



Illegal Wildlife Trade (IWT) Challenge Fund Annual Report

IWT Challenge Fund Project Information

Project reference	IWT109
Project title	Preventing the extinction of Bolivia's Critically Endangered Red-fronted Macaw
Country/ies	Bolivia
Lead Partner	Natura Bolivia Foundation
Project partner(s)	The Mother Earth Authority, Ministry of the Environment, Government of Bolivia and the Municipal Governments of Omereque, Pasorapa, Saipina, Comarapa and Aiquille
IWTFCF grant value	£294,900
Start/end dates of project	April 1, 2022-Mar 31, 2025
Reporting period (e.g. April 2023-Mar 2024) and number (e.g. Annual Report 1, 2, 3)	April 1, 2023-Mar 31, 2024, Annual Report 2
Project Leader name	Nigel [REDACTED]
Project website/blog/social media	www.naturabolivia.org
Report author(s) and date	Nigel [REDACTED], Maria Teresa [REDACTED] and Henry [REDACTED] May 31 st 2024

1. Project summary

Once locally common (5,000 individuals in the 1980s), Bolivia's endemic Red-fronted Macaw now inhabits scattered patches of scrub, nesting and roosting on steep-sided cliffs in the inter-Andean valleys. Chicks and eggs are poached for the pet trade, which, along with persecution by local farmers, has led to a precipitous population decline: our 2021 survey estimated that there are less than 160 breeding pairs. The greatest threat to Red-fronted Macaw is the trafficking of eggs and chicks. Prior to this project, we piloted a new model for Macaw conservation: protection of critical foraging areas and nest sites through the signing of community-based conservation incentive agreements. This project is building on these successful pilots in the Mizque watershed by scaling up our intervention to the Grande and Pilcomayo watersheds, thus covering 85% of the global Red-fronted Macaw population. We are protecting macaws from poachers by forming teams of farmer-stewards to patrol nest sites and are providing economic benefits to local communities that help them cover the opportunity cost of preventing trafficking. These benefits comprise development projects that prioritize the needs of women. In 2023-2024 we support 164 families with more than £30,000 of projects in exchange for their conservation activities. We are institutionalizing the long-term management of the species by creating a series of Municipal Macaw Conservation Incentive Programmes.

2. Project stakeholders/ partners

Primary project partners comprise Natura Bolivia, the national Ministry of the Environment, the Departmental Government of Santa Cruz and the Municipal Governments of Omereque, Pasorapa, Saipina, and Aiquille.

While we held two meetings with the Director of the Mother Earth Authority within the Ministry of the Environment, it has been difficult to engage her in the project. We have therefore shifted our attempts to feed into national government policy by working with the Vice Presidency and have had a series of meetings with Sergio Arispe Barrientos, as representative of the Vice-President, David Choquehuanca.

At the end of the reporting period, we collaborated with the Departmental Government of Santa Cruz to host the Technical Meeting of the Governors Climate and Forests Task Force (www.gcftf.org), attended by 6 governors and 4 environmental secretaries of 10 states from Bolivia, Brazil and Peru (and was also attended by the British Ambassador to Bolivia, Richard Porter. Although the Red-fronted macaw was not the focus of the meeting, the species was part of the meeting’s logo, and so we use the event to discuss and promote the IWT Challenge Fund project with the governor of Santa Cruz, Mario Aguilera and the British Ambassador.

The Municipal Governments continue to be the bedrock of the project and are fully involved in all day-to-day project decision-making, and most significantly in co-financing the compensation programs for the conservation agreements. We have built new relationships with the governments of Comarapa, Presto and Pojo and have initiated activities in these municipalities.

