Concessionaire must review the legal process and report the advances and response issued to the environmental authority in the next monitoring report. UF : 1 PS /EP: PS1	Biannual – Next E&S report.	There has not beet material progress since November 2023. Arup will continue tracking this process until its official closure.	●
5	Working conditions – work force layoff: Due to the end of construction works some of the UFs, during the evaluated period the Concessionaire began to implement the staff layoff programs which included different trainings. Arup request the Concessionaire to report all the programs, activities, statistics, and effectiveness of the implemented measurements. UF: ALL PS/EP: PS2	Biannual – Next E&S report.	In this period, the Concessionaire organized meetings with project workers to inform them about the project's current progress. Additionally, the report for Pacifico 3 includes the layoff schedule for 2024. Arup opines that the Concessionaire is aligned with PS2 on this matter. However, it is advisable to regularly report on all strategies implemented to minimize the effects of layoffs on employees, including statistics on actions taken.	
6	Water treatment in Tesalia Tunnel	N/A	Action solved during the January-June 2023 period.	
7	Water management – El Cairo aqueduct: The Concessionaire received the PQR No. 10-78 (May 5 th , 2019) related to the petition of information of the community El Cairo about the water flow of a waterbody near the entrance portal of Tunnel Tesalia. Arup requests the Concessionaire to submit all the technical studies about the watercourse lithology and water quality characterization and a report all the implemented measurements that guarantee the water availability and quality. UF: ALL PS/EP: PS1, PS3	Immediately – Next Technical report.	The Concessionaire has finished a definitive design for a permanent solution at El Cairo and expects to submit it to Corpocaldas in the next period. Nevertheless, this community benefited from the regional aqueduct pilots that were put into operation in December 2023. The Concessionaire keeps monitoring Tesalia waterbodies and checks communities' satisfaction periodically. This action is remains "on track" until an official approval from Corpocaldas is received.	●
8	Environmental sanctioning process- ready mix concrete plant: The Concessionaire has an environmental sanction procedure with ANLA (Resolution 02094, October 21 st , 2019) that has not ended in economic sanctions but are a risk for the project's environmental compliance and reputation. This sanction procedure was due to the operation of a ready-mix concrete plant not approved in the environmental license of UF 2. UF: ALL PS/EP: PS1, PS3	Biannual – Next E&S report.	There has not beet material progress since March 2023. This action remains "on track".	●
10	Flow rates decrease near Tesalia Tunnel: In August 2020, the communities (including El Cairo) raised several PQRS related to an alleged decrease in groundwater flow rates and the water supply near the Tesalia Tunnel.	Immediately- Next	The Concessionaire has verified that the aqueduct connection pilot programs are functioning, although the communities' water supply is not reliant on them.	

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	<p>Immediately, the Concessionaire activated the mitigation measures approved in the Environmental License to guarantee communities water access and start developing a hydrogeological study to determine if this impact is caused by the construction of the Tunnel. Arup requires the Concessionaire to continue to provide the information related to (i) the hydrological and technical studies that determine the cause, impacts, and risks, (ii) mitigation and compensation implemented measures, (iii) interagency strategies, and the (iv) communications with environmental authorities, communities, and stakeholders. It is necessary to consider a scenario analysis and action plan in case of this issue is scaled up to a Court and the precautionary principle is declared. UF: 2.2 PS/EP: PS1-3-4</p>	<p>Technical report.</p>	<p>Additionally, Arup has identified appropriate measures for engaging with and disclosing information to the affected communities. Furthermore, monthly monitoring of nearby waterbodies is still being conducted in accordance with the environmental license. As a result, Arup considers this matter to be "solved," but encourages the Concessionaire to continue these positive actions in order to prevent any future impacts.</p>	
15	<p>Land acquisition and offset KPI near the Tesalia tunnel: During a previous field visit carried out by Arup, the Concessionaire reported that it was contemplating the acquisition of land near the Tesalia tunnel to reduce water pressure in the area due to crop cultivation. They also commented on implementing environmental offsets in that same property. The Concessionaire proposes this measure to contribute to the prevention of future impacts to the water body. This is also expected to contribute in some manner to the ecological restoration of the area. Arup recommends impact indicators for this measure if it is allowed and compensations for forestry use to be implemented. They can be considered for water quantity and flows, as well as for the development of plant species (e.g., percentage of survival). PS/EP: PS3-4</p>	<p>Biannual – Next E&S report.</p>	<p>The KPI proposed by the Concessionaire, as part of the environmental management plan approved by CORPOCALDAS, serve as a suitable measure for assessing the net gain of biodiversity and enrichment of the area, according to Arup. The properties acquired near Tesalia have a dual purpose of restoring ecosystem services in modified habitats and safeguarding the water supply in nearby water springs. While this action has been marked as "solved" under PS3 provisions, Arup suggests that the Concessionaire should continue monitoring KPIs to keep track of the status of these properties and the progress of ecological restoration efforts.</p>	
