European Investment Bank

CM Complaints Mechanism

REVENTAZÓN
Hydroelectric Project
– Costa Rica

Complaint
SG/E/2016/18

Complaints Mechanism - Complaints Mechanism - Complaints Mechanism - Complaints Mechanism

CONCLUSIONS REPORT

17 July 2019

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External Distribution
Complainants
Intermediary
Promoter

Internal Distribution
Management Committee
Secretary General
Inspector General
EIB services concerned

The EIB Complaints Mechanism

The EIB Complaints Mechanism is designed to provide the public with a tool enabling alternative and pre-emptive resolution of disputes in cases in which members of the public feel that the EIB Group has done something wrong, i.e. if they consider that the EIB has committed an act of maladministration. When exercising the right to lodge a complaint against the EIB, any member of the public has access to a two-tier procedure, one internal – the Complaints Mechanism Division (EIB-CM) – and one external – the European Ombudsman (EO).

Complainants that are not satisfied with the EIB-CM's reply have the opportunity to lodge a complaint of maladministration against the EIB with the European Ombudsman.

The EO was "created" by the Maastricht Treaty of 1992 as an EU institution to which any EU citizen or entity may appeal to investigate any EU institution or body on the grounds of maladministration. Maladministration means poor or failed administration. This occurs when the EIB Group fails to act in accordance with the applicable legislation and/or established policies, standards and procedures, fails to respect the principles of good administration or violates human rights. Some examples, as set out by the European Ombudsman, are: administrative irregularities, unfairness, discrimination, abuse of power, failure to reply, refusal to provide information, unnecessary delay. Maladministration may also relate to the environmental or social impacts of the EIB Group's activities and to project cycle-related policies and other applicable policies of the EIB.

The EIB Complaints Mechanism is designed not only to address non-compliance by the EIB with its policies and procedures but also to endeavour to solve the problem(s) raised by complainants such as those regarding the implementation of projects.

For further and more detailed information regarding the EIB Complaints Mechanism, please visit our website: http://www.eib.org/about/accountability/complaints/index.htm

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EXECUTIVE SUMMARY

In September 2016, the Complainants lodged a complaint with the EIB's Complaints Mechanism ("EIB-CM") concerning the Reventazón Hydroelectric ("project") in Costa Rica. The Lancaster Farm includes two protected wetlands (the "Lancaster Lagoons") that are located within the area of influence of the project. The Complainants have presented four allegations of negative project impacts: **(1)** non-compliance of the project with the EIB's nature protection standards; **(2)** failure to reconstruct the Mesoamerican Biological Corridor; **(3)** non-compliance of the project with the obligation to remove the vegetation from the reservoir area, and corollary impacts on the greenhouse gas emissions profile of the project; and **(4)** failure to conduct land acquisition in line with the EIB's Standards. The EIB-CM enquired about the EIB's appraisal and monitoring of the aforementioned project impacts in light of the EIB's Environmental and Social Standards.

The project is the largest hydropower plant in Central America, with an installed capacity of 305.5 MW, a medium-sized reservoir and a large dam. Commercial operation started in 2016. The EIB is expected to close the technical monitoring of the project in 2019, upon receipt of the project completion documentation to the satisfaction of the Bank. The project is also financed by the Inter-American Development Bank (IDB), the International Finance Corporation (IFC) and the Central American Bank for Economic Integration (CABEI or the Intermediary). CABEI has intermediated the EIB's financial resources for the project pursuant to the Central America Climate Change Framework Loan Agreement (CCFL). The project's environmental and social (E&S) framework was developed in accordance with IDB and IFC Standards, following on from the early involvement and technical assistance of the World Bank Group.

The complaint to the EIB-CM followed similar requests from the same Complainants to the independent accountability mechanisms of IDB (MICI) and IFC (CAO). The EIB-CM carried out a joint fact-finding mission with MICI and CAO in 2016, issued an initial assessment report in 2017, and reviewed the documents available at the investigation stage of the complaints procedure. At the time of this report, CAO is reviewing the compliance of the project-related land acquisition with IFC Standards[1]. Accordingly, the EIB-CM will issue its assessment of the fourth allegation in an addendum to this report, based on the findings by CAO, once available.

The Complainants submitted allegations of negative project impacts associated with an individual allocation under an EIB framework loan. In general, under this loan type, the EIB may delegate appraisal and monitoring tasks to an intermediary. Therefore, the EIB-CM's enquiry started with a review of the competencies of the EIB in relation to the contested project impacts. This provided the context for the subsequent inquiry into the project impacts.

REVIEW OF THE EIB'S PROJECT APPRAISAL AND MONITORING

While appraisal was carried out in accordance with the Bank's procedures for framework loans, the EIB-CM finds that the EIB's E&S due diligence and monitoring of the project was not fully consistent with the EIB's Standards and the funding agreement signed with the financial intermediary, CABEI. The Bank made some choices in the E&S contractual and monitoring arrangements that later affected the EIB's ability to monitor the contested project impacts. In particular, the Bank's monitoring arrangements were not commensurate with the E&S risk profile of the project. The EIB's appraisal identified significant E&S risks and the need to heavily monitor the mitigation and compensation measures. However, the Bank did not take measures to enhance the monitoring arrangements with CABEI that were existing under the CCFL at the time of appraisal. Notably, the Bank's appraisal documents did not identify the need to participate – either directly or through the Intermediary – in the independent monitoring regime of IDB and IFC, although the project's E&S

[1] MICI finished its enquiry in May 2017, after IDB's Board decided that no compliance investigation should be conducted.

framework had already crystallized by the time of EIB's appraisal. As a result, the EIB has not received E&S information on the implementation of all the mitigation and compensation measures.

The Bank's administration of project monitoring was equally inconsistent with the EIB's Standards in many aspects. The Bank did not verify the status of the E&S mitigation and compensation measures before the impoundment of the reservoir started, although this was a loan condition approved by the EIB's Board of Directors. At the same time, the Bank did not request E&S monitoring data produced under IDB/IFC Standards in relation to the mitigation and compensation measures (e.g. GHG monitoring reports, biodiversity-related reports, a vegetation clearance plan, a water hyacinth control plan and the Operational Framework of the reconstructed Mesoamerican Corridor). In the absence of the substantiating E&S information, the EIB may not be in a position to form its own opinion on the success of the mitigation and compensation measures at project completion, as required by the EIB's Standards.

In this context, EIB-CM takes note that the appraisal of the Reventazón Hydroelectric project took place when the EIB did not have specific Environmental and Social Standards for framework loan operations outside Europe. As part of a continuous improvement process, the Bank is currently reviewing its E&S Handbook and is developing Guidelines for Hydropower Plants. The adoption of these two documents by the Bank will facilitate and guide the structuring and monitoring of future similar operations.

REVIEW OF THE CONTESTED PROJECT IMPACTS

Due to the EIB's non-participation in the project's independent monitoring regime created by IDB and IFC, the EIB-CM only had access to a limited amount of E&S information produced under the project's E&S framework. During the EIB-CM's enquiry, the promoter provided access to some E&S documents not available at the EIB, which facilitated the EIB-CM's inquiry into the contested project impacts. While the available information did not allow a conclusive opinion about the project impacts, the table below presents the EIB-CM's findings on project impacts, and the corollary recommendations for the Bank.

ALLEGA-TION	FINDINGS ABOUT PROJECT IMPACTS	PROJECT COMPLIANCE WITH EIB STANDARDS	RECOMMENDATIONS FOR THE BANK
Non-compliance of the project with EIB nature protection standards	**<u>At appraisal:</u>** Based on the basic principles of the EU Habitats Directive, the EIB's Standards would have required the preparation of an appropriate biodiversity assessment, capturing the likely impacts of the project on all protected areas within the area of influence. It was noted that neither the host country's laws, nor IFC/IDB Standards required an assessment specific to the Lancaster Lagoons. However, the biodiversity planning that took place for the reconstruction of the Mesoamerican Corridor could be considered equal to an appropriate biodiversity assessment, since the plans proposed the preservation of the integrity of the Lancaster Lagoons. **<u>At monitoring:</u>** The available project documents and geological reports indicate that an appropriate biodiversity assessment was not conducted for the authorisation of the	The project was in line with EIB requirements at appraisal, while there are indications of non-compliance at the time of the construction works.	In light of the concerns about the potential negative impacts of the project on the Lancaster Lagoons – a protected area of national significance and an element of the Mesoamerican Corridor – the EIB should request clarifications from the promoter about the sourcing of construction materials from a site other than those identified in the ESIA, and from such a geotechnically and environmentally sensitive area. The EIB may consider conducting a site visit.

	quarry operations near the foot of the Lower Lancaster Lagoon.		
Failure to reconstruct the Mesoamerican Biological Corridor	**<u>At appraisal:</u>** The project's mitigation and compensation measures were designed to achieve "no net loss" of biodiversity, and a "net gain" of connectivity in relation to the Jaguar Corridor (a pass for a critical habitat). The Lancaster Lagoons are located within the reconstructed Mesoamerican Corridor. **<u>At monitoring:</u>** In July 2018, the lenders' E&S monitoring consultant (IESMC) confirmed the completion of the reconstruction of the corridor, and resources allocated to its long-term functionality. The specific situation of the Lancaster Lagoons/Farm within the Corridor's Operational Framework was not addressed in the documents available for the EIB-CM's enquiry. Against this background, it remains unclear how the fencing at the Lancaster Farm would be conducive to the functionality of and connectivity in the Corridor.	The project was in line with EIB requirements at appraisal. The available information does not allow a conclusive opinion to be formed regarding the project's compliance with EIB requirements at the monitoring stage.	Given that the EIB's Standards require the EIB to evaluate the status of biodiversity mitigation and compensation activities at project completion, the Bank should verify the success of the reconstruction of the Mesoamerican Corridor at the Lancaster Farm as part of the EIB's process of collecting project completion information from the Intermediary and the promoter. The EIB may consider contacting the Intermediary and the promoter to collect the relevant E&S information under IDB/IFC Standards, and conduct a site visit.
Non-compliance of the project with the obligation to remove the vegetation from the reservoir area	The requirement in the project's Environmental and Social Impact Assessment (ESIA) concerning vegetation removal was not met. While possible scientific explanations exist in support of such a decision in general, evidence to that effect was not found in the project documents available to the EIB-CM. Considering the alleged implications for the GHG emissions from the reservoir, the project is equipped with a physical GHG measuring system that captures real emissions. The results of the first year of GHG emissions monitoring are in line with the EIB's calculations at appraisal.	The available information does not allow a conclusive opinion to be formed regarding the fulfilment of the EIB requirement to comply with the ESIA. The project is compliant with the EIB's requirement relating to climate change.	As part of the EIB's process of collecting project completion information, the EIB should assess whether the vegetation management in the reservoir is compliant with the ESIA. The Bank may consider collecting the relevant data from the promoter/the Intermediary, and if necessary, conduct a site visit. N/A
Failure to conduct land acquisition in line with EIB Standards	To be prepared in an addendum to this report, based on the findings by IFC-CAO.		

The EIB is recommended to follow up the aforementioned concerns about negative project impacts as part of the EIB's ongoing process of collecting project completion information from the Intermediary and the promoter. The EIB-CM will prepare a follow-up report based on the Bank's actions nine months after the publication of this report.

CONCLUSIONS REPORT

Reventazón Hydroelectric project – Costa Rica
Complainants:
Date received: 28 September 2016

Project Status: Signed / Disbursed / Under monitoring
Board Report: March 2013
Contract amount: EUR 60.6 million for 20 years; project cost: EUR 1.0472 billion

1. COMPLAINT

In September 2016, the Complainants submitted a complaint to the EIB Complaints Mechanism (EIB-CM). The Complainants presented a comprehensive list of allegations to the EIB-CM in relation to the Reventazón Hydroelectric project (the "project"). The Complainants challenged the project's compliance with the EIB's Environmental and Social Standards.

SUMMARY OF ALLEGATIONS

The allegations concern the implementation of the EIB's Standards, which fall within the remit of the promoter. The EIB-CM is examining whether the EIB appraised and monitored the contested environmental and social (E&S) impacts in accordance with the EIB's Standards. The allegations can be summarised as follows:

1.1 Non-compliance of the project with the EIB's nature protection standards
The Complainants allege that the project does not include adequate measures to uphold the conservation objectives of the Lancaster Lagoons – two wetlands that were declared as "protected" by Costa Rican law in 1994 and are situated within the "area of influence" of the project. The Complainants state that the project has contributed to the destabilisation of the Lower Lancaster Lagoon, which is now in imminent danger of collapsing. They conclude that an obligation to prevent harm to the protected wetlands stems from the Bank's standards.

1.2 Failure to reconstruct the Mesoamerican Biological Corridor
The Complainants contend that the project does not comply with the EIB's requirement concerning the reconstruction of the Barbilla-Destierro Biological Subcorridor (SBBD) – a segment of the Mesoamerican Biological Corridor – and reforestation at the tail of the reservoir. They also allege that the project implementation involved illegal logging at the Lancaster Farm.

1.3 Non-compliance of the project with the obligation to remove the vegetation from the reservoir area
The Complainants allege that the reservoir area was not cleared before the filling of the reservoir and this constitutes a violation of the EIB's Standards. They declare that the decomposing vegetation emits a substantial amount of methane and causes environmental damage to the ecosystems of the Reventazón River and the Tortuguero National Park. The Complainants also allege that the negative externalities associated with these emissions were not duly assessed in the lenders' economic analysis.

1.4 Failure to conduct land acquisition in line with the EIB's Standards
The Complainants declare that the land acquisition plan, as approved by the EIB, did not contemplate the partial expropriation of the Lancaster Farm. They also contend that the expropriation of the Lancaster Farm is being conducted in a manner contrary to the principles of transparency, fairness and due compensation.

2. CLAIM

The Complainants request that the EIB:

1. recognise the environmental damage caused by the project to the Lancaster Lagoons, the ecosystems of the Reventazón River and the Tortuguero National Park;
2. ensure the project's compliance with the EIB's Standards, and in particular that:
   - **a)** appropriate measures are taken to stabilise the wall of the Lower Lancaster Lagoon;
   - **b)** appropriate measures are taken to correct the course of the Reventazón River so as to prevent further erosion of the wall of the Lower Lancaster Lagoon;
   - **c)** the barbed wire, installed by the promoter and which had been impeding the migration of animals, is removed from the Lancaster Farm;
   - **d)** the Lancaster Lagoons and the surrounding forests are included within the reconstruction of the Barbilla-Destierro Biological Subcorridor;
   - **e)** a legal mechanism is created to provide a permanent framework for the preservation of the Lancaster Lagoons, for example a trust fund or a reserve area;
   - **f)** the expropriation of the Lancaster Farm takes place in compliance with the EIB's Standards.