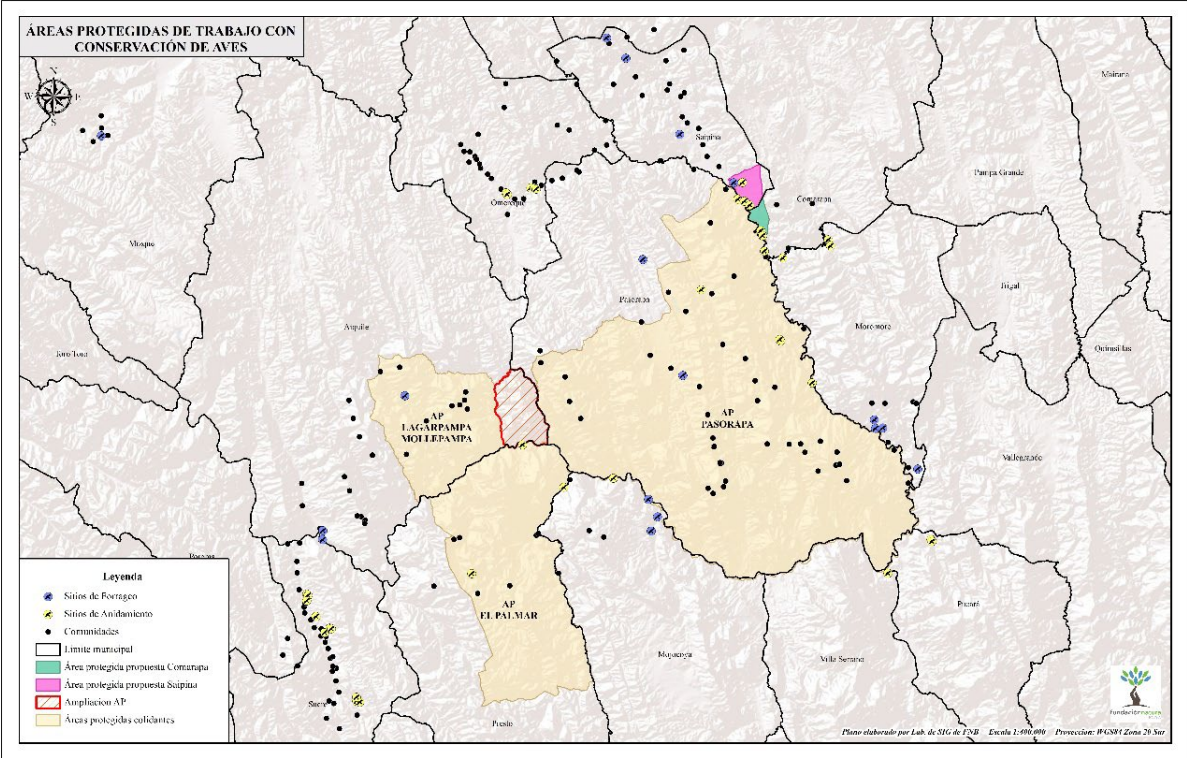
3. Project progress

3.1 Progress in carrying out project Activities

Output 1: Teams of local Macaw Guardians are formed and are patrolling nest sites and forage areas.

1i) Use results from the 2021 macaw survey to identify and map sites and communities important for conservation

We carried out a territorial and spatial analysis to identify the important sites and communities for the macaw. Seven communities in the municipalities of Saipina, Comarapa, Aiquile and Omereque with both nesting and foraging sites were identified for the 2023 management. Most of these sites are within the already created Lagarpampa-Mollepampa and Pasorapa integrated management areas (see map below)



Based on the site identification process, we decided to also use project resources to promote a new conservation mechanism, the creation of two new protected areas for the conservation of the Red-fronted macaws in the municipalities of Saipina and Comarapa (pink/green on the map above, see more details under activity 2.i below) and an extension of the Lagarpampa-Mollepampa protected area (hatched polygon).

The Municipal Macaw Conservation Incentive Programmes in the municipalities of Aiquile, Omereque, Pasorapa, and Saipina then prioritized communities and sites for the conservation of nesting and foraging sites of the Red-fronted Macaw and selected 25 plots for the implementation of Macaw conservation Agreements in the communities of Zapallar, La Piedra, Lagarpampa, Mollepampa, Saipina, Porotillo Zona Baja, and Ele Ele.

1ii) Select cadre of community volunteers to be Macaw Guardians: Within the framework of the establishment of the Red Front Macaw Conservation Agreements with rural families in the municipalities of Saipina, Omereque, Pasorapa and Aiquile, we supported 164 families presenting us with a pool of more than 300 community guardians. In the municipality of Aiquile, another 17 students from the Aiquile Technical Institute and municipal technicians were selected as volunteer members to promote the protection of the Red-fronted Macaw and promote sighting and birdwatching campaigns at the community level. Adding the community guardian leaders we had selected last year there are now eight leaders hired by the governments of Aiquile and Pasorapa. The guardians live strategic communities within and close to the protected areas that allow the conservation of the species and reduce their threats.