19	<p>Update on Environmental Offsets: For previous period, Arup did not receive an update on the progress status of the Concessionaire's environmental compensation decreed by ANLA and local authorities. This is important for compliance with both national and international standards. Even though there are no effects on the schedule or fines up to June 2022, Arup must receive this information to validate the development of each of the compensation measures agreed by the Concessionaire. UF: All PS/EP: PS6</p>	<p>Biannual – Next E&S report.</p>	<p>Most environmental offset plans have not been executed yet, even though UFs 1, 2, 3 and 4 have finished construction activities. The main reason for delays in offset completion is the availability of economic resources from the ANI environmental sub-account. Arup will continue requesting updated information to each plan regarding:</p> <ul style="list-style-type: none"> • Alternative approaches to entities (CARs, ANLA, Supervisor, etc.) and further announcements from them. • All information related to the current environmental offset budget, environmental sub-account from ANI and workshops held with the Supervisor in order to reach a consensus on this issue. • More detailed information concerning other environmental activities to be developed aside 	

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			<p>from only the land acquisition i.e. measurable conservation outcomes such as the number of trees to be planted and fauna/flora monitoring.</p> <ul style="list-style-type: none"> • Updates for applicable UFs should not only include indicator performance but also descriptions on how the offsets will mitigate the impact the Project has on biodiversity and which specific actions (planting, restauration, rehabilitation, etc.) will take place, for compliance with PS6. <p>During this period the Concessionaire shared properties acquired and hectares acquired.</p> <p>The action will be marked as “on track” until all properties are acquired.</p>	
20	<p>Control over forestry use: For this period, Arup conducted a field visit and did not find evidence that the control measures for forestry use are being applied. The Concessionaire is requested to validate this situation and report it for the next monitoring period. UF: All PS/EP: PS6</p>	Biannual – Next E&S report.	<p>The Concessionaire sent photographic record on forestry use this period. Also, the Concessionaire informed that at present forestry use is at 99.4% of trees planned to be cut.</p> <p>The action is marked as "solved" .</p>	
23	<p>Accidents: Considering the increase of accidents, especially from the contractors, Arup requests from this time forth the Concessionaire should report within every biannual report supporting information related to the breakdown of each of the accidents presented (type of accident, causes, consequences, action plan). Arup invites the Concessionaire to be proactive in H&S activities to prevent and minimize accidents in the Project. UF: All PS/EP: PS2</p>	Biannual – Next E&S report.	<p>Arup believes that the Concessionaire could improve their performance on this matter, thus this action is marked as “on track”. The Concessionaire should provide additional details in the upcoming report regarding their efforts to enhance health and safety performance. This should include information on their adherence to the accident action plan and on ARL's response.</p>	●
25	<p>Fauna protection and follow-up: Aside from the wildlife repelling and rescue, Arup found no information regarding the implementation and effectiveness of fauna passages along the Project. Arup considers it as one of the most important parts of the biodiversity assessment, as it can measure the impacts on biodiversity caused by the Project construction. Therefore, Arup emphasizes submitting this information, including analysis of the results obtained. UF: All PS/EP: PS6</p>	Biannual – Next E&S report.	<p>No progress on construction of planned wildlife crossings was evidenced in this period. However, the environmental authority pronounced itself on the matter and approved 12 of the 20 proposed wildlife crossings in UF5.</p> <p>The action is marked as “on track” until construction of all wildlife crossings is reported.</p> <p>The IESC finds that the wildlife crossings process is taking longer than expected. The Concessionaire argues that they will be installed once the UFs begin the O&M stage.</p>	●