3. BACKGROUND INFORMATION

3.1. *The project*

3.1.1. The project is the largest hydropower plant in Central America, with an installed capacity of 305.5 MW, a 7 km^2 (118 million m^3) reservoir and a 130 m high dam. It is expected to contribute to climate change mitigation and the security of the electricity supply by providing renewable hydroelectricity to meet increasing demand in Costa Rica and the region. The project has been developed by Costa Rica's state-owned electricity company, *Instituto Costarricense de Electricidad* (the "promoter"). Construction work took place between 2009 and 2016. The filling-up of the reservoir was completed in July 2016, and the project started commercial operation in November 2016.

3.1.2. The project's Environmental and Social Impact Assessment (ESIA) and Environmental and Social Management Plan (ESMP) were developed in accordance with IDB Safeguards and IFC Performance

Standards.[2] The project was subjected to an assessment pursuant to the Hydropower Sustainability Assessment Protocol in 2017.[3]

3.1.3. The project benefits from multiple sources of financing. The promoter created a special-purpose vehicle for the project (a Costa Rican trust named *Fideicomiso UNO P.H. Reventazón*), which secured financing from six senior lenders: the Inter-American Development Bank (IDB), the International Finance Corporation (IFC) and four local banks. At the same time, the Central American Bank for Economic Integration (CABEI or the "Intermediary") provided a direct loan to the promoter. The EIB's financial resources constituted part of the direct loan from CABEI, under the terms of the Central America Climate Change Framework Loan Agreement (CCFL) signed by CABEI and the EIB in 2011.[4]

3.1.4. In 2013, the six senior lenders to Fideicomiso UNO P.H. Reventazón established a Syndicate of Lenders, which contracted the services of independent consultants in the field of environmental, social and technical monitoring: **(1)** an environmental and social panel, IESMC, **(2)** a dam safety panel, and **(3)** a Lenders' Independent Engineer. IESMC reported on the project's compliance with IDB and IFC Standards, and advised each member of the Syndicate on environmental and social compliance matters related to the project.[5] IESMC prepared quarterly reports during the construction phase (until July 2018), and semi-annual reports during the first year of operation (expected to end in July 2019).

3.1.5. The EIB and CABEI did not participate in the Syndicate of Lenders, nor in the independent monitoring framework based on IDB and IFC Standards (§3.1.4). The EIB's financing of the project has been tied to compliance with the principles/standards of EU legislation (§§3.2.3-3.2.5).

3.2. *The Central America Climate Change Framework Loan Agreement (CCFL)*

3.2.1. In general, framework loans enable the EIB to finance a borrower's multi-scheme investment programme within a framework of pre-determined objectives and eligibilities (e.g. a project portfolio of an intermediary bank). The EIB's appraisal of framework loans focuses on the assessment of the capacity of the borrower (Intermediary) to generate and implement projects in line with the EIB's requirements. The actual schemes/projects are confirmed after the signature of the framework loan

[2] The ESIA was first prepared in 2009 in accordance with national law (Environmental Protection Agency of Costa Rica "SETENA", Decision No. 1778-2009 dated 29 July 2009). The ESIA was updated in 2012 following the technical assistance operation of the Inter-American Development Bank (IDB). The full ESIA documentation is available on IDB's website (https://www.iadb.org/en/project/cr-l1056 and https://www.iadb.org/en/project/CR-L1049.) After the project was approved by IFC and IDB, the technical assistance operation continued to further develop the project's environmental and social framework, in particular in the areas of GHG monitoring and biodiversity mitigation and compensation measures. Certain components of the Environmental and Social Management Plan (the "ESMP") were developed in separate studies, i.e. the Biodiversity Action Plan, the Reforestation Plan, the Livelihood Restoration Programme and the GHG Monitoring Plan. Under the umbrella of the technical assistance programme, non-governmental organisations (NGOs) and international experts have contributed to the project implementation (e.g. the project-specific Biodiversity Advisory Group, the feline-specialised NGO Panthera and the Costa Rican organisation Centro Agronómico Tropical de Investigación y Enseñanza – CATIE).

[3] The report is available on the promoter's website: https://www.grupoice.com/wps/wcm/connect/49a3ad75-28a8-4806-b9bb-df0054bda033/Reventazon+Protocol+Assessment+FINAL+ENGLISH.pdf?MOD=AJPERES&CVID=muafQq8.

[4] See also: http://www.eib.org/en/projects/pipelines/pipeline/20100723.

[5] IESMC's services consist of, *inter alia*, **(i)** producing periodic reports on the project's compliance with E&S and health and safety-related requirements via desk reviews of project documentation and site visits; **(ii)** proposing corrective action for any non-compliance identified together with the time frame and evidence of implementation; **(iii)** commenting on any socio-environmental related incidents, accidents or local protest related to the project; **(iv)** preparing certificates attesting the project's compliance with the applicable E&S Requirements, host country laws and the ESIA at different stages of the project cycle; **(v)** preparing any other E&S certificate as requested by any Member of the Syndicate; **(vi)** providing information and feedback, as needed, to the Biodiversity External Experts Group; and **(vii)** making itself generally available for consultation in connection with any reports or certificates delivered to it or by it, to the extent required by any Member of the Syndicate.

agreement. For schemes/projects with EIB financing exceeding EUR 50 million, the project is fully appraised by the Bank and approved by the EIB's Board of Directors.

3.2.2. The CCFL was signed between the EIB and CABEI in 2011, and it counted towards the EIB's lending priorities regarding climate change.[6] The CCFL was designed to support renewable energy investments with limited environmental impacts (visual impact, local disturbance to flora and fauna and temporary impacts during construction with no significant negative residual effects), so that projects with high environmental impacts were in principle excluded from this facility (see: §3.2.3).

3.2.3. The CCFL stipulated that projects must comply with the following minimum environmental requirements:

(i) be implemented in accordance with the basic principles of the EU Directives on Birds (79/409/EC), Habitats (92/143/EC), and Environmental Impact Assessment (85/337/EC), as appropriate;

(ii) comply with the EIB Statement of Environmental and Social Principles and Standards;

(iii) if a project requires an Environmental Impact Assessment (EIA) in accordance with EU or national legislation, the final beneficiaries shall collect and publish the Environmental Impact Study and provide a digital copy to the Bank, and they shall further confirm that the project incorporates all measures intended to mitigate the impact recommended by the EIA;

(iv) projects with a significant negative impact on areas of high biodiversity value, nature conservation areas or migratory routes of birds/fish, will not be eligible for financing; in addition, if a project may affect a nature conservation area or the biodiversity of a protected animal/plant species, the final beneficiary shall obtain written confirmation from the competent authority, or an equivalent environmental evaluation to the satisfaction of the EIB, attesting that the project does not have a significant negative impact on biodiversity or a nature conservation area;

(v) projects in protected areas or critical habitats, without the appropriate mitigation and compensation measures, are not eligible for financing;

(vi) project implementation shall be accompanied by independent third-party E&S monitoring.

3.2.4. The CCFL included a model contract for sub-loans, articulating the general clauses agreed between the EIB and CABEI, to be inserted in the finance contracts between the Intermediary and final beneficiaries. The model contract envisioned the following environmental undertakings, among others: (i) to comply with national law and the environmental measures indicated by CABEI; (ii) "to *develop and operate the Final Project in accordance with the principles of EU legislation provided in the Framework Loan Agreement (a copy of which is annexed to the sub-loan agreement)"* A copy of the signed sub-loan agreements were sent to the EIB before the EIB's first disbursement for a scheme under the CCFL.

3.2.5. The Sub-Loan Agreement (SBL), signed by CABEI and the promoter in May 2013, set out the following relevant undertakings by the promoter:

(i) to comply with national environmental law, and the environmental measures indicated by CABEI;

[6] The CCFL formed part of the EIB's Facility for Energy Sustainability and Security of Supply. It was a EUR 3 billion facility financed from EIB's own resources, supporting renewable energy and energy efficiency investments in non-EU countries. The Facility was principally used when the Bank did not request the European Union guarantee under its External Lending Mandate to mitigate sovereign or political risk to protect its own credit standing.

(ii) *"to develop and operate the Final Project in accordance with the standards of the Legislation of the European Union to the extent transposed by the laws of [Costa Rica] or indicated by CABEI";*
(iii) to comply with the recommendations of the two panel of experts to the satisfaction of the Bank;
(iv) to report periodically on technical, environmental and social issues. [7]
Pursuant to the reporting lines established in the legal documentation, all E&S monitoring information provided by the promoter to the Intermediary was forwarded to the EIB for review.

3.3. *Background of the complaint*

3.3.1. The complaint to the EIB-CM followed previous requests from the same Complainants to MICI and CAO, the independent accountability mechanisms of IDB and IFC respectively.[8] The Complainants contacted the independent accountability mechanisms only after they had exhausted the remedies at project level: the remedies under national law and the project's grievance mechanism.

3.3.2. In 2016, IDB's operational services proposed to start a mediation process between the Complainants and the promoter, which did not materialise. The Complainants have also followed the procedure under national law concerning the valuation of their property for the project's land acquisition.

4. APPLICABLE REGULATORY FRAMEWORK

4.1. *The EIB's Complaints Mechanism*

4.1.1. This complaint has been processed under the 2012 version of the EIB Complaints Mechanism Principles, Terms of Reference and Rules of Procedure (CMPTR)[9]. The CMPTR apply to complaints of maladministration by the EIB Group. "Maladministration" refers to instances where the Bank fails to act in accordance with the applicable legislation and/or established policies, standards and procedures, fails to respect the principles of good administration or violates human rights. Maladministration may also relate to the E&S impact of a project financed by the EIB.[10]

4.1.2. The mandate of the EIB-CM is confined to reviewing the actions, decisions or omissions related to allegations that may be attributable to the EIB and not to third parties. The EIB-CM is not competent to investigate complaints concerning International Organisations, EU institutions and bodies, or national, regional or local authorities (e.g. government departments, state agencies and local councils).[11]

[7] According to the legal documentation associated with EIB's financing, the EIB should receive the following E&S monitoring data: **(1)** project progress reports of the promoter – (quarterly); **(2)** reports of IESMC and the Dam Safety Panel; **(3)** an Environmental and Social Status Report 90 days prior to the filling of the reservoir; **(4)** a project completion report (PCR) that covers the following matters, among others: final reports of IESMC, an Independent Resettlement Audit, a description of any major issue with impact on the environment, a description of any risk or incident that can endanger the project operation, and the project's carbon footprint in tCO_2eq; **(5)** a post-PCR report three years after the PCR including, among others, the project's carbon footprint in tCO_2e; **(6)** notification of complaints, any material breach of applicable environmental law or modification of any environmental permit for a financed project.
[8] MICI is the Spanish acronym for IDB's Independent Consultation and Investigation Mechanism; CAO refers to IFC's Compliance Advisor Ombudsman.
[9] https://www.eib.org/attachments/strategies/complaints_mechanism_principles_2012_en.pdf.
[10] EIB – Complaints Mechanism Principles, Terms of Reference and Rules of Procedure (2012), part II, §1.2.
[11] Complaints Mechanism Principles, Terms of Reference and Rules of Procedure (2012), §2.3.

4.2. *EIB's Environmental and Social Standards*

EIB's Standards applicable to the project

4.2.1. The project is subject to the E&S requirements stated in the CCFL (See: §§3.2.2-3.2.3).

The responsibility of the EIB

4.2.2. The Bank's project appraisal and monitoring processes in this case are governed by the EIB's Statement[12] and the Environmental and Social Practices Handbook (2010)[13].

4.2.3. The Bank's procedures are derived from the presumption that promoters are fully responsible for implementing projects financed by the Bank, including studies, the ESIA process, the implementation of mitigation and/or compensation measures and monitoring the success/effectiveness of these measures after implementation. The Bank limits itself to determining that the conditions attached to its financing are met. At the appraisal stage, the Bank determines and recommends to the EIB Board of Directors contractual conditions to ensure the E&S acceptability of the project during implementation and operation.[14] There are, in general, three stages where these checks could be made: (i) conditions for signature; (ii) conditions for disbursement, and (iii) particular undertakings.[15] The EIB monitors the E&S performance of the projects it is financing, especially the fulfilment of any specific obligations described in the finance contract.[16]

4.2.4. At the appraisal stage, the Bank shall satisfy itself that projects to be financed comply with the EIB's E&S requirements.

a) Projects to be financed outside of the EU are assessed on the basis of EU environmental principles, standards and practices (although EU law formally does not apply, the EIB uses the legal principles and standards of the EU as a benchmark.)[17] During the appraisal, the EIB's services identify procedural requirements on environment that may differ from the country's legal requirements. Where EU standards are more stringent than national standards, the higher EU standards are applicable if practical and feasible (i.e. affordability, local environmental conditions, international good practice, etc.). [18]

b) In the case of co-financing, the EIB can agree to apply the standards of other international financial institutions, as far as they are equivalent to the requirements of the Bank. The EIB ensures coherence of its requirements with those of its co-financiers.[19]

[12] EIB's Statement of Environmental and Social Principles and Standards (2009), available at: https://www.eib.org/attachments/strategies/eib_statement_esps_en.pdf

[13] The Handbook translates the E&S Principles and Standards described in the Statement into the operational practices applied by the staff of the EIB. The Handbook explains how EIB staff conduct their routine work on E&S matters throughout the project cycle. It also describes the roles and responsibilities of other parties - notably those of the promoters, intermediaries and competent national authorities - in the implementation of the EIB's requirements. The current version of the Handbook, adopted in October 2018, is available at: https://www.eib.org/en/publications/environmental-and-social-standards.htm

[14] Handbook (2010), page 63, Section C.13. It is worth noting that E&S conditions may be addressed to the promoter, borrower, environmental authority or ministry. In some cases, the E&S conditions will need to be separate legal agreements in order to be applicable to the third party, which will fulfil the environmental and social condition. See Handbook (2010), §§249, 250.

[15] Handbook (2010), page 63, §243.

[16] EIB Statement of Environmental and Social Principles and Standards (2009), page 11, §8. The Handbook adds, *"Where Framework Loans are signed with intermediary borrowers the monitoring requirements will be itemised in the separate project completion agreements signed with the promoters."*

[17] EIB Statement of Environmental and Social Principles and Standards (2009), page 8, §19.

[18] Handbook (2010) page 17, §§23-24., page 40, §101.

[19] EIB's Statement of Environmental and Social Principles and Standards (2009), page 9, §23; page 17, §44.; Handbook (2010), page 40, §101.