1iii) Run training courses to build community capacity for patrolling, data collection, use of GPS receivers and surveying: We hired a specialist ornithologist – José Balderrama – to strengthen the capacities of municipal technicians and the community guardian leaders in bird observation techniques and the potential for bird tourism in their areas. Jose is also leading community members undertake assessments to create two new macaw protected areas in Saipina and Comarapa municipalities, through evaluation of active nest sites, their conservation status and evaluation of bird tourism, and diversity of other species of birds in each area.

The following trainings were undertaken:

- 1) With community guardians from other areas to participatively build and validate a monitoring, reporting and verification (MRV) system of threats in sub-national protected areas. This exchange of experiences in the implementation of the MRV system allows the strengthening of the capacities of community guardians and the systematization of learning for the development of the MRV system for Subnational protected areas. During this event, the macaw guardian leaders were trained in a) monitoring of vegetation and water quality, c) bird tourism; d) Management of the SMART system. Monitors have improved their capabilities to assess biodiversity and recognize threats.
- 2) Strengthening capacities for the observation, identification and evaluation of birds, theoretical-practical training has been developed focused on municipal technicians from Aiquile, Pasorapa, Comarapa, Omereque and students from the Aiquile technical institute, who then transferred this knowledge to the community guardians, on a) birds of Bolivia, b) birds threatened with extinction in Bolivia and conservation status, c) endemic birds of Bolivia, d) potential for bird tourism in Cochabamba and Bolivia. Participants practiced bird watching methods and the training encouraged technicians to know, value and have tools to promote bird tourism in their protected areas, as an alternative to generate economic income for management.
- 3) For the community guardian leaders, specific training has been carried out on a routine basis regarding the control and surveillance of the Lagarpampa – Mollepampa (municipality of Aiquile) and Pasorapa (municipality of Pasorapa) protected areas. These trainings have included the design of patrols to effective monitoring with routes being prioritized in macaw foraging areas and in river canyons at lower altitudes (because the macaw prefers warmer places!).

1iv) Help Macaw Guardians design and undertake monitoring patrols: By strengthening the technical capacities of community guardians, municipal technicians, and student volunteers, constant work has been done to consolidate the monitoring, verification and reporting system of threats and biodiversity with community guardians. Within the SMART application, data for each protected area and important sites of the Red Fronted macaw has been incorporated for its respective patrolling. With each of the community guardian leaders, we have worked on training and field verification of patrols and use of the Smart device for its proper functioning.

As part of their training, the community guardians undertook 34 days of SMART monitoring in two municipal protected areas: (Lagarpampa-Mollepampa (Aiquile) and Pasorapa. The transects covered over 483 km, with emphasis on birds with 280 observations (note that the high level of bird observations were related to the corn fruiting season that generates high congregations of birds, including macaws and parrots).

The monitors periodically develop monitoring reports and verification of the conservation status of the areas. In the latter half of 2023-2024, in the municipal protected areas of Pasorapa and Lagarpampa, the community guardians made 1660 observations of fauna, water resources, flora and archaeological resources during 470 hours of patrolling over 890 km of route. Monitors from Ceibas community noted five threats (all hunting) and installed 18 camera traps.

1v) Build contacts with law enforcement agencies and provide legal support to communities: Through the capacity-building processes, municipal governments, local communities and municipal technicians themselves have been guided to establish contact with the Forestry and Environmental Preservation Police (POFOMA), the governorate of Santa Cruz and Cochabamba in their respective biodiversity units or directorates.

1vi) Collaborate with local communities and law enforcement agencies to document and act on results of patrolling activities: Within the framework of monitoring, verifying and reporting threats to the macaw, community guardians have periodically generated patrol reports specifying routes, sightings, findings and indications about threats in the areas. In this way, they document the results of SMART monitoring as a tool for local decision-making and technical support to enforce the law in coordination with the Forestry and Environmental Preservation Police (POFOMA). Monitoring results have been reported at the community level within the municipal protected areas (Pasorapa and Mollepampa-Lagarpampa), where the findings and threats of the nesting and foraging sites of the macaw were presented. In the event of certain irregularities and threats that affect the species, the communities, in coordination of the Municipal Governments, inform the Biodiversity Directorate of the Government of Santa Cruz / Cochabamba and POFOMA.