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27	<p>Exotic invasive species: UF2.2 has reported presence of the exotic invasive species <i>Litobathes catesbeianus</i>. The Concessionaire's environmental team will need to report presence of this species in sites where it has not been reported yet. The information should be reported within the Anexo B. IFC as a compliance of the IFC PS 06.</p>	Biannual – Next E&S report	<p>The Concessionaire has executed visual site visits to identify if the invasive species bullfrog is located in The Project in 2022 and 2023. During these site visits, the Concessionaire did not see any bullfrog specimens.</p> <p>For following periods, the Concessionaire shall continue with these site visits. The IESC recommends that monitoring is done more often to see if there has been increase in the distribution of the bullfrog.</p> <p>The action is marked as “solved” but Arup will continue its monitoring.</p>	
28	<p>Internal Grievance Mechanism: The Concessionaire reports having no significant claims from workers. However, Arup emphasizes for the following period to send information regarding the registration of these complaints in the Internal Complaints Mechanism. Complaints can be attached by type, major cause, whether they come from the EPC, Contractors, or the Concessionaire itself. Arup also expects to receive a report summarizing the management of each measure. UF: All PS/EP: PS2</p>	Biannual – Next E&S report	<p>No internal complaints were reported during this semester. However, Arup advises verifying a complaint brought up by an ex-employee and investigating whether it is linked to their termination conditions.</p> <p>Moreover, Arup encourages the Concessionaire to keep providing updates on the internal grievances status, implement the actions mentioned in the last meeting minutes and train workers on how, why, and when to submit any claim, question or request.</p>	
29	<p>GHG emissions: The GHG calculation should be wider, including more aspects rather than only fossil fuel consumption. The quantification should be based on international methodologies such as GHG Protocol and include a document of data interpretation and Concessionaire's good practices. Also, considering the IFC PS3 requirements and the stage of the Project, Arup requires the Concessionaire to present the cost-effective alternatives to reduce GHG emissions during the operation of the Project. UF: All PS/EP: PS3</p>	Biannual – Next E&S report	<p>During July to December 2023, the Concessionaire disclosed their Scope 1 and Scope 2 GHG emissions. Arup has noted an increase in emissions due to UF5 construction activities, but also acknowledges that the Concessionaire has taken steps to reduce their O&M footprint by incorporating renewable energy assets in tolls and CCOs, utilizing green power certificates, and conducting energy efficiency reviews. Arup recognizes these efforts as a positive improvement in GHG reduction and accounting but suggests that the Concessionaire should develop a more comprehensive GHG model that includes other emissions sources beyond fuel and energy consumption. Additionally, comparing different scenarios can help the Concessionaire understand the extent to which they are avoiding emissions. This actions is marked as “on track”, as Arup expects that these recommendations are included in the GHG</p>	

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30	Water consumption: Arup requires the Concessionaire to present the strategies that aimed at conservation measures, alternative water supplies, water consumption offsets, among others. The Concessionaire may support a part of these requirements by presenting the strategies to comply with PS3 (KPI follow-up and monitoring evidence). Other strategies to reduce water that are not cover by the PUEAA should also be submitted by the Concessionaire. UF: All PS/EP: PS3	Biannual – Next E&S report	The Concessionaire has implemented the Program for the Efficient Use and Saving of Water (PUEAA), which includes strategies to reduce water consumption. Arup acknowledges this action as a positive step towards water conservation, hence, the this is marked as “solved”. However, Arup encourages the Concessionaire to continue reporting on their progress and to ensure that the potential quantities saved through the implementation of the PUEAA are carefully monitored and tracked.	
35	Use of glyphosate in weeds management	N/A	Action solved during the January-June 2023 period.	
36	Internal Grievance Mechanism trainings: For next period, trainings on internal grievance mechanism should be performed. Workers need to learn how, why, and when to submit any claim, request, question, etc. UF: All PS/EP: PS2, EP2, EP3	Biannual – Next E&S report	Due to duplicity, this action has been closed and the Concessionaire's actions are being recorded in action 28.	
37	Activities to ensure mitigation of impacts to social actors affected by land acquisition processes: The concessionaire has implemented adequate acquisition, resettlement and compensation plans aligned with PS5. However, Arup considers the concessionaire should report an update on security of tenure for social units that have been relocated. UF: All PS/EP: PS5, EP2, EP3	Biannual – Next E&S report	The Concessionaire has an approved procedure by ANI where there are 7 different options to guarantee housing reestablishment and tenure adapted to the project's context and area of influence. Information from the site visits of guidance and support from the official registry from “carta venta”, was also provided. It is important that the Concessionaire continues informing Arup on the different beneficiaries of each option accepted, and the guidance, support and follow-up carried out. This action is marked as “solved”.	