4.2.5. The Handbook provides guidance on the EIA process as well as on biodiversity and natural resource management in projects outside Europe. In this context, the EIB performs the following tasks during the appraisal:

- assesses that the project complies with the process and content consistent with the requirements of the EU EIA Directive.[20]
- ensures that an appropriate biodiversity assessment has been carried out where necessary to identify and to mitigate the impacts on nature sites of high conservation value. The EIB services clarify what, if any, protected areas are nearby or are affected by the project. [21]
- records (*inter alia* in the ESDS) the conclusions of the biodiversity and nature assessment, i.e. whether a nature conservation site has been identified, whether or not there may be a significant effect on the site as well as the type of site, i.e. why it has conservation status. A map should be obtained to confirm the location of the project in respect of any conservation site. [22]
- assigns appropriate monitoring level for project implementation and operation if significant impact is likely. This monitoring plan should include a remediation plan for long-term biodiversity stabilisation and promotion on the project site and importantly in the secondarily affected adjacent areas.[23]
- assess the promoter's ability to implement the necessary conservation and mitigation measures. The promoter will then prepare a biodiversity action plan, acceptable to the Bank, highlighting the issues and the mitigation measures that will be put into place, such as avoiding and reducing the negative impacts on the loss of habitat and establishing and maintaining an ecologically similar protected area.[24]

4.2.6. At the monitoring stage, the aim of the Bank's activities is to verify that the E&S objectives have been met, to confirm any mitigation and compensation measures have been applied and to ascertain that any environmental conditions have been fulfilled. If a project includes the implementation of mitigation measures, then it should not normally be considered complete until these measures are implemented, even if the remainder of the project is complete. The Bank's monitoring should continue until all mitigation and compensation measures are implemented, i.e. may continue after the promoter provides the project completion documentation.[25]

4.2.7. Projects with significant implementation problems including non-compliance with E&S requirements shall be included in the Project Watch List and reported to the Management Committee.[26]

[20] Handbook (2010), Section C.1.
[21] Handbook (2010) page 40, §101. The Bank's approach and commitment to nature and biodiversity are grounded in the principles and practices contained in the Birds (79/409/EEC) and Habitats Directives (92/43/EEC), and in international treaties and conventions ratified by the EU and incorporated into EU law. In this context, all projects have to be screened for their potential impact on nature and biodiversity. The initial E&S assessment should flag up any potential impacts the project may have on biodiversity and these should include: (i)potential impacts on protected areas and areas supporting protected species; (ii) impacts on other areas that are not protected but are important for biodiversity; (iii) activities posing a particular threat to biodiversity (in terms of their type, magnitude, location, duration, timing, reversibility); and, (iv) impact on areas that provide important biodiversity services including [..] wetlands, [..] soils prone to erosion [..] etc. To assess the potential significant impact on habitat and species, the EIB services are guided by the International Conservation of Nature (IUCN) classification of protected areas and species (IUCN Red List of Threatened Species), the management regulations applicable to them as well as sector recommendations/guidelines from established institutions and organisations such as Fauna Flora International, CBD and Birdlife International. The EIB services may also use the Integrated Biodiversity Assessment Tool and the World Database on Protected Sites. See Handbook (2010), Section C.5.
[22] Handbook (2010) page 48, §144.
[23] Handbook (2010) page 48, §146.
[24] Handbook (2010) page 50, §154.
[25] Handbook (2010) page 50, Section D.1.
[26] Handbook (2010), page 68, §262. After May 2018, the new name is "Review and Resolution Mechanism (RMM)".

4.2.8. The Handbook provides the following guidance related to climate change:

- hydropower projects may be considered as renewable energy and therefore count towards the Bank's climate finance objective. At the same time, hydropower projects above 20 MW may not be considered climate change projects when their net carbon balance is to be presumed positive, i.e. resulting in an increase in GHG emissions, at the time of appraisal.[27]
- The Bank has specific operational duties related to GHG emissions in projects. At appraisal, the Bank determines and records in the ESDS *"whether the project will result in an increase or reduction of greenhouse gas emissions, identifies any specific effects on, or risks to, the project from predicted climate change impacts, as well as the need for adaptation."* Where such a significant impact is likely, it should be monitored during implementation and operation, as appropriate.[28]

4.2.9. The Handbook set out environmental and social due diligence procedures for the different loan types of the Bank. In this context, the Handbook stated that the procedures for framework loan operations outside Europe were "work in progress".[29]

5. WORK PERFORMED BY THE EIB-CM AND COLLABORATION WITH OTHER IAMS

5.1. On 28 September 2016, the Complainants lodged a complaint with the EIB-CM. During the course of the EIB-CM's enquiry, the Complainants submitted two geological studies[30] and an expert opinion on the ecological value of the Lancaster Lagoons.[31] The EIB-CM processed these expert opinions as part of the allegations.

5.2. The complaint to the EIB-CM followed similar requests from the same Complainants to MICI and CAO, the independent accountability mechanisms (IAMs) of IDB and IFC respectively.[32] In November 2016, the EIB-CM undertook a fact-finding mission in Costa Rica together with MICI and CAO. MICI commissioned an independent geologist's report to examine whether the stability of the Lancaster Lagoons may have been affected and/or jeopardised by the extraction of gravel and sand from the Reventazón River.

5.3. During the initial assessment, the EIB-CM explored the possibility of mediation between the Complainants and the promoter, which did not receive an agreement from both parties. In May 2017, the EIB-CM's initial assessment report was published.[33] At the investigation stage, the EIB-CM contracted a team of independent experts to advise on the geological, environmental and climate change issues raised in the complaint. The EIB-CM reviewed the available project documents, and contacted the Intermediary, the promoter and the Complainants to gather additional information. On this occasion, the Intermediary and the promoter provided access to some key environmental

[27] Handbook (2010), page15
[28] Handbook (2010), §101, §165.
[29] Handbook (2010), page 42.
[30] A. Gättgens, "Dictamen técnico de peritaje sobre el riesgo de deslizamiento del Humedal Láncaster como producto de la construcción del PH Reventazón" (September 2016); A. Mende, "Reconstrucción de las Actividades de Explotación en el Valle Río Reventazón en los Alrededores del Humedal Laguna Láncaster entre 2012 y 2014 basado en la Interpretación de Datos de Teledetección" (September 2017).
[31] M. Marozzi, "Evaluación Rápida Económico-ambiental del Potencial Ecológico Fincas Lancaster" (March 2018).
[32] MICI is the Spanish acronym for IDB's Independent Consultation and Investigation Mechanism; CAO refers to IFC's Compliance Advisor Ombudsman .
[33] https://www.eib.org/attachments/complaints/reventazon-initial-assessment-report-02-05-2017.pdf

documentation not available at the EIB, facilitating the EIB-CM to formulate its findings about the contested project impacts (§7).

5.4. In its response to the complaint, MICI concluded that a compliance investigation was warranted in relation to the issues raised by the Complainants, excluding those related to land acquisition, as they were under judicial review in the national courts.[34] However, IDB's Board determined that no compliance investigation should be conducted. With this decision, the MICI process in relation to the complaint ended and the case was closed in May 2017.

5.5. CAO issued its compliance appraisal report in October 2017.[35] CAO determined that its compliance investigation would review the issues related to land acquisition for the project. Regarding the allegations on biodiversity, landslides and GHG emissions, CAO noted, *inter alia*, that these issues would be subject to an independent review as part of the EIB-CM's enquiry. CAO's appraisal stated that, should the EIB-CM make findings related to the project's environmental impacts that are not addressed in ongoing supervision by IFC, it would be open to CAO to raise these issues with IFC at a later point.

5.6. CAO's compliance investigation is ongoing at the time of this report. Therefore, regarding the fourth allegation, the EIB-CM will issue an addendum to this report based on CAO's findings. In taking this decision, the EIB-CM took note of the equivalency of EIB and IFC requirements related to land acquisition and involuntary resettlement.

6. FINDINGS ON THE EIB'S PROJECT APPRAISAL AND MONITORING

6.1. The Complainants submitted allegations about negative E&S impacts associated with an individual allocation under an EIB framework loan. Under this loan type, the EIB generally does not have a direct contractual relationship with the final beneficiaries (here: the promoter), and may delegate to intermediaries certain project appraisal and/or monitoring tasks (§3.2.1). Consequently, it is appropriate to start the EIB-CM's enquiry with an overview of the EIB's appraisal and monitoring competencies related to the contested E&S impacts.

6.2. The EIB carried out the project due diligence from October 2012 to February 2013. As the EIB's financial support for the project exceeded EUR 50 million, the project was fully appraised by the EIB and approved by the EIB's Board of Directors. At the time of the EIB's appraisal, IDB and IFC had concluded their own appraisal and approved the project for financing. The EIB took into account the available E&S documents and the independent monitoring panels that were about to be established in accordance with IDB and IFC Standards. While no formal gap analysis was performed of the EIB's requirements in the CCFL vis-à-vis the IDB/IFC Standards, the EIB's due diligence resulted in setting additional disbursement conditions in the area of social impacts, which were not covered in the existing E&S agreements and documentation at that time.

6.3. The EIB considered the project eligible under the CCFL, based on the following considerations:

[34] MICI, Recommendation for Compliance Review and Terms of Reference, MICI-BID-CR-2016-110, February 2017, available at; http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=40872895

[35] CAO Compliance Appraisal Report regarding Costa Rica / Reventazón HPP-01/Siquirres (October 10, 2017), available at: http://www.cao-ombudsman.org/cases/case_detail.aspx?id=250

i.) The project supports the EU objective of climate change mitigation. The project would provide renewable hydroelectricity and GHG emission reductions of approx. 212 000 tCO_{2eq}/year. [36]

ii.) The promoter had prepared a comprehensive ESIA in line with national law and the financiers' (IDB, IFC, CABEI and EIB) requirements. The river basin has a management agency. A comprehensive watershed management plan and cumulative impact assessment of the river cascade existed.

iii.) The project would only affect one protected area: the Tortuguero National Park (a Ramsar site).

iv.) The ESIA indicated significant E&S impacts that required mitigation in order to be acceptable for EIB's financing. The promoter had adopted an ESMP – a set of mitigation and compensation measures based on IDB/IFC Standards – acceptable to the Bank. The promoter had started the ESMP implementation, but had not yet completed it at the time of the EIB's appraisal (see Table 1).

v.) Independent third-party monitoring would be arranged by the co-financiers.

Table 1: Environmental and social risks and safeguard measures identified in the EIB's appraisal:

E&S RISKS	MITIGATION & COMPENSATION MEASURES
• Disruption of the Mesoamerican Biological Corridor (i.e. the SBBD); • Genetic degradation of jaguars, a critical habitat; • Degradation of the river habitat; • Blockage of the migratory routes of fish; • Potential impacts on the ecologically complex Tortuguero National Park downstream on the Caribbean coast.	The ESMP included a biodiversity action plan that aimed to achieve a net positive gain in critical habitat over time, and no net loss of aquatic habitat. The measures covered, among others: • relocation of the SBBD at the tail of the reservoir; • reforestation at the tail of the reservoir; • the River Parismina Offset Programme; The effects on the complex Tortuguero Park ecosystem are difficult to predict, and the mitigation consists therefore of an adaptive management programme that includes monitoring and thereafter a number of potential correcting measures, including the potential controlled release of sediments.
• Loss of livelihood in the reservoir area and downstream.	• Livelihood Restoration Plan; • White Water Rafting Mitigation Plan; • Grievance Mechanism for affected people.
• Labour conditions during construction works; • Health and safety impacts of construction works on nearby village residents.	• ICE's E&S and Health and Safety Management System; • creation of an independent supervision unit at ICE; • Contingency Plan; • Natural Disaster Management Plan for the Construction Phase; • Grievance Redress Mechanism for Workers.

6.4. In February 2013, the EIB's Board of Directors approved the project for financing under the CCFL, defining the E&S loan conditions to be applied in the prospective contract between CABEI and the

[36] The ESDS noted that *"according to the UNFCCC methodology, (for CDM registration), GHG emissions can be neglected from hydropower plants with a power density higher than 10 W per m^2. Reventazón reservoir is significantly smaller than this threshold, and the carbon footprint exercise does not include such emissions. The project boundaries are the power plant and the reservoir. No emissions or savings outside this boundary have been taken into account. The climate change models indicate that precipitation on the Caribbean coast of Costa Rica is expected to slightly increase. The hydrology and emissions savings of the project are considered to be stable."* See Reventazón Hydropower project, Environmental and Social Datasheet (08.02.2013), available at: http://www.eib.org/infocentre/register/all/46807249.pdf

promoter.[37] Notably, these E&S loan conditions did not alter the EU-based standards provided in the model contract for sub-loans (§3.2.4). The project was assigned to Category B ("heavy") monitoring by the EIB. In this regard, CABEI was only tasked to collect the E&S documentation for the EIB's review. The EIB's project monitoring was set to continue until the receipt of project completion documentation satisfactory to the EIB. The latter included the final reports of the independent E&S monitoring consultant (see §3.2.5; footnote 7).

6.5. At the time of this Conclusions Report, the full project completion documentation has not yet been submitted to the EIB. The independent E&S monitoring is in progress.[38] In March 2018, the project was added to the EIB's Project Watch List due to implementation problems (§4.2.7).

6.6. The facts above indicate that despite the indirect (intermediated) structure of the EIB's involvement in the project, the EIB retained the following competencies to control the E&S conditions attached to its financing: **(1)** full project appraisal and approval; **(2)** the establishment of the promoter's contractual obligations in E&S matters via the CCFL and the Sub-Loan Agreement, and the allocation notice to CABEI; **(3)** the review of the signed SBL before the first disbursement for the project; and **(4)** the evaluation of E&S monitoring data collected through CABEI (§3.2.5, §6.4).

6.7. In this context, it appears that the Bank made some sub-optimal choices in the contractual and monitoring arrangements at the appraisal stage. The following decisions in the early stage of the project cycle materially affected the Bank's ability to monitor the project impacts in line with the applicable rules (§4.2).