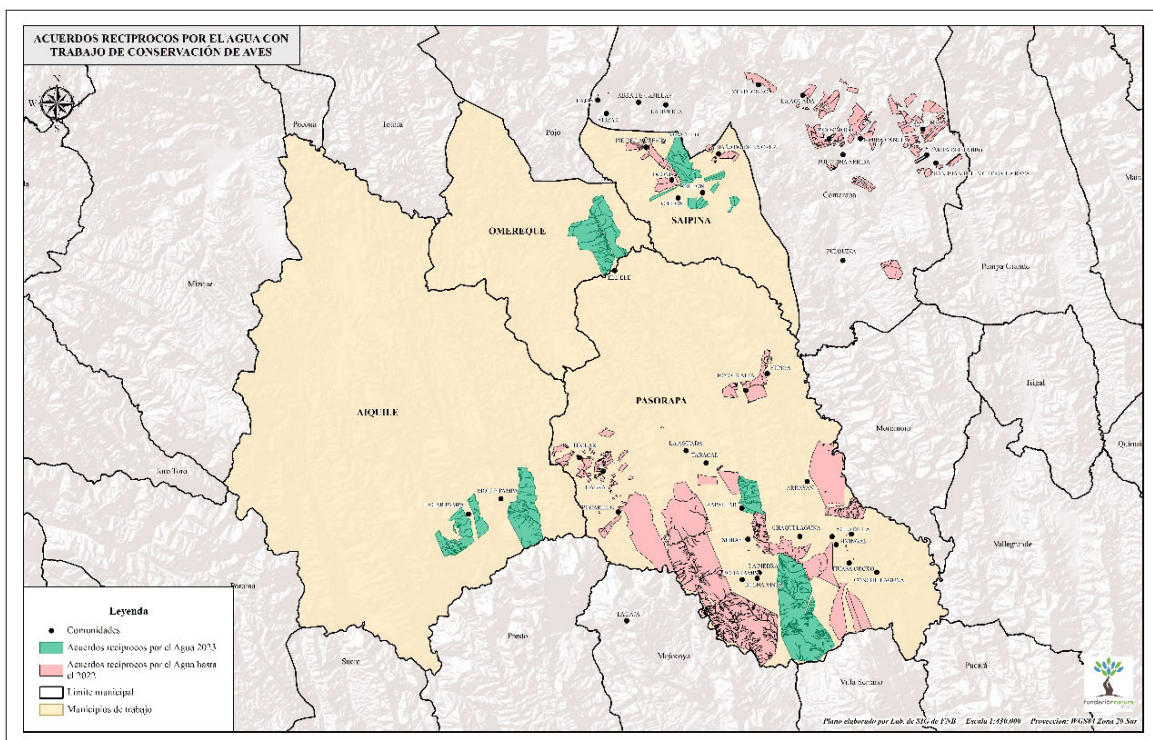
Output 2: Local community members receive direct, continued economic benefits in exchange for conservation activities and for stopping the macaw trade.

2i) Use results from the 2021 macaw survey to identify and map individual land parcels important for conservation: Based on the macaw survey results we initiated in the creation of two new protected areas, specifically focused on important macaw nesting sites. We undertook a land tenure analysis, based on an evaluation and specialization of the ownership rights of nesting and foraging areas. This analysis served as the basis for determining the potential polygon of the Saipina and Comarapa protected area, identifying the private actors with rights over the land, and in turn, initiating the socialization processes in their different stages.

We have contacted the nine individuals who own land in the Saipina polygon: 1) Santos Machuca; 2) Oscar Salguero; 3) Marcelo Cadima; 4) Emiterio Oronoz; 5) Fabiola Mendoza; 6) Francisco Navia; 7) Frankilina Pantoja; 8) Sandra Cano); and 9) Dainer Reyes. In Nine other private owners own land in the Comarapa polygon: 1) Andrés Jiménez Gamboa; 2) Eusebia Gutiérrez; 3) Vicenta Escobar Nogales and José Rodríguez Llanos; 4) Eusebia Ávila Paniagua; 5) Bautista Reyes Tapia; 6) Julia Arimosa de Reyes; 7) Heidy Paola Valverde Nova and others; 8) Yamil Nova Delgadillo; 9) Emiterio Oronoz Arana.