38	Archeological Licenses	N/A	Action solved during the January-June 2023 period.	
39	UF3.1 archeological updates: UF3.1 sites with soil removal that are not under ICANH licensing may impose a gap with PS8. In November 2022, ICANH informed the Concessionaire that given the soil works are because of a landslide and civil works to stabilize the area need to be done, the Project's archeological team, as a preventive measure, shall permanently accompany civil works. In case archeological material is found the team shall implement the “Protocol for the Management of Fortuitous Archeological Heritage Findings” established by the ICANH. The IESC will need detailed updates on communications with ICANH on the issue and reports on findings of archeological material an management of the situation and civil works. UF: All PS/EP: PS8, EP2, EP3	Biannual – Next E&S report	No new requirements were bestowed upon the Concessionaire. Given that the site was already in the O&M phase and that it had been declared as a site with low probability of archeological vestiges, the Concessionaire has continued with monitoring and inspection when soil removal activities take place. No new findings have taken place, and the Concessionaire has sent the information in the Action plan follow-up matrix, in their Social Management report and through Annex 39. If there are any significant findings or if any extra requirements are imposed through ICANH the	

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			<p>Concessionaire should report them to Arup. These topics will continue to be reviewed within the norm. This action is marked as "solved" given the availability of the required information.</p>	
40	<p>Disaster Management Plan training: Arup considers that the Project has adequate measures for prevention and action in case of emergencies and disasters. However, the IESC considers that there could be improvements in the dissemination of information. Arup requests updated information or evidence related to trainings associated with the Disaster Management Plan and Contingency Plan and to report the community at least once a year on implementing on impacts, risks or matters that may affect them. UF: All PS/EP: PS1, EP2, EP3</p>	Biannual – Next E&S report	<p>The Concessionaire has implemented social risk and hazard trainings in case a public order event, risk, or dangers, occurs. The training and socializations have been reported as completed with collaborators but the Concessionaire has stated that they have not updated information on emergency training and socialization, or on any of the drills that should be carried out as part of the Disaster Management Plan.</p> <p>It is important that for the next monitoring period the Concessionaire updates this information.</p>	
41	<p>Identification of Climate Change Risk Assessment for the Project: Arup considers that rainfall and floods are having a significant impact on the Project, since the Concessionaire has repeatedly requested urgent measures to adapt bridges and other works to erosion, flooding and mass movements. It is important to carry out a risk study of climatic events, as they have an impact on the value of the Project and potential cost overruns, as well as on the safety of users and communities. The IESC recommends that the Concessionaire submit an analysis on this aspect for the next period, as well as documentary evidence on the actions taken between January and July 2023 to remedy the effects and prevent future damages. UF: All PS/EP: PS1, EP2, EP3</p>	Biannual – Next E&S report	<p>Arup acknowledges that the Concessionaire has provided evidence of their efforts to enhance the of the road assets. They conduct monthly monitoring to identify potential critical points and employ georeferencing equipment to track key situations. Additionally, the Concessionaire is proactively addressing construction sites with design adaptations to prevent river affectations in various UFs. Arup considers this action as "solved" and encourages the Concessionaire to gather climate change risk data to proactively anticipate physical and transitional risks, given that the O&M stage for the entire project might start in 2024.</p>	
42	Air pollution prevention and road safety	Biannual – Next E&S report	The Concessionaire provided Arup with protection measures for air pollution prevention.	
43	<p>Current update on Zodme Saibo contingency: Considering the information shared until this semester, the Concessionaire will keep Arup informed regarding the progress or management made for the Zodme Saibo contingency. The Concessionaire informed that it has not been possible to properly address the contingency because there is no authorization from the owner to access the property. UF: 4 PS/EP: PS3</p>	Biannual – Next E&S report	<p>A meeting was convened by the Concessionaire with the El Saibo property owner and CORPOCALDAS to discuss the access required to address the ZODME contingency. During the meeting, the owner requested to be kept informed about the geotechnical studies and the final constructive solutions, with a copy to be sent to CORPOCALDAS. All parties agreed to this request and the Concessionaire is scheduled to commence activities on January 15, 2024. This action has been marked as "on track" until a final solution is implemented.</p>	

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44	<p>Soil protection improvements: Considering the site visit findings, Arup requires evidence of the actions taken to improve soil protection management in all work sites open in the Project. It should include trainings and lectures to employees.</p> <p>UF: All PS/EP: PS3</p>	Biannual – Next E&S report	The measures taken by the Concessionaire to prevent soil pollution were appropriately addressed and supported by evidence. Although Arup identified some minor areas for improvement during the site visit in January 2024, overall, the Concessionaire is managing this aspect effectively, and their environmental team has established a protocol to rectify any deviations. Arup considers that such deviations do not pose a significant risk. This issue is now marked as "solved," and Arup encourages the Concessionaire to continue reporting any soil protection measures, particularly in construction sites and camps.	
45	<p>Water occupation- La Ley bridge: In Arup's opinion, a proper water management consists of canalizing and diverting the water body so that it would not come into contact with materials and the construction activity itself. Therefore, Arup requires the Concessionaire to submit documentation and photographic record to prevent water pollution in water occupation activities in the Project, especially at La Ley bridge in UF5.</p> <p>UF: All PS/EP: PS3</p>	Biannual – Next E&S report	The construction activities at La Ley Bridge are nearing completion, and the Concessionaire has provided proof of improved protective measures near the waterbody. During the site visit in January 2024, Arup was able to verify these upgrades. As a result, this issue has been marked as "solved." However, it is recommended that the Concessionaire continues to implement such measures for any future watercourse occupations or construction activities near waterbodies.	