- E&S standards identified by the EIB. At the time of appraisal, the project's E&S framework – the ESIA and the ESMP – had already been established pursuant to IDB and IFC Standards and national law (§3.1.2, §6.2). However, the EIB's finance contracts have tied the use of EIB resources to compliance with the "*principles/standards of EU legislation*" (§§3.2.3-3.2.5). Since no EU environmental laws have been transposed in Costa Rica, national law cannot automatically bring about the implementation of the EIB's requirements. The absence of a formal gap analysis in the EIB's legal documentation (EU legislation v. Costa Rican law or EU legislation v. IDB/IFC Standards) indicates that the contractually required E&S standards differ from those actually applying at project level (§3.1.4). In fact, the EIB-CM found no evidence that the Intermediary or

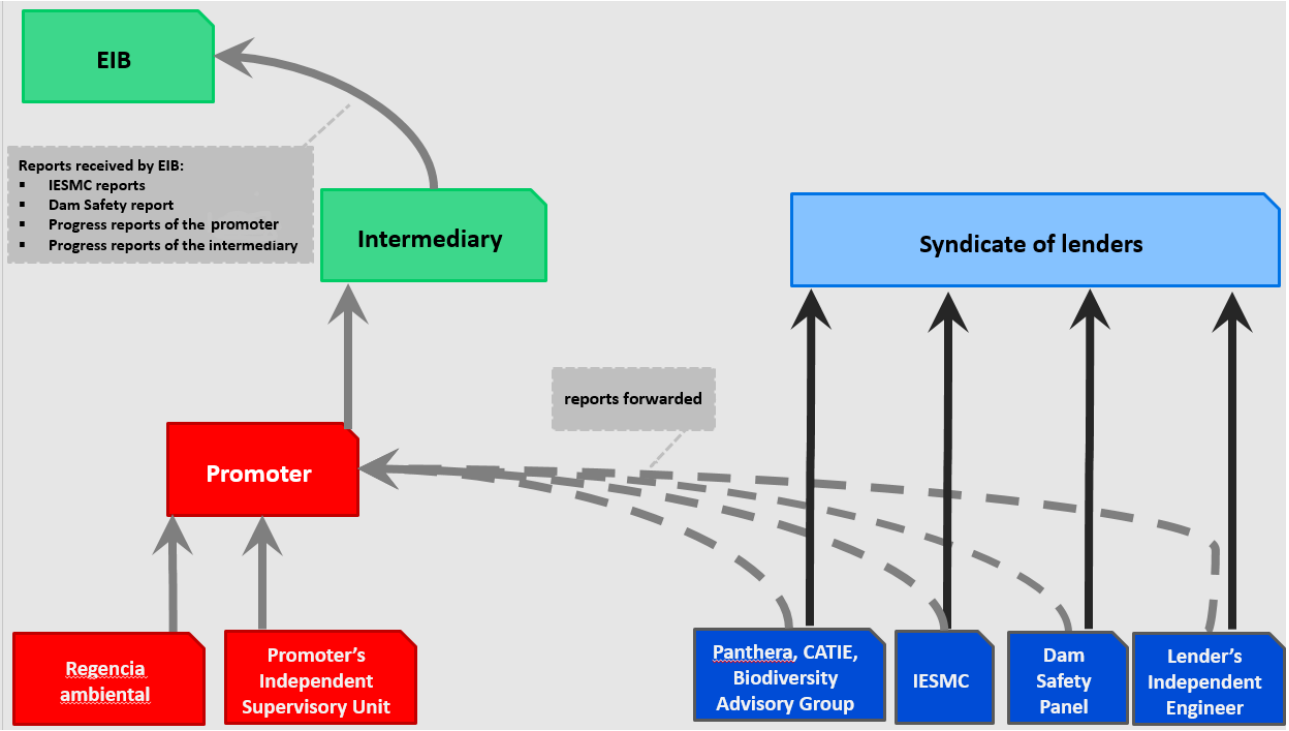
[37] The EIB Board of Directors approved the following E&S contract conditions that were communicated to CABEI in an allocation notice: **(1) Conditions to first disbursement:** The promoter shall, to the satisfaction of the Bank (i) establish the Dam Safety Panel and IESMC; (ii) develop a Livelihood Restoration Plan and a White Water Rafting Mitigation Plan, and implement a robust Grievance Redress Mechanism for workers and for project-affected people; **(2) Undertakings:** The promoter shall, to the satisfaction of the Bank, **(i)** deliver the reports of the Dam Safety Panel and the IESMC as annexes to the project progress reports; **(ii)** comply with the recommendations of both Panels of Experts; **(iii)** deliver to the Bank a dam safety report by the Dam Safety Panel; **(iv)** submit to the Bank 90 days prior to the filling of the reservoir a comprehensive E&S status report (in form and content to the satisfaction of the Bank) endorsed by IESMC. This report shall provide details of the completion and/or the progress that has been made with respect to each of the mitigating measures in the ESMP, and it will cover the progress in tasks outside the project area, like the biodiversity-related activities, the enhancement of the connectivity of protected areas and the Parismina Offset Programme. It shall as well monitor the implementation of Livelihood Restoration Plan, ICE's Occupational Health and Safety compliance mechanism to monitor sub-contractors throughout the project, and the introduction and operation of the grievance redress mechanism for affected parties. This review needs to cover as well the integrated Environmental, Social and Health and Safety Management System and associated manuals and the creation of an independent supervision unit, the Contingency Plan and Natural Disaster Management Plan for the Construction Phase and the associated warning and alarm system for downstream communities (including adapted versions of the existing emergency preparedness and evacuation plans for Cachi and Angostura), and an independent Resettlement Audit; **(v)** submit a White Water Rafting Mitigation Plan; and **(vi)** provide a Completion Audit of Resettlements at project completion stage. Source: Reventazón Hydropower project Environmental and Social Datasheet (08.02.2013), available at: https://www.eib.org/attachments/registers/46807249.pdf . Further information is available at: https://www.eib.org/en/projects/pipelines/all/20120472

[38] The construction phase was closed in July 2018 (13th IESMC Report), while the IESMC reports for the first year of operation are expected in late 2019. See footnote 4.

the promoter had reported pursuant to the EU-based principles and standards, or that the EIB had carried out such monitoring itself.

- Monitoring arrangements not commensurate with the risk profile of the project. The EIB's appraisal highlighted significant E&S risks, and the need for heavy monitoring of the mitigation and compensatory measures set out in the ESMP. The latter were developed pursuant to IDB/IFC Standards (§§6.3-6.4). Against this backdrop, the EIB required the delivery of only a fraction of monitoring data produced in the context of the ESMP implementation: the IESMC and the Dam Safety Panel reports. The EIB did not make arrangements – directly or via the Intermediary – to join the independent monitoring contracts of IDB/IFC (§6.4, §3.1.5) or to allocate additional internal/external resources for its own monitoring. Notably, the EIB's loan conditions selectively mentioned some monitoring documents known at the time of appraisal, without identifying the need to participate in the prospective monitoring arrangements of IDB and IFC (see: footnote 37). As a result, the EIB was not informed about the evolution of the ESMP (for example, the project's GHG emission monitoring programme mentioned in §7.3.7), nor did the EIB receive E&S information on all the mitigation and compensation measures identified in the ESMP. Considering that the project involved a large dam and significant environmental risks, this would call for a heightened vigilance by the EIB as far as E&S monitoring was concerned.

Figure 1: E&S monitoring framework of the project



6.8. The choices of the Bank reported in §6.7 resulted in the following effects at the monitoring stage:

- The Bank did not receive E&S data attesting the implementation of the ESMP, such as the project's GHG monitoring reports, documents related to the biodiversity compensation and mitigating measures (e.g. the Ministerial Decree on the Parismina Offset Programme, the expert reports by CATIE, Panthera and the Biodiversity Advisory Group, the Operational Framework for the reconstructed Mesoamerican Corridor), the vegetation clearance plan and the water hyacinth control plan. In absence of such substantiating E&S information, the EIB may not be in

a position to form its own opinion on the success of the mitigation and compensation measures at project completion, as required by the EIB's Standards (§4.2.3, §4.2.8).

- The EIB did not verify its *sui generis* loan condition related to the "E&S status report 90 days prior to the filling of the reservoir." This undertaking was approved by the Board of Directors, and its objective was to ensure that the success of the ESMP implementation was checked by the EIB (see footnote 37).
- Neither the EIB nor the Intermediary are vested with the contractual rights of the Lenders to consult the Independent Engineer, IESMC or the Dam Safety Panel in the area of the project's compliance with the technical, environmental and social requirements applicable at project level (§§3.1.4-3.1.5). The aforementioned monitoring agents were contracted by the Syndicate of Lenders and the Special Purpose Vehicle (§3.1.4), while the EIB's information rights under its finance contracts are with the promoter and CABEI (see for example: footnote 37).

6.9. Notably, the Bank could have defined its E&S loan conditions and monitoring in alternative ways, considering, for example, the existing E&S models in the applicable regulatory framework: (1) the acceptance of the co-financiers' standards and monitoring regime; or (2) the enhancement of the existing arrangements with CABEI under the CCFL, accompanied with a *sui generis* monitoring regime based on a formal gap analysis of EU-based principles and standards versus national law (§4.2.4).

Conclusions

6.10. In accordance with its own rules, the EIB shall identify contract conditions to ensure the E&S acceptability of the project during implementation and operation, and on which basis the EIB will carry out project monitoring (§4.2.3). In the present case, the EIB did not put in place E&S contract conditions and monitoring arrangements commensurate with the E&S risk profile of the project (§3.2.3, §6.3). It appears that the E&S standards in the EIB's finance contracts differ from the standards actually applying at project level, which impairs the Bank's ability to perform its ordinary duties under the EIB's Standards (i.e. verify compliance and take appropriate action under the finance contracts in the case of non-compliance). Finally, the EIB has not availed itself of several E&S monitoring documents: (i) those required under IDB/IFC Standards, and (ii) those required under the EIB's *sui generis* finance contract conditions.

6.11. The EIB-CM concludes that the EIB did not structure its involvement in the project in accordance with its E&S Standards and the specific requirements of the CCFL. Nor did the EIB monitor the project in accordance with the applicable rules and procedures in the EIB's Standards (§4.2.6).

7. FINDINGS ON THE CONTESTED PROJECT IMPACTS

7.1. *Non-compliance of the project with the Bank's nature protection standards*

Allegation

7.1.1. The Complainants presented a twofold allegation. Regarding the project preparation phase, the Complainants claimed that the ESIA did not assess the project's likely impacts on the geological stability of the Lancaster Lagoons. Concerning the implementation phase, they alleged that the construction works "*undermined the base of the ridge where the Lancaster Lagoons are located, creating a danger of collapse of the wetlands. The elevation of the water table due to the filling of the reservoir is another factor that poses a major risk of destabilising the material even further.*"

7.1.2. In the Complainant's view, the promoter extracted material from the right river bank as well as from the slope of the Lower Lancaster Lagoon without the necessary permits and authorisations. The geological study by the Complainants concluded that the Lower Lancaster Lagoon was in imminent danger of collapse, which could dump up to 9 million m^3 of material into the Reventazón River.[39] The Complainants concluded that an obligation to prevent harm to the protected wetlands arises from the EIB's Standards.

Applicable regulatory framework

7.1.3. The allegation concerns the EIB's requirements related to the project's impacts on protected areas, which consist of the following (§3.2.3, §4.2)

- the project has to undergo an ESIA to identify the most suitable mitigation measures to minimise environmental and social risks;
- any potential impact on biodiversity is duly assessed and mitigation and compensatory measures adopted, in particular where protected areas and/or critical habitats are affected;
- if the project may affect a nature conservation area, the promoter shall obtain written confirmation from the competent authority, or an equivalent environmental evaluation to the satisfaction of EIB, attesting that the project does not have a significant negative impact on biodiversity or a nature conservation area.

7.1.4. The EIB's contractual arrangements with the Intermediary caused confusion regarding the applicable EIB environmental requirements for the Reventazón Hydroelectric project. The finance contracts referred to compliance with elements of *EU environmental law* (§§3.2.3-3.2.5). For projects in Latin America, where EU law formally does not apply, it would have been appropriate to require compliance solely with *EIB's Standards*, since the latter translates the principles and standards of EU legislation to the operational practice of the EIB (§4.2). For the purposes of the EIB-CM's compliance review, the difference between an "appropriate biodiversity assessment" (the EIB's Standards) and an "appropriate assessment" (Habitats Directive) should be stressed.[40] The "appropriate biodiversity

[39] A. Gättgens, Dictamen técnico de peritaje sobre el riesgo de deslizamiento del Humedal Láncaster como producto de la construcción del PH Reventazón (September 2016), page 97.

[40] The appropriate assessment, as defined in the EU Habitats Directive (92/43/EEC), entails a specific procedure that is applicable to projects which might have a significant impact on Natura 2000 sites **within the EU**. These sites have been identified by EU Member States based on specific criteria linked to the presence of habitats and/or species of particular importance for biodiversity in the European context. The appropriate assessment is distinguished from an EIA, since the former focuses on the likely impacts of a plan/project on the conservation objectives of a protected area, on the basis of habitats/species for which the site has been designated. If an appropriate assessment indicates that a project may have adverse impacts on the integrity of a protected area, the competent authority shall adopt appropriate mitigation and offset measures. **The appropriate assessment**

assessment" comprises an exhaustive biodiversity baseline and impact assessment in the ESIA report or in a separate document. A list of nature conservation sites affected by or near the project shall also be provided (see §4.2.5).

7.1.5. As mentioned in §6.2, the EIB's appraisal did not involve a documented gap analysis of the EU-based principles and standards vis-à-vis host country laws or the applicable IDB/IFC Standards. The EIB-CM considers that a formal gap analysis could have clarified the content of EIB's requirements for the Reventazón Hydroelectric project, especially since the SBL contained no reference to EIB's Standards. As part of this enquiry, the EIB-CM conducted a gap analysis to compare the basic principles of the EU Directives with national law as well as IDB/IFC Standards concerning the assessment of a project's likely impacts on protected areas. Annex 1 to this report provides a detailed review of this gap analysis, i.e. an appropriate biodiversity assessment in the project's preparatory documents – in particular the ESIA and the ESMP. The findings are summarised in §§7.1.6-7.1.11.

Findings on an appropriate biodiversity assessment at the time of project preparation

7.1.6. The Lancaster Lagoons are two water bodies of approximately 5 ha (Lower Lancaster Lagoon) and 1.3 ha (Upper Lancaster Lagoon), located on the right bank of the Reventazón River, southeast of the reservoir. Based on the maps available for the EIB-CM's review, it appears that the lagoons are located approximately as follows:

- Lower Lagoon: 220 m from nearest point on the river: 1.4 km from the tail of the reservoir and 150 m from the landslide-prone quarried area on the river.
- Upper Lagoon: 1.0 km from nearest point on the river; 1.0 km from the tail of the reservoir and 770 m from the landslide-prone quarried area on the river.

7.1.7. The Lancaster Lagoons were identified as part of the *Lagunas Bonilla-Bonillita* formation and they were declared protected wetlands *(humedales)* in Costa Rican law in 1994.[41] The declaration in national law was not made on the basis of specific key species, but it referred generally to an abundance of biodiversity. The lagoons are not listed among the protected wetlands of international significance (Ramsar sites) designated by Costa Rica.

7.1.8. The Lancaster Lagoons were mentioned in a number of places in the project ESIA and ESMP. Both Lancaster Lagoons were included in the list of 19 "prominent natural features" in the ESIA, and hence the ESIA clearly identified them as being located within the area of direct influence of the project, also in terms of bio-physical impacts.[42] At the same time, the Lancaster Lagoons were not identified on the map of protected areas in the ESIA[43], a fact that constitutes a formal omission in the ESIA in light of the relevant EIB requirements (§7.1.3).

process, as defined in the EU Habitats Directive, is not applicable outside of the EU. See also EIB Handbook (2010), Chapter C.5. "Biodiversity and Natural Resource Management Assessment".

[41] In 1994, the Ministry of Natural Resources, Energy, and Mines of Costa Rica (MIRENEM) designated the Lancaster Lagoons as protected wetlands *(humedales)* due to their high biodiversity value and ecosystem services. See MIRENEM Decree No. 23004 of 21 February 1994 (published in the Official Journal of Costa Rica No 53. of 16 March 1994). As mentioned in the EIB-CM's Initial Assessment Report, the Complainants highlighted that the Lancaster Lagoons represent an isolated ecosystem that provide shelter to various species protected under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). See EIB-CM Initial Assessment Report, §7.2.2.