We then worked with the offices of the two mayors to collect relevant data, maps, and other information from municipal offices. The technical justification process was led by a multidisciplinary team (an Environmental Engineer: Anibal Villaroel; Agricultural Engineer, Elia Romero; Biologist-Ornithologist, José Balderrama; Environmental Engineer: Eduardo Unsuetabiodiversity technician), who carried out the survey of social, environmental and biological information. The ornithologist played an important role with the identification and evaluation of active nest status (conservation status of nests and parrots; evaluation of avi-ecotourism; characteristics of nesting sites); and in turn, the diversity, endemism, conservation status, and rarity of other potential bird species in the polygons.

2ii) Offer incentive packages for community patrolling and on individual land parcels in communities close to all important macaw nesting, foraging and sleeping sites: Based on the identification of potential community or individual plots to enter the incentive package, offers of incentive packages have been made to 7 communities in areas close to the nesting and foraging sites of macaws in the municipalities of Pasorapa, Saipina, Aiquile and Omereque during the 2023. These communities agreed to enter the conservation agreements programme to receive incentives linked to agricultural production and access to water.



2iii) Sign conservation agreements with community authorities and land owners: The municipal governments of Saipina, Aiquile and Omereque consolidated the conservation of red-fronted macaw nesting and foraging sites by signing conservation agreements with 164 families who have benefited with water access and productive development projects that are improving their livelihoods. With the signing of these Conservation Agreements 24,826 hectares have been established, corresponding to nesting and natural foraging areas of the species in the municipalities of Pasorapa, Saipina, Omereque and Aiquile (green polygons on map above, the pink polygons are where conservation agreements were signed previously).

2iv) Deliver compensation packages (bee hives, irrigation systems, tree seedlings etc.)

The following incentive packages were delivered:

- a) **Harvest, Water storage and division of pastures:** Incentives included barbed wire, staples, polytubes, water tanks, roofing sheets, chicken wire, and grass seeds.
- b) **Division of pastures and water storage in the Mollepampa-Lagarpampa PA:** Incentives included barbed wire, staples, 1200 water tank, two-layer polytubes, 1000M hose and PVC tap.
- c) **Division of pastures and access to water for the community of Chillón:** Incentives included barbed wire, smooth wire, staples, tanks, polytube, patent union, universal union.

d) **Support Access to water through the construction and repair of 2 tanks:** Incentives included cement, iron, nails, tie wire, waterproofing Sika, paint, sand, gravel, stone.

2v) Monitor compliance and, if appropriate, renew agreements: The hectares under agreements signed during 2022 were monitored to check conservation status, and in turn, compliance with the commitments i.e.

- a) Zero deforestation of species that are natural food for the Red-fronted Paraba: Chañara, Soto, Lanza, Chañarillo, Palo Borracho, Higuerrilla, Tjaco, Mara Valluna, Pica Pica;
- b) To take care of the integrity of the conservation area
- c) Prevent and control forest fires
- d) Prevent and avoid hunting, extraction of natural resources and other illegal activities that damage or cause a negative impact on the area
- e) Report to the competent authorities, illegal activities of use or extraction of natural resources that affect the object of conservation.
- f) To participate in community-led patrolling and monitoring

All the monitored conservation agreements (Pasorapa 21 projects, Saipina 16, Aiquile 2, and Omereque 1) had complied 100% with their first year of conservation commitments.

Output 3: *Threat reduction and strategies for long-term sustainable management of the macaw population are institutionalized.*

3.1i) Review and improve "Incentives" component of existing draft Management Plan:

We reviewed the Macaw Management Plan and shared it with municipal partners, who then developed their own processes and policies to follow the general lines of the plan.

3.1ii) Hold facilitated meeting with all relevant stakeholders: We held a series of meetings with national government (the Vice Presidency) the Departmental Government of Santa Cruz, the private sector (Coca Cola, and water providers and communities to discuss the general lines, and the details of how we can best implement the incentives component of the macaw management plan. To promote better species and area management, we have also worked with other conservation groups on the evaluation of Bolivian Key Biodiversity Areas. Information from community monitoring and camera traps allowed us to determine species with some category of threat, mainly mammals, and to propose 4 new KBAs. In the bird group we contributed significantly to the re-evaluation of the Red-fronted Macaw KBA, using our monitoring information in the municipalities of Aiquile, Pasorapa, Saipina and Comarapa. The re-evaluation has allowed a redefinition of the KBA of the Red Front Macaw focused on a separation into different management units (protected areas) and with new more precise limits.