[42] The ESIA (2008) provided, in two distinct chapters, a list of prominent natural features (*singularidades naturales*) and a map of protected areas (*áreas protegidas*). The former described the landscape and visual impacts of the project, while the latter formed part of the assessment of biodiversity impacts. See ESIA (2008), page 985, 604.

[43] The map of protected areas within the project's area of influence only marked the Lagunas Bonilla and Bonillita on the *left* bank of the river. The Lancaster Lagoons – on the *right* bank of the river – are not marked as protected areas. See: ESIA (2008), page 604, Figure 8.1.1.

7.1.9. It transpires from the ESIA (2008) that the Lancaster Lagoons were not identified as a priority conservation area in their own right, but they were considered as an integral part of the highly prioritised connectivity aspect of the SBBD. In this respect, the lagoons themselves were not considered to be of a higher level of importance than the forested areas around water bodies in the SBBD. Protected areas per se is not an aspect that is given special consideration in the ESIA update (2012) prepared pursuant to IDB and IFC Standards. Instead, the emphasis is on critical habitats in the high-priority SBBD, of which Lancaster Lagoons are a part.

7.1.10. Concerning the absence of a documented gap analysis by the EIB in the context of this project (§6.2), the EIB-CM finds an important difference between the basic principles of EU Nature Directives and IDB/IFC Standards generally. IDB/IFC Standards do not require an "appropriate biodiversity assessment" for protected areas. Instead, they recognise areas of critical habitat, and put limitations on the project activities that may take place therein. This has implications for the EIB's appraisal of co-financed projects outside Europe, where the EIB accepts the E&S standards of other international financial institutions.

7.1.11. In the case of the Reventazón Hydroelectric project, the EIB-CM also notes that the lagoons were included in the reconstructed SBBD, i.e. the biodiversity mitigation and offset measures covered the preservation of these protected wetlands. The EIB-CM therefore concludes that a biodiversity impact assessment equivalent to the EIB's requirements was conducted at the time of project appraisal. The biodiversity safeguards adopted by IFC and IDB for the project are effectively equivalent to the requirements of the EIB; therefore the acceptance of project documentation based on IDB/IFC Standards does not constitute a breach of the EIB's own policies and standards.

Findings on appropriate biodiversity assessment for the quarrying activities

7.1.12. The second part of the allegation revolved around an appropriate biodiversity assessment for the authorisation for the quarry operations near the foot of the wall of the Lower Lancaster Lagoon.

7.1.13. The Complainants challenged the legality of the quarrying operations before several national authorities – the Environmental Agency (SETENA)[44], the Ministry (MINAE)[45], the Agency for the Management of Protected Areas (SINAC)[46] and the Environmental Tribunal. However, these national authorities considered the complaint not grounded. The promoter underlined that an appropriate permitting process had been followed in line with national law, and referenced the MINAE resolution granting the concession.[47] The 13th IESMC report, dated July 2018, observed that SETENA was in the process of issuing the compliance certificate for the construction phase at that time.

7.1.14. In addition to the decisions of the national authorities, the EIB-CM's enquiry recorded the following geological reports on the landslide risks to the Lancaster Lagoons associated with the project:

- the promoter's own geotechnical study on the Lancaster Lagoons area (2015);

[44] SETENA Decisions: RES-1829-2015 (17.08.2015); RES-094-2016 (21.02.2016); RES-573-2017 (17.03.2017); RES-1036-2017(29.05.2017).
[45] The Directorate for Geology and Mines of the Ministry for Environment and Energy (MINAE-DGM) carried out a site inspection in 2015. The enquiry did not find evidence of materials extraction from the wall of the Lower Lancaster Lagoon by the promoter. See: MINAE Decisions: DGM-CMRHA-026-2016 (04.03.2016), 406-2016-MINAE (07.09.2016).
[46] SINAC Decision of 8 December 2015.
[47] MINAE Resolution R-0239-2013-MINAE of 04.07.2013.

- the Complainants' geological study (2016) and an expert report specifically aimed at reconstructing the quarrying activities through the use of remote-sensing equipment (2017);[48]
- Lenders' Independent Engineer report(2016);
- MICI's independent expert report (2016).

7.1.15. The below paragraphs present the findings and conclusions of the EIB-CM desk review of the aforementioned documentation. As regards the appropriate biodiversity assessment, the EIB-CM was not able to find support in the project's ESIA for the use of the area in question as a source of construction material. The concession documentation was not available for the desk review, which prevented the EIB-CM from forming a conclusive opinion on the appropriateness of the assessment for this action. The same conclusion was reached by MICI's independent review and the geological expert study commissioned by the Complainants in 2017.

7.1.16. IESMC took note of the complaint about the project's negative impacts on the protected area, however the panel did not have access to the relevant permitting documentation, nor did it investigate the merits of the allegation.

7.1.17. According to the satellite images and technical reports reviewed by EIB-CM, the quarrying concession extended beyond the area identified as a source of construction material in the ESIA of 2008. It also transpires from the available documents that the materials extraction may have taken place in a geologically unstable and environmentally sensitive area. The EIB-CM notes, however, that quarrying at the toe of a slope of this nature and in a highly sensitive wildlife habitat is a poor reflection on the permitting processes. However, the EIB-CM cannot conclude whether the excavations took place outside of the concession area for the materials extraction given the limited documentation as indicated in §7.1.14 and §7.1.15.

Conclusions and recommendations

7.1.18. Although IDB and IFC Standards do not establish a requirement for an "appropriate biodiversity assessment" as per the basic principles of the EU Habitats Directive, in the present case, the project's preparatory documents included equivalent biodiversity safeguards to preserve the integrity of the Lancaster Lagoons. Therefore, the project met the EIB's requirements on nature protection at the time of appraisal.

7.1.19. There are indications that the authorisation for quarrying at the foot of the Lower Lancaster Lagoon took place without an "appropriate biodiversity assessment". The EIB-CM could not form a conclusive opinion on the potential impacts of the quarry operations on the Lancaster Lagoons based on a desk review.

7.1.20. In light of the concerns about the potential negative impacts of the project on the integrity of the Lancaster Lagoons – a protected area of national significance and an element of the reconstructed Mesoamerican Corridor – the EIB should request clarification from the promoter about the sourcing of construction materials from a site other than those identified in the ESIA, and from such a

[48] A. Gättgens, Dictamen técnico de peritaje sobre el riesgo de deslizamiento del Humedal Láncaster como producto de la construcción del PH Reventazón (September 2016); A. Mende, "Reconstrucción de las Actividades de Explotación en el Valle Río Reventazón en los Alrededores del Humedal Laguna Láncaster entre 2012 y 2014 basado en la Interpretación de Datos de Teledetección" (September 2017).

geotechnically and environmentally sensitive area. In this connection, the Bank may consider conducting a site visit.

7.2. *Failure to reconstruct the Mesoamerican Biological Corridor*

Allegation

7.2.1. In their second allegation, the Complainants challenged the project's compliance with the EIB's requirement to reconstruct the Barbilla-Destierro Biological Corridor (SBBD). According to the Complainants, the Lancaster Lagoons were excluded from the buffer zone *(zona de amortiguamiento)* of the relocated SBBD, contrary to the provisions of the Master Plan.[49]

7.2.2. The Complainants also declared that the Reforestation Plan for the areas at the tail of the reservoir and around the dam had not been implemented. The Reforestation Plan formed part of the ESMP and aimed to restore connectivity as well as to stabilise the banks of the reservoir. The Reforestation Plan set forth an implementation schedule that is referenced in the complaint letter. The Complainants added that in 2016 the promoter partially expropriated the Lancaster Farm and cleared a section of the Complainants' forest plantations, which had been secured under a contract with the National Forestry Financing Fund (FONAFIFO). The Complainants saw the act as illegal logging on the grounds that it runs counter to the reforestation component of the project.

7.2.3. The Complainants added that, as of mid-2018, no wildlife monitoring has been performed and the camera traps have been dismantled.

Applicable regulatory framework

7.2.4. The EIB's Standards require that biodiversity mitigation and compensatory measures, as adopted in the ESIA, be implemented before project completion (§3.2.2, §4.2.6).

Findings

7.2.5. Both the reconstruction of the SBBD and the reforestation programme were among the biodiversity mitigation and offset measures that substantiated the project's eligibility for EIB financing (Table 1).

7.2.6. As reported in §6.8., the EIB's project monitoring has not captured all the biodiversity monitoring data required under IDB/IFC Standards and the EIB's *sui generis* contract conditions. In relation to this allegation, the absence of the SBBD Operational Framework and the reports by Panthera, CATIE and the Biodiversity Advisory Group from the EIB's monitoring archive is noted. As part of this enquiry, in May 2018, the promoter submitted to the EIB-CM substantial documentation on the actual implementation of biodiversity mitigation and offset measures (e.g. the Ministerial Decree approving the Parismina Offset Programme, and four Biodiversity Advisory Group reports), which was considered in the present review.

7.2.7. The EIB-CM noted the findings in IFC-CAO's Compliance Assessment Report explaining that, *"The project also involves a large land acquisition and resettlement programme, requiring the acquisition of 136 properties covering approximately 2 000 hectares of land. Land acquired included a buffer*

[49] The Master Plan of May 2013 (*Plan Maestro para mitigar los efectos del Proyecto Hidroeléctrico Reventazón sobre la Conectividad y Funcionalidad del Sub-Corredor Barbilla Destierro*) is one of the project documents setting out biodiversity mitigation and compensation measures. Document available at: https://www.iadb.org/en/project/CR-L1049 (accessed on 1 September 2018).

zone that was deemed necessary for the implementation of the [Biodiversity Action Plan] in relation to the terrestrial corridor, and to better manage the reservoir's geological risks."[50]

7.2.8. A detailed review of the available project documentation is provided in Annex 2 to this report. The review showed that the Lancaster Lagoons are located almost at the centre of the SBBD but outside the buffer zone. As regards the project's E&S management, this is line with the plan and the definition of the buffer zone (50 m wide, around the reservoir), and is based on the opinion that a forested fringe all around the reservoir would facilitate animal migration through the SBBD and enhance ecological connectivity – i.e. the function – of the reconstructed corridor.[51] It is, however, unclear as to how the fencing installed by the promoter in this area would be conducive to reaching this goal.

7.2.9. The 12th IESMC report also expressed concern over the impacts this fencing will have on wildlife movements. IFC-CAO investigations into this complaint found that, "*The fencing of the reservoir protection area was required by law prior to filling of the reservoir. The lenders noted that fencing has been designed with the support of Panthera experts to minimise adverse impacts on fauna and therefore allow jaguar movements within the SBBD Corridor. CAO also notes that the company and Panthera have been working together on camera trap captures, as well as individual tracking of jaguar movements along the SBBD Corridor in the area affected by the project*."[52] The impacts on wild animals linked to this fencing are further exacerbated by the apparent lack of consolidated management of the buffer zone. (See Annex 3 to this report).This could have long-term negative effects on the functionality of the area as a wildlife corridor.

7.2.10. The SBBD has been mentioned in all of IESMC's reports available to the EIB-CM. IESMC has noted that the implementation of the management plan appears to be successful, and the 10th IESMC report (May 2016) mentions that additional land owners are accepting the reforestation programmes. The 12th IESMC report (June 2017) summarises the consultant's findings as follows: "*The Biodiversity Corridor and Parismina River Offset Programmes are advancing according to plan. Results so far are encouraging but some caution is needed regarding the attainment of performance indicators in both plans. While it is premature to conclude success in these programmes, the results achieved to date are very encouraging*." The 13th IESMC Report mentions the "SBBD Operational Framework", developed for compliance with IFC and IDB Standards in order to maintain the long-term functionality of the SBBD. IESMC noted that the SBBD Framework is operational and has staff and funding for the next four years up to 2022, and that ICE is concluding contracts with landowners for payments for ecosystem services (PES). The mentioned documents on the implementation of

[50] IFC-CAO Compliance Appraisal Report – Summary of Results (October 2017), page 8., available at: http://www.cao-ombudsman.org/cases/case_detail.aspx?id=250 (accessed on 1 September 2018)

[51] The SBBD Management Plan (*Subcorredor Biológico Barbilla–Destierro Informe del Plan Integrado de Vigilancia Biológica y Ecológica (BEMP) 2016,* PAAS -14-14.6-2-v1.) outlines an approach with 22 camera traps in the prioritised section at the reservoir tail (*Zona Prioritaria Cola del Embalse),* of which two are located slightly northeast of the lower Lancaster Lagoon and several more in the area between the Lancaster Lagoon and Laguna Bonilla, less than 2 km away to the southwest. In relation to the Lancaster Farm, three camera locations appear to be on the farm borders – two close to the lower lagoon and one by the river close to its confluence with Quebrada Moncha.
However, the map in the SBBD Management Plan is not sufficiently detailed to determine with certainty whether any camera trap is in fact located on the Lancaster Farm. The baseline monitoring carried out before reservoir filling was continued at five general monitoring sites, two of which are located in close proximity to the lower Lancaster Lagoon. The first year's monitoring is reported in the SBBD Management Plan. No pumas or jaguars were identified, but two smaller felines, the ocelot and its close relative the margay cat were found, the ocelot being the more common. The report on monitoring undertaken in September 2016, and the latest monitoring report available at the time of drafting of this report in July 2018 recommends that the monitoring effort be reduced at the five general sites from 120 hours of continuous work to 72 hours, based on the considerable experience and baseline data gathered. This is implemented annually. It also recommends extending the camera trapping to the area around the reservoir and not just limiting this to the reservoir tail. The Complainants allege that, as of mid-2018, no monitoring has been done and that the camera traps have been dismantled. The EIB-CM was unable to verify this claim during its enquiry.

[52] IFC-CAO Compliance Appraisal Report: Summary of Results (October 2017), page 17.

mitigation measures were not recorded in the EIB's project monitoring. In addition, the IESMC reports did not analyse the situation of the Lancaster Farm. Therefore, the EIB-CM could not form an opinion as to whether the EIB's requirement concerning the reconstruction of the Corridor was breached in relation to the allegations.

7.2.11. Based on the evidence available, the EIB-CM considers that there has been no breach of the EIB's E&S requirements in the planning and design of the reconstruction of the SBBD. It is however, noted that relevant monitoring data were not fully available for the EIB-CM's enquiry (§7.2.6). The EIB-CM could therefore not reach a conclusive opinion on the potential impacts of the fencing or the progress of the ongoing wildlife monitoring without being able to assess the issues in the field – an assessment that would have to be made by a wildlife expert.

7.2.12. The desk review raised a clear concern regarding the actual implementation of the biodiversity mitigation and offset measures at the Lancaster Farm, for example the impacts of the fencing and partial expropriation of properties on the functioning of the SBBD as a migration corridor for wildlife. This concern warrants close monitoring and continuous dialogue with the promoter, in close cooperation with IFC and IDB, with a view to ensuring the functioning of the Corridor as a priority.

Conclusions and recommendations

7.2.13. The EIB-CM cannot form a conclusive opinion on the allegation due to the absence of relevant documentation at the EIB. Given that the EIB is in the process of collecting project completion information from the Intermediary and the promoter (§6.5), and the EIB's Standards require the EIB to verify the implementation of biodiversity mitigation and compensation actions before completion (§4.2.6), the EIB-CM recommends that the EIB verify the success of the reconstruction of the Mesoamerican Corridor at the Lancaster Farm as part of the ongoing processes. The EIB may consider contacting the Intermediary and the promoter to collect the relevant E&S information produced under IDB/IFC Standards, and conducting a site visit.

7.3. Non-compliance of the project with the obligation to remove the vegetation from the reservoir area

Allegation

7.3.1. The Complainants stated that the filling process commenced without the prior clearing of the reservoir area, running counter to §3.3.4 of the ESIA. They stressed that the decomposing vegetation emits a substantial amount of methane, compromising the GHG mitigation potential of the project. The Complainants also alleged that the negative externalities associated with these emissions had not been duly assessed in the lenders' economic analysis during appraisal. They believed that this constituted a serious omission as the financiers – including the EIB – are financing this project under their climate change initiatives. Finally, the Complainants indicated that the putrefaction process suppresses oxygen levels in the reservoir, causing environmental damage to the aquatic ecosystems of the Reventazón River and the Tortuguero National Park.

Applicable regulatory framework

7.3.2. The EIB requires that all mitigation and compensation measures recommended in the ESIA be incorporated in the project (§3.2.2).

Findings

7.3.3. The photos submitted by the Complainants during the initial assessment and investigation stages show large trees at the dam site and in the middle of the reservoir, supporting the view that not all vegetation was removed from the reservoir area. In 2018, maintenance works on the project involved the lowering of the water level in the reservoir. Satellite images from the same period confirm that biomass was left in the reservoir area after the filling.

7.3.4. IDB's Management Response to the Complainants in 2016[53] provided the following explanation: "*The Requesters claim that not all trees in the reservoir area have been cut prior to filling of the reservoir. Indeed, selective biomass clearance is a standard practice for large hydropower projects globally, as it is often impractical and not necessarily desirable to remove all biomass in a reservoir prior to its filling. It is in many cases, such as for the project, the best strategy to minimise overall impacts on the environment, as full biomass clearance can lead to very detrimental environmental impacts, including increased risk of erosion and landslide on the river banks*."

7.3.5. A potential scientific basis for the decision to leave this vegetation in place cannot be ascertained without the relevant documentation, but the EIB-CM concurs with the conclusions of the IDB Management Response regarding the advantages and disadvantages of vegetation removal. As regards the possibility that the Complainants are referring to floating weeds such as water hyacinth (*Eichhornia Crassipes* or "lirio"), that is a maintenance issue of significant importance to the power generation of the hydropower plant.

7.3.6. The ESIA contained recommendations related to vegetation clearance before reservoir filling and the continuous removal of invasive weeds[54], which were translated into measures in the ESMP and decisions by national authorities.[55] However, it has proven difficult to draw a conclusion on the allegation because the EIB is not in possession of the relevant E&S data, such as (i) all the relevant decisions of the competent national authorities; (ii) the relevant parts of the ESMP, for example the final vegetation clearance plan, the water hyacinth control plan[56]; and (iii) the E&S status report 90 days prior to the filling of the reservoir – the latter has been identified as a *sui generis* EIB E&S requirement (§6.4 and footnote 37). It is apparent from the 12th and 13th IESMC Reports that IESMC was unsatisfied with the management of floating weeds as of July 2018, calling for significant improvements to the water hyacinth control plan.[57] A conclusive opinion on these compliance issues would require a field visit by a hydropower expert to the project.

7.3.7. Regarding the implications of the vegetation removal for the GHG emissions profile of the project, it is noted that the promoter developed a GHG emissions monitoring framework as part of the ESMP, and conducted field measurements of GHG emissions during the operational phase, i.e. after the

[53] Joint IDB-IIC Management response to the MICI-BID-CR-2016-106 Request regarding the Reventazón Hydroelectric Project in Costa Rica (the "Request"), page 10, section 4.3.1.

[54] §3.3.4 of the ESIA *states, "The following are the different project works and a description of the actions that each task entails. Reservoir Site clearing: this consists of the removal of the vegetation that covers the sites to be flooded, such as grasslands, trees and minor flora. This activity is implemented by cutting the trees down with chainsaws, while the removal of logs is carried out using machinery such as tractors or excavators. Minor flora is removed by hand for transfer to other places, where it can be replanted."* Page 1033 of the ESIA refers to selective biomass removal in the reservoir area during construction works, and continuous control of invasive weeds during the operation of the hydropower plant.

[55] EIB-CM had access to one decision of SINAC (Resolución No. ACLAC-OSSM-046-2014) that referred to the selective removal of trees and plants, and provided a table of the quantity of trees for cutting in the reservoir area.

[56] The water hyacinth control plan is mentioned in the 12th IESMC report. The version dated August 2015 (*Programa Prevención y Control de la Introducción y Dispersión Lirio Reventazón PAAS-8-8.2-1*) is available on IDB's website: https://www.iadb.org/en/project/CR-T1086.

[57] Water hyacinth can alter water clarity and decrease dissolved oxygen produced by phytoplankton, and concentrations of nitrogen, phosphorous, and heavy metals.

filling of the reservoir. The project's GHG monitoring framework was prepared after the EIB's project approval, and it stems from an agreement between the promoter and IFC and IDB (§3.1.2). It appears that the EIB's monitoring did not record this development, as the EIB did not receive the relevant annual GHG monitoring reports. The EIB's contract conditions only requested reporting on the project's carbon footprint at project completion and three years thereafter (§3.2.5, footnote 7). Considering that large hydropower projects may not automatically generate GHG emissions reductions (§4.2.8), this project may provide a "lesson learned" for the Bank in terms of keeping abreast of dynamically evolving monitoring methodologies in climate finance projects.

7.3.8. During the EIB-CM's enquiry, the promoter provided access to the project's GHG monitoring methodology[58] and the first GHG monitoring report, the latter covering the period from May 2016 to November 2017.[59] A desk review of these documents indicated that the project's GHG monitoring framework is consistent with good practice in the field. The vegetation situation of the valley prior to flooding is factored into the GHG monitoring framework of the project. The selected GHG monitoring methodology is based on putting floating tent-like devices on the water which capture emissions from the reservoir (such as those resulting from the decomposition of vegetation) and measure those. The monitoring methodology addresses real emissions from the reservoir *in situ* meaning that, irrespective of whether or not vegetation was removed from the reservoir before filling, the monitoring results show what is actually happening in the reservoir.

7.3.9. The project's GHG monitoring report indicated annual average emissions of 13 862 tCO_{2eq} (8.8 gCO_{2eq}/kWh) in 2016 and at 29 342 tCO_{2eq} (4.9 g CO_{2eq}/kWh) in 2017.[60] The EIB's appraisal – using its own Carbon Footprint Methodology[61] – estimated net GHG emissions savings *from the project* of 212 000 tCO_{2eq}/yr (see §6.3), based on the following assumptions about the project's reservoir emissions. The EIB assumed GHG emissions from the reservoir consisting of CO_2 diffusive emissions, CH_4 diffusive emissions and CH_4 bubble emissions. The calculation resulted in an emission rate of approximately 38 000 tCO_{2eq}/yr (corresponding to approximately 5 400 gCO_{2eq}/m^2/yr or 26 gCO_{2eq}/kWh). This calculation was based on the highest sensitivity values in a tropical, moist, short-dry-season zone. The average emission rate, without sensitivity, was calculated at 12 000 tCO_{2eq}/yr (corresponding to approximately 1 700 gCO_{2eq}/m2/yr or 8 gCO_{2eq}/kWh).

7.3.10. The EIB-CM noted that the EIB's calculations regarding GHG emissions at project appraisal are in line with the first physical monitoring results.

[58] Diseño para implementar el Programa de Monitoreo de emisiones de gases efecto invernadero, provenientes del embalse de Reventazón, PAAS-13-13.2-1.2 (June 2015).
[59] Estudio de Gases de Efecto Invernadero para el Embalse del Proyecto Hidroeléctrico Reventazón (ICE-PHR) (January 2018).
[60] *"Se puede notar que las emisiones para 2017 prácticamente duplicaron las obtenidas en 2016, resultado que pone en evidencia el nivel de degradación que está sufriendo el reservorio así como la posible acumulación de sedimento y en consecuencia el aumento en la disponibilidad de nutrientes. Se puede notar además que las mayores emisiones se registraron en los meses de noviembre y diciembre para el 2016 y en los meses de octubre, noviembre y enero para el 2017. Esto concuerda con lo discutido en párrafos anteriores, en donde se explicó que los procesos de erosión que se intensifican en la época lluviosa, impactan de manera directa el flujo de emisión de GEI producto del acarreo de nutrientes que se acumulan en el cuerpo de agua, favoreciendo así los procesos de degradación de materia orgánica lo que explica el aumento en las emisiones de GEI." In :*
Estudio de Gases de Efecto Invernadero para el Embalse del Proyecto Hidroeléctrico Reventazón (ICE-PHR) (January 2018), page 25-26.
[61] See: EIB Methodologies for the Assessment of Project GHG Emissions and Emission Variations, available at:
http://www.eib.org/en/about/documents/footprint-methodologies.htm.

Conclusions and recommendations

7.3.11. Based on the information available for this enquiry, the EIB-CM is unable to form a conclusive opinion on the compliance of the vegetation management in the reservoir area with the EIB's requirements. While the unremoved biomass has not compromised the GHG emissions profile of the project (§7.3.10), vegetation clearance in the reservoir area constituted a recommendation in the ESIA, and the corollary mitigating measures were further developed in the ESMP. The EIB's Standards require promoters to implement such interventions. Therefore, vegetation management is a compliance issue in the context of the EIB's monitoring and project completion review. Based on the aforesaid, the EIB should assess whether the vegetation management in the reservoir is compliant with the ESIA and the ESMP. To this end, the Bank has agreed to collect the relevant E&S information from the promoter and the Intermediary, and if deemed necessary, commission a field visit.

7.3.12. The EIB-CM noted that the promoter has developed a GHG emissions monitoring framework in accordance with international best practice. The GHG emissions associated with the project are in line with the EIB's requirements. Due to the EIB's non-participation in the Syndicate as well as the EIB's Handbook applicable at the time of appraisal (in which there is no explicit requirement for physical monitoring of GHG emissions), however, GHG monitoring information was not systematically reported to the EIB. The project may provide a "lesson learned" for the Bank as regards monitoring arrangements in climate finance projects (see also: §7.3.7).

8. LESSONS LEARNED

8.1. The approval of the CCFL as well as the Reventazón Hydroelectric project took place during a period when the EIB's Environmental and Social Standards for framework loan operations outside Europe were under preparation (§4.2.9). The EIB-CM considers that this circumstance puts into context the gaps in the EIB's administrative processes that ultimately led to the failure of the Bank to structure and monitor the Reventazón Hydroelectric project in line with the applicable regulatory framework. The EIB-CM considers that there are lessons learned from this project.

8.2. It is noted that the Bank is in the process of developing a set of Guidelines for Hydropower Plants[62], which is now in the final stage of preparation. In addition, the E&S Handbook of the Bank is also currently under review. The review will also cover the appraisal and monitoring of framework loans and intermediated operations, thus further contributing to determining the responsibilities of the parties involved. Both the Guidelines for Hydropower Plants and the review of the E&S Handbook are being conducted as part of a continuous improvement process at the Bank, and they are expected to facilitate the structuring and monitoring of future similar operations.

[62] The Guidelines will be applicable to all types of small and large hydropower projects, as well as to all financial products by EIB, including on-lending to financial intermediaries. The GLHP differentiates between large dams and large reservoirs due to the potential risks involved in each case. Concerning large dams in particular, there are several recommendations and requirements relating mainly to potential physical risks (e.g. technical assessment of the natural hazards and technological risks to the safety of a hydropower plant, Independent Dam Safety Review). The *draft* document is available at the Bank's website: https://www.eib.org/attachments/general/events/eib-guideline-on-hydropower-development-draft-april-2018.pdf

9. CONCLUSIONS AND RECOMMENDATIONS

9.1. The Bank's involvement in this project was not sufficiently structured and managed in accordance with the EIB's Standards. In reaching this conclusion, the EIB-CM noted that the Bank retained control over the formulation of the E&S loan conditions attached to its financial resources. The EIB-CM's enquiry identified the following inconsistencies in the Bank's appraisal and monitoring:

1) The E&S standards identified at appraisal - and subsequently stipulated in the legal documentation for the EIB's financing operation - (principles/standards of EU legislation) may not serve the purposes of the EIB's monitoring. In reality, the project's E&S documentation was prepared pursuant to IDB/IFC Standards and Costa Rican law, and the EIB-CM could not find any legal document attesting the equivalency of the EU-based contractual requirements and IFC/IDB Standards or national law. This may impair the EIB's ability to perform its ordinary duties under its Standards, i.e. verifying compliance and taking appropriate legal action under the CCFL in the case of non-compliance.

2) The EIB did not identify E&S monitoring arrangements commensurate with the risk profile of the project. The EIB did not participate – either directly or through the Intermediary – in the E&S monitoring framework created by IFC and IDB, and therefore did not receive key E&S documentation related to the mitigation and compensatory measures adopted under IDB and IFC Standards. Given that the project involved a large dam and significant environmental risks, it follows that a fraction of the monitoring data under IDB/IFC Standards cannot satisfy the EIB's requirements.

3) The EIB did not follow-up its *sui generis* loan condition approved by the EIB Board of Directors, related to the E&S status report before reservoir filling. Furthermore, the EIB did not receive E&S monitoring data on the success of all the E&S mitigation and compensation measures. In the absence of the substantiating E&S information, the EIB may not be in a position to assess the implementation of the aforesaid measures at project completion, as required by the EIB's Standards.

9.2. During the EIB-CM's enquiry, the promoter provided access to some E&S documents not held by the EIB, which facilitated a better view of the E&S impacts raised in the complaint. While the available documentation did not allow the EIB-CM to reach a conclusive opinion on the contested E&S impacts, the inquiry indicated the following:

1) Regarding the **first allegation**, the EIB-CM finds that the EIB's requirement for an appropriate biodiversity assessment was fulfilled at the time of appraisal. However, the available project documents and geological reports indicate that an appropriate biodiversity assessment was not conducted for the authorisation of the quarry operations near the foot of the Lower Lancaster Lagoon. While the EIB-CM could not reach a conclusive opinion based on a desk review, the inquiry indicated potential negative impacts of the project's construction works on the protected area in question. ***The EIB should request clarification from the promoter, and it may also consider conducting a site visit.***

2) Concerning the **second allegation,** the EIB-CM noted that the Lancaster Lagoons are located within the reconstructed Mesoamerican Corridor. IESMC issued the compliance certificate for the Corridor's reconstruction in July 2018. It remains, however, unclear how the fencing at the Lancaster Farm would further the functionality of, and connectivity in, the Corridor. Furthermore, the EIB-CM ascertained that the EIB does not have access to all relevant monitoring

data on the implementation of biodiversity mitigation and compensation measures produced under IDB/IFC Standards. ***The EIB should verify the success of the reconstruction of the Mesoamerican Corridor at the Lancaster Farm as part of the EIB's process of gathering project completion information. The EIB may consider contacting the Intermediary and the promoter to collect the relevant E&S information under IDB/IFC Standards, and conduct a site visit.***

3) As regards the **third allegation**, it appears that the requirement in the project's ESIA concerning vegetation removal was not implemented. The EIB's Standards include a general obligation of promoters to implement the ESIA recommendations. ***Based on the aforesaid, the EIB should assess, as part of the process of collecting project completion information, whether the vegetation in the reservoir has been managed in compliance with the ESIA. The Bank may consider collecting the relevant monitoring data on vegetation management in the reservoir area from the promoter/the Intermediary, and if necessary, conduct a site visit.***
Concerning the possible implications of the decomposing vegetation within the reservoir on the GHG emissions associated with the project, the EIB-CM noted that the project is equipped with a physical measurement framework for GHG emissions. Therefore, the project monitoring captures the real GHG emission levels from the reservoir. The results of the first year of GHG monitoring are in line with the EIB's calculations at the time of appraisal.

9.3. The EIB is recommended to follow up on the aforementioned concerns as part of the EIB's processes of collecting project completion information from the Intermediary and the promoter. The EIB-CM will prepare a follow-up report based on the Bank's actions nine months after the publication of this report.

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Head of Division
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17.07.2019

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ANNEX 1 – APPROPRIATE BIODIVERSITY ASSESSMENT AT THE TIME OF PROJECT PREPARATION

GAP ANALYSIS OF THE PROJECT DOCUMENTS DEVELOPED PURSUANT TO NATIONAL LAW, IDB AND IFC STANDARDS VIS-À-VIS THE EIB'S REQUIREMENTS

Limited exclusively to the environmental issues raised in this complaint, the gap analysis compares the project documents prepared pursuant to Costa Rican law, the basic principles of the EU Environmental Directives, and IFC Performance Standards and IDB Environmental Standards concerning the assessment of a project's likely impacts on protected areas. The highlighted topics are: 1) impact assessment methodology; 2) mitigation; and 3) offset measures.

While it would have been more appropriate to compare IFC and IDB Standards with the EIB's Standards, they are instead compared with the EU Directives because the EIB's finance contracts stipulated that this project should comply with the basic principles/standards of the EU Environmental Directives.

The most obvious difference between the frameworks is that the Costa Rican laws and the EU Directives are legislative texts, and therefore part of national law at the country and EU Member State levels, whereas IFC and IDB Standards are not legal documents but normative safeguards used by the banks in conjunction with their transactions. The EU Directives are therefore able to stipulate clear roles and mandates for Member States and their competent authorities in the implementation and operation of the Directives. For example, there are lines of reporting and monitoring from the management of the protected areas to the national level and to the European Commission. If a derogation is made to the principles of the EU Nature Directives (Habitats and Birds Directives) and a development will take place in a key habitat, then this must be reported to the European Commission by the Member State, together with the measures that will be taken.

1. Impact assessment methodology

IFC Standards are not prescriptive on the content of an ESIA and do not provide a standard ESIA format as is set out in the EU EIA Directive and IDB Safeguards. IFC and IDB Standards are not prescriptive as regards which projects/sectors require an ESIA, whereas the EU EIA Directive provides a list of relevant sectors in its Annexes. IDB only states that an ESIA is required for Category A projects, however hydropower projects on the scale of the Reventazón Hydroelectric are always categorised as "A".

While requiring an ESIA, IFC and IDB Standards do not go into the same level of detail on the methodology of the impact assessment, as is assumed in the EU Habitats Directive's "appropriate assessment" process, which is triggered when a project may affect a protected area. In an appropriate assessment, the practice is for the developer to document that there is no detrimental effect on the specific habitat type or the relevant animal/bird species for which the special conservation zone has been designated.

The project ESIA was developed in 2008 and updated in 2012. The EIB-CM's enquiry indicated that the original ESIA was very disjointed in its impact analyses, using a matrix approach which was largely impenetrable, and without making conclusive impact statements. The list of protected areas within the project's area of influence is incomplete. The updated EIA (2012) has an improved systems approach, and is much better in terms of its methodology. It identifies five areas of environmental concern: A) critical natural habitat: loss of connectivity in the Barbilla-Destierro Biological Subcorridor (SBBD) - path of the jaguar; B) significant conversion and degradation of a natural habitat: the Reventazón River; C) risks of adverse impacts on the downstream Reventazón-Parismina-Tortuguero hydro-biological system (including potential effects on the

Tortuguero National Park); D) risk of economic displacement (a social aspect, not relevant to the bio-physical environment); E) management of environmental impacts during construction; and F) cumulative impacts on the Reventazón River.

The project ESIA does not conduct appropriate biodiversity assessments for all protected areas as envisaged in the basic principles of the Habitats Directive, which is considered in more detail in section 4 of this Annex.

2. Mitigation measures

The EU Habitats and Birds Directives recognise the need for a network-based approach to nature conservation, due to the mobility of species and the need for corridors between different habitat types. IFC and IDB do not include this as a specific aspect of their standards on biodiversity, but address the functional aspect of connectivity in a different language.

The Habitats Directive states that Member States shall identify Special Areas of Conservation (SACs) based on key species and habitat types, as given in its Annexes. The Birds Directive has a similar approach, requiring Member States to classify Special Protected Areas (SPAs) for bird species identified in Annex I. The Habitats Directive includes special provisions stipulating that projects shall not take place in SACs and SPAs if they have a detrimental effect on species and habitats, although it does provide for derogation if the project is of overriding public and/or economic interest.

The appropriate biodiversity assessment process, as per the basic principles of the EU Nature Directives, is used to determine if there are negative effects or not. IFC Standards do not specify that an appropriate biodiversity assessment shall be conducted for each protected area. Instead, IFC Standards recognise areas of critical habitat (e.g. habitat of significant importance to critically endangered and endangered species) and state that project activities shall only take place in critical habitat if an entire set of criteria are met. These include the requirements that the project does not lead to measurable adverse impacts on those biodiversity values for which the critical habitat was designated, and does not lead to a reduction in the national/regional/global populations of critically endangered or endangered species.

Paragraph 101 of the EIB E&S Handbook states that, during the appraisal, "*[the Bank] clarifies what, if any, protected areas are nearby or affected by the project."* For projects outside Europe, where international E&S standards are used for environmental risk identification and management, EIB staff need to be cognizant of the difference between IFC Standards and EU Nature Directives during the Bank's appraisal. **The Bank should therefore consider whether the impacts on all protected areas (habitats and species) have been taken into account in an appropriate manner, for example whether the area of the designated critical habitat encompasses all the protected areas. In the case of the Lancaster Lagoons, this was impeded by the fact that the ESIA does not recognise the Lancaster Lagoons as a protected area** (see also section 4 of this Annex).

The project documentation indicates that the project ESIA focuses on the project's impacts at the overall level of "ecosystems" and "landscapes". Only one species is singled out for specific attention - the jaguar.

While clear inventories of birds were conducted in both the original ESIA (2008) and the update (2012), there is no specific assessment of the threat to birds (whether with or without IUCN classification) in either the original ESIA or the update. The IUCN classification is given in an ambiguous manner – it is unclear whether threat is determined at national or international level, or both; in spite of the existence of many species that

the EIB-CM assumes belong to the VU, EN and CR categories according to IUCN[63], there is no section analysing the potential impacts (or not) on these listed species as is basic good practice in an EIA.

Both the 2008 and 2012 ESIAs contain detailed species lists. The 2008 EIA lists all bird species inventoried[64] while the 2012 update focuses only on those species with a threat classification.[65] This latter list contains 31 species. The designation of threat category is not clear, but it is understood that "*Amenazado de Extinción*" in Spanish should be interpreted as VU and "*Peligro de Extinción*" in Spanish as EN and possibly also CR. There are four species designated in the higher threat category, three of which must have been assigned to this category on national grounds as they are listed as "least concern" internationally (at least at the time of writing) while the fourth, the great green macaw (*Ara ambigua*) is listed in the EN category also internationally. Neither study reports a specific assessment of the project's potential negative impact on these threatened species. The key discussion on birds in either study concerns the standard aspect of impacts from transmission infrastructure such as lines and switchyards, and the necessary mitigation and management to avoid the electrocution of birds.

The 2012 update of the ESIA follows the IFC Standards approach (based on good international practice) of identifying key areas of significance for the environmental mitigation, management and monitoring of the project and identified five, as previously mentioned. Any significant aspects of relevance to birds are then assumed to be included in the measures adopted to avoid, minimise, mitigate and/or compensate for these five principal areas of risks.

3. Offset measures

The EU Nature Directives do not go into great detail on the possibility of an offset approach if a natural habitat is going to be strongly affected. This may be because the habitats that are recognised as Special Protected Areas or Natura 2000 under these Directives are links in a corridor that cannot automatically be replaced by another portion of land somewhere else. The mitigation hierarchy put forward in IFC Performance Standard 6 includes biodiversity offsets, which may be considered only after appropriate avoidance, minimisation and restoration measures have been applied. The biodiversity offset needs to be designed and implemented so that it achieves measurable conservation outcomes, which can be reasonably expected to result in no net loss and preferably a net gain in biodiversity. IFC Performance Standard 6 further clarifies that a net gain is a requirement in critical habitats. Compensation is therefore seen as a means to tackle residual impacts wherever it is technically and financially feasible. IDB Safeguards take a similar approach to IFC Performance Standards.

4. Appropriate biodiversity assessment in the ESIA and the ESMP

The Lancaster Lagoons were officially declared as wetlands in 1994 as one part of the "*Humedal Lacustrino Bonilla-Bonillita*" and are hence legally protected. The declaration was not made on the basis of specific key species but instead refers to an abundance of biodiversity, which we assume relates to their wetland status, i.e. aquatic species. The lagoons do not, however, feature in the presentation of protected areas reported as a section of the project's original ESIA, though both the Bonilla and the Bonillita Lagoons are included. Protected areas per se is not an aspect given special consideration in the 2012 ESIA update. Instead, the emphasis is firmly on critical habitats in the high-priority SBBD, of which the Lancaster Lagoons are a part. The designation as a wetland means that a zone of 100 m width around the lagoons should be established where the Forestry Law applies – originally Forestry Law 7174, later replaced by Forestry Law 7575.

The Lancaster Lagoons are mentioned in a number of places in the ESIA of 2008, notably in the inventory sections on birds and mammals; in the listing of prominent natural features (*singularidades naturales* in Spanish); and in *"Anexo 8.1"* (which briefly describes the sites sampled as part of the aquatic ecology baseline studies). In Anexo 8.1., they are described as being *"surrounded by a regenerating secondary forest, having*

[63] VU = vulnerable, EN = endangered, and CR = critically endangered.
[64] ESIA (2008), page 638, Table 8.2.6.
[65] Proyecto Hidroeléctruco Reventazón - Estudios Ambientales Adicionales / Parte E: Plan de Manejo de la Biodiversidad, Annex 3. (the page number is indicated as 39, but it is in reality 53, as there is a pagination error in the document).

muddy bottoms, and low fish diversity". The fact that the surface of the lagoons is mainly covered by small floating aquatic plants is identified as a biodiversity problem. The ESMP does not mention the lagoons specifically. They were briefly mentioned in the Master Plan for the SBBD, where it was pointed out that recovery of the forest cover around wetlands and rivers in general was assessed as a priority for the Corridor's function. They were not mentioned at all in Phase 1 of the IDB/ICE additional environmental studies, notably the biodiversity management plan or the biodiversity compensation plan of February 2012[66], but were mentioned in the Phase 2 documentation of May 2012.[67]

Taken together, this does not indicate a lack of appropriate biodiversity assessment at the time of the original 2008 ESIA nor in 2012 ESIA updates, but rather points to the fact that the lagoons were not identified as a priority conservation aspect in their own right, and considered as an integral part of the highly prioritised connectivity aspect of the SBBD. In this respect, the lagoons themselves are not considered to be of a higher level of importance than are all forested areas around water bodies in the SBBD. **It is, however, clear that the Lancaster Lagoons were not identified in the map of protected areas in the ESIA (prepared pursuant to IUCN Category I-VI)[68], a fact that constitutes a formal omission in the ESIA.**

As mentioned previously, the ESIA does not specifically consider the impacts of the project on the Lancaster Lagoons as a protected wetland. We noted that the declaration of the wetlands did not refer to the presence of key species, so this would have been difficult. It is also noted that the ESIA team visited the lagoons as part of the environmental base line. This was done because the lagoons are part of the bigger SBBD. The team did not find species of biodiversity importance that were not present elsewhere. It is the EIB-CM's understanding from the ESIA that the project is likely to have limited impact on the wetland species that are associated with the lagoons.

The EIB-CM finds that the lagoons are part of the SBBD. This was identified as critical habitat and a Biodiversity Action Plan was developed for key species. On the basis of the documentation provided, the EIB-CM finds that the biodiversity planning done for the SBBD, including the lagoons, is equivalent to an appropriate biodiversity assessment required under the EIB's Standards.

The EIB-CM concludes that the principles of the safeguards adopted by IFC and IDB for the project are effectively equivalent to the requirements of the EIB; therefore, the acceptance of IFC and IDB Standards for the project does not constitute a breach of the Bank's own policies and standards.

[66] Proyecto Hidroeléctruco Reventazón - Estudios Ambientales Adicionales / Parte E: Plan de Manejo de la Biodiversidad ; and Proyecto Hidroeléctruco Reventazón - Estudios Ambientales Adicionales / Parte F: Propuesta de Compensación y Mitigación de Biodiversidad, Appendix 1.
[67] See for example Proyecto Hidroeléctrico Reventazón - Estudios Ambientales Estratégicos Fase 2.
[68] ESIA (2008), page 604, Figure 8.1.1.

ANNEX 2 - THE LANCASTER LAGOONS IN THE RECONSTRUCTED MESOAMERICAN CORRIDOR.

The most relevant document pertaining to the issue of the biological corridor and its buffer zone is the Master Plan.[69] Reviewing this document, it is clear that the entire Lancaster Farm (the Farm includes both lagoons, which are the real aspect of the complaint) is located well within the SBBD. The area covered by the SBBD can be seen in Figure 3 below.

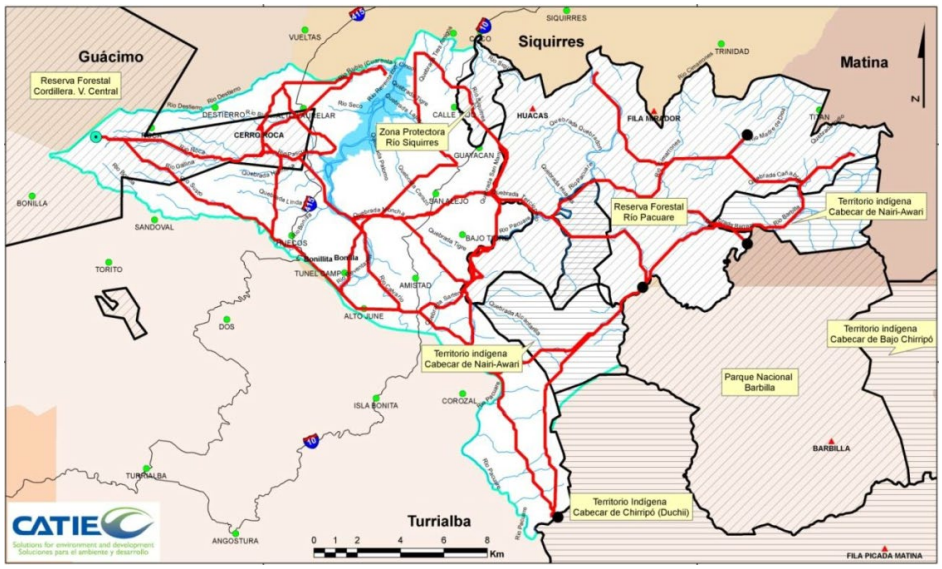

Figure 3. Delimitation of the SBBD (Source: Master Plan)

The Master Plan sets out the connectivity in the SBBD in three sectors, whereby the Lancaster Lagoons are in sector 1, comprising the forestry reserve of the *Cordillera Volcánica Central – Río Reventazón*. See below.

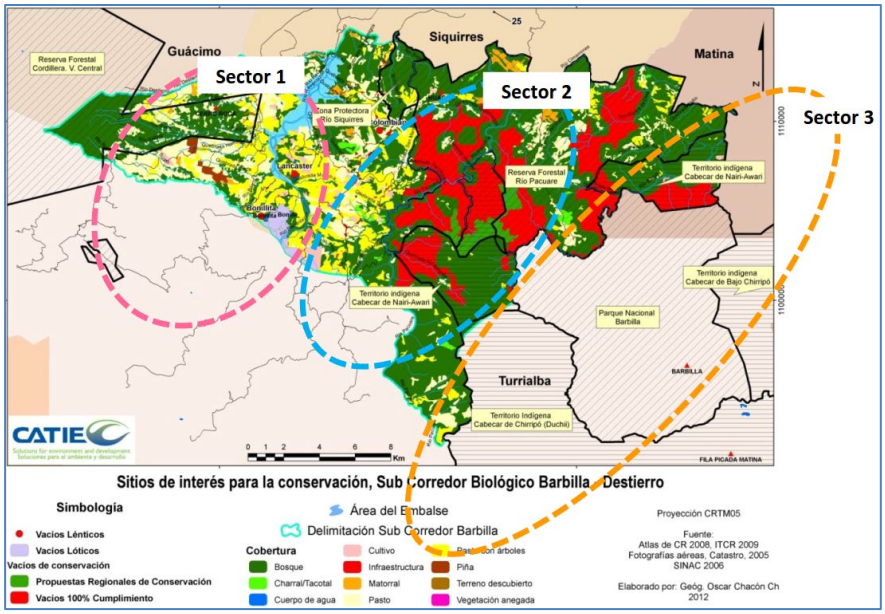

Figure 4. Sectors within the SBBD

[69] Master Plan (May 2013) (Plan Maestro Mitigar Efectos del Proyecto Hidroeléctrico Reventazón sobre la Conectividad y Funcionalidad del Subcorredor Barbilla-Destierro. SBBD), available at : https://www.iadb.org/en/project/CR-L1049 (accessed on 1 September 2018).

The Environmental and Social Management Report[70] lists the key environmental and social impacts and risks for the entire Reventazón Hydroelectric project, one of them being the loss of connectivity of the SBBD, which could have a negative impact on the critical natural habitat of the corridor. These issues are directly addressed in the updated ESIA (2012)[71], as follows:

"The mitigation of the physical barrier effect, through the creation of an efficient and ecologically feasible biological corridor, covers the following objectives:

1. *Restore the connectivity in proposed priority areas*
   a. *Perimeter of the dam: this component would facilitate the creation of a buffer zone (zona de amortigüamiento) consisting of a reforested fringe of minimum 50 meter's width around the perimeter of the dam, most importantly on the right bank, where the vegetation is composed of grasslands and crops. The main functions would be: (i) reduction of erosion and sedimentation, hence increasing the lifetime of the reservoir; (ii) avoid/reduce landslides in areas with steep slopes around the reservoir; (iii) create connectivity routes for the fauna and habitats for amphibians, reptiles, birds, small insects and medium-sized mammals, among others.*
   b. *Critical areas of the SBBD: this component relates to restoring the structural and functional connectivity of those areas where the current land use compromises the ecological integrity of all the area/zone around the tail of the dam and fragments of forests close to those protected areas of the SBBD."*

The Master Plan picks up many of the recommendations outlined in the ESIA, the most important one being a programme on reforestation, including a description of the buffer zone and its delimitation (Figure 5).

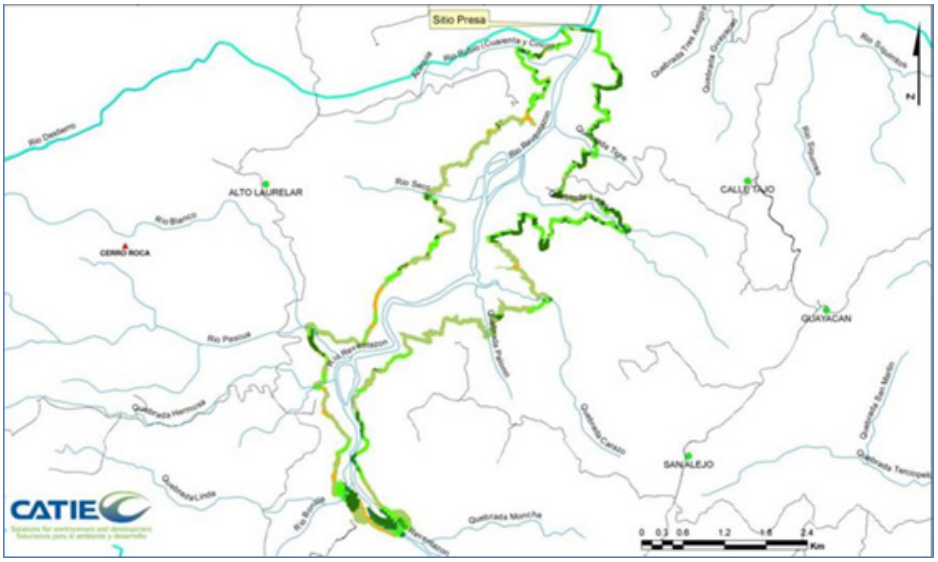

Figure 5. Delineation of the SBBD's buffer zone (50 m fringe) around the dam. Source: Master Plan

The buffer zone (*zona de amortigüamiento*), specified in the Master Plan, is a 50 m reforested fringe around the dam, where the objectives are, among others, to create connectivity routes for the fauna and habitats for reptiles, birds, etc. Note, however, that the buffer zone is widened beyond the prescribed 50 m at the tail of the reservoir. This addition is left without a specific explanation, but the nature of the area, with considerable landslide activity combined with the importance assigned to the reservoir tail for ecological connectivity, is most likely the reason. Whatever the reason, the buffer zone does not incorporate the

[70] Reventazón Hydroelectric Project Environmental and Social Management Report (May 2012), available at : https://www.iadb.org/en/project/CR-L1049 (accessed on 1 September 2018)
[71] Proyecto Hidroeléctrico Reventazón - Estudios Ambientales Estratégicos Fase 2 (May 2012), page 31, available at : https://www.iadb.org/en/project/CR-L1049 (accessed on 1 September 2018)

Lancaster Lagoons. Moreover, the buffer zone in the Master Plan has three purposes: protection, reforestation and regeneration, depending on the current type of land use, the type of surface cover and the slope of the terrain. The Master Plan does not specify any type of land use relating to wetlands or lagoons, or even water bodies. Instead, it focuses on natural forest, crops, bushes, grassland, etc. The only mention of wetlands as a priority concern is the following passage (Master Plan, page 12): "*In this area, special attention should be given to the Lagunas Bonilla-Bonillita as they lack appropriate protection and should be a priority area for the subcorridor.*" This statement creates some additional uncertainty regarding the Master Plan's opinion of the Lancaster Lagoons, as the lagoons were included in the concept of Lagunas Bonilla-Bonillita in the 1994 decree declaring them registered wetlands.

It appears that the lagoons are located almost at the centre of the SBBD but outside the buffer zone. From the point of view of the project's socio-environmental management, this is as per the plan and the definition of the buffer zone (50 m wide around the reservoir), and is based on the opinion that a forested fringe all around the reservoir would facilitate animal migration through the SBBD and enhance the ecological connectivity – hence the function – of the reconstructed corridor. It is, however, unclear as to how fencing of this area will be conducive to reaching this goal.

The Complainants also focused on the barbed-wire fence installed by the project, stating that the primary forest had been disturbed in order to install this fence on the Lancaster Farm. While the expert opinion expressed in multiple reports is that no primary forest exists around the lagoons, but rather secondary forest in a state of regeneration, the 12th IESMC report states that the promoter has installed over 30 km of fences in the communities located in the project's area of influence. The report goes on to expresses concern about the impacts this fencing will have on wildlife movements. IFC-CAO's investigations into similar complaints (and published as recently as October of 2017) report that IFC and IDB have jointly investigated the fencing aspect and concluded, "*The fencing of the reservoir protection area was required by law prior to filling of the reservoir. The lenders noted that fencing has been designed with the support of Panthera experts to minimise adverse impacts on fauna and therefore allow jaguar movements within the SBBD corridor. CAO also notes that the company and Panthera have been working together on camera traps captures, as well as individual tracking of jaguar movements along the SBBD corridor in the area affected by the project*."[72] The issue and potential problems associated with this fencing is further exacerbated by the apparent lack of consolidated management of the buffer zone.[73] This could have long-term negative effects for the functionality of the area as a wildlife corridor.

The SBBD was mentioned in all of the IESMC reports to which the EIB-CM has had access. IESMC has noted that the implementation of the management plan appears to be successful, and in the 10th report, it is mentioned that additional landowners are accepting the reforestation programmes. The 12th report summarises IESMC's findings as follows: "*The Biodiversity Corridor and Parismina River Offset Programmes are advancing according to plan. Results so far are encouraging but some caution is needed regarding the attainment of performance indicators in both plans. While it is premature to conclude success in these programmes, the results achieved to date are very encouraging*." The 13th report, dated July 2018, highlighted *that "there is increasing evidence that large felines are using the biodiversity corridor which indicates*

[72] IFC-CAO Compliance Appraisal Report (October 2017), page 17.
[73] IESMC demanded a management plan for the buffer zone at the tail-end of the reservoir in its 10th monitoring report.

increasing ecological functionality of the SBBD corridor." The same report underlined risks to the viability of the Parismina Offset Programme, and recommended that ICE take adequate steps.[74]

The EIB-CM cannot reach a conclusive opinion on the potential impacts of the fencing or the progress of ongoing wildlife monitoring without the ability to assess the issues in the field, an assessment that would have to be made by a wildlife expert. Based on the evidence available, it is the EIB-CM's opinion that there was no breach of the EIB's socio-environmental standards in the planning and design of the reconstruction of the SBBD. We do, however, note that the relevant documentation from Panthera or CATIE was not provided for the purposes of this study, and is not made available to the Bank as part of the monitoring. However, there is a clear concern regarding the actual implementation measures, for example the impacts of the fencing and partial expropriation of properties on the functioning of the SBBD as a migration corridor for wildlife, a concern that warrants close monitoring and continuous dialogue with the promoter, in close cooperation with IFC and IDB, with the goal of ensuring the functioning of the corridor as a priority.

The monitoring methodology[75] outlines an approach with 22 camera traps in the *Zona Prioritaria Cola del Embalse* (the prioritised section at the reservoir tail), of which two are located just north-east of the Lower Lancaster Lagoon and several more in the area between the Lancaster Lagoon and Laguna Bonilla, less than 2 km away to the south-west. The baseline monitoring carried out before reservoir filling was continued at five general monitoring sites, two of which are located in close proximity to the Lower Lancaster Lagoon. The results of the first year's monitoring was included in the same document. No pumas or jaguars were identified, but two smaller felines, the ocelot and its close relative the margay cat were found, the ocelot being the more common. This monitoring report, representing monitoring undertaken in September 2016, and the latest monitoring report available for the EIB-CM's enquiry, recommends reducing the monitoring effort at the five general sites from 120 hours of continuous work to 72 hours, based on the considerable experience and baseline data gathered. This is implemented annually. It also recommends extending the camera trapping around the reservoir and not just limiting this to the reservoir tail.

[74] *"IESMC was informed of a potential threat to the viability of the offset as a result of pending upgrades to Highway 32 which will require aggregate materials possibly to be sourced from the Parismina River. ICE is a partner in the Highway 32 expansion project as it will be responsible for relocation of overhead utilities and lighting. ICE should initiate discussion with the Ministry of Transport and the proposed construction contractor to prohibit extraction of gravel and sand extraction from the Parismina River."*

[75] Subcorredor Biológico Barbilla – Destierro Informe del Plan Integrado de Vigilancia Biológica y Ecológica (BEMP) 2016.

LIST OF ABBREVIATIONS

a.s.l.	Above sea level
CABEI	Central American Bank for Economic Integration
CATIE	Centro Agronómico Tropical de Investigación y Enseñanza
CAO	Compliance Advisor Ombudsman
CCFL	Central America Climate Change Framework Loan
CMPTR	Complaints Mechanism Principles, Terms of Reference and Rules of Procedure
COMCURE	River Basin Management Commission for the Upper Reventazón River
EIB-CM	European Investment Bank's Complaints Mechanism
ESDS	Environmental and Social Data Sheet
ESPS	EIB Statement of Environmental and Social Principles and Standards
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
E&S	Environmental and social
FL	Framework loan
fsl	Full-supply level
FONAFIFO	National Forest Fund of Costa Rica
GHG	Greenhouse gas
IAM	Independent accountability mechanism
ICE	Instituto Costarricense de Electricidad
IDB	Inter-American Development Bank
IFC	International Finance Corporation
IIC	Inter-American Investment Corporation
IUCN	International Union for Conservation of Nature
MICI	Independent Consultation and Investigation Mechanism
MINAE	Ministry for Environmental Protection and Energy of Costa Rica
MIRENEM	Ministry of Natural Resources, Energy, and Mines of Costa Rica
PCR	Project completion report
SBBD	Barbilla-Destierro Biological Subcorridor
SBL	Sub-Loan Agreement
SETENA	Environmental Protection Agency of Costa Rica

SINAC	Agency for the Management of Protected Areas (National System of Conservation Areas)
tCO_2e	Tonnes of carbon dioxide equivalent
v.	versus