3.1iii) Draft details of how to implement "Incentives" component of plan, request public comments and revise accordingly: Each municipality has developed its own guidelines and policies, we are now collating the results and presenting the general ideas to other municipalities such as Pojo and Presto.

3.1iv) Help National and Departmental Governments and Municipalities publish "Incentives" component of Management Plan:

The municipal governments have developed their own versions of guidelines and policies for incentive-based conservation of the macaw, but because this was only completed in March, we have not yet been able to engage departmental and national governments on this issue.

3.2i) Present Municipal Macaw Conservation Incentive Program (MMCIP) proposal to municipal governments, and where appropriate other stakeholders (such as the private sector or water users): We have created macaw conservation programs through municipal decrees in each of Aiquile, Omereque, Saipina and Pasorapa. In Comarapa we are discussing which is the best way forward: to integrate a macaw fund into an existing water fund, or to create a new institution. Each of the macaw funds is being consolidated by developing legislation and policies, but also practically, by signing conservation agreements throughout the project area, using both IWT Challenge Fund- and municipal- resources. Our goal in 2024-2024

is to evaluate the cost and benefits of channelling macaw financing through existing municipal structures – i.e. the decrees are sufficient – or if we need to develop new institutions.

3.2ii) Help municipal authorities design MMCIP and pass appropriate creation legislation

To strengthen the institutions in important areas for macaws we signed two inter-institutional agreements with the Municipal Government of Presto (Chuquisaca Department); and the Municipal Government and the Campesino Central of Titora (Cochabamba department), with the purpose of consolidating Macaw Conservation Funds, which would finance implementation of conservation agreements with local communities in these municipalities.

3.2iii) Support municipal implementation of MMCIP fund as the governments purchase development projects and takes on long term project management:

Our lawyer, Faviola Porcel, developed a regulatory framework for the creation of the Saipina-Comarapa protected areas and associated Municipal Macaw Conservation Incentive Program. This bill was disseminated to the mayor, the technical team and the municipal council. The socialization was carried out through working groups and independent meetings with both the executive and legislative bodies. Starting from the first draft regulations with the initial approval of the municipal authorities, socialization has begun with the private owners involved in the protected areas polygon. The initiative has undergone observations and clarifying recommendations at the level of the articles: management category, rights granted, and participatory management. This is due to the fundamental role of local actors in both the validation for the creation and the future management of protected areas.

3.2 Progress towards project Outputs

Output	Indicators	Advances in this period
Output 1: Teams of local Macaw Guardians are formed and are patrolling nest sites and forage areas	1.1 300 local Macaw Guardians are trained by June 2024 1.2 50 Macaw Guardian teams are patrolling all important nesting and foraging sites by December 2024 1.1.1 Signatures certifying attendance at Macaw Guardian Training Courses 1.1.2 Patrolling commitments signed by Guardians and their communities 1.1.3 GPS points of patrolling missions	1.1. 181 community guardians have been selected and trained (out of ~300 eligible community members) 1.2. Community guardians have spent 470 hours patrolling, covering 890 km. We expect that the output will be fully achieved by project close

Output	Indicators	Advances in this period
Output 2: Local community members receive direct, continued economic benefits in exchange for conservation activities and for stopping the macaw trade	2.1 800 local landowners in 40 communities, at least 75% of whom are females, receive economic incentives worth \$40,000 from eight Municipal Macaw Conservation Incentive Programmes (MMCIP), and have increased their annual incomes by 30%, by June 2025 2.1.1 Signed agreements detailing delivery of development projects such as honey production, improved irrigation systems 2.1.2. Receipts showing value of delivered incentives	2.1. Conservation Agreements have been signed with 164 families to protect 24,826 hectares, in exchange for water access and productive development projects worth £31,000 We expect that the output will be fully achieved by project close

Output	Indicators	Advances in this period
Output 3: Threat reduction and strategies for long-term	3.1 Bolivian National, Departmental and Local Governments implement a detailed "Conservation Incentives" component of the <i>Ara rubrogenys</i> Management Plan that	3.1. Four municipalities are implementing the conservation

<p>sustainable management of the macaw population are institutionalized</p>	<p>institutionalizes local incentive programmes by June 2024</p> <p>3.2 Six municipalities with resident <i>Ara rubrogenys</i> breeding pairs lead the creation and operation of Municipal Macaw Conservation Incentive Programs (MMCIP) to promote habitat and nest conservation, and to patrol and prevent incursions from traders by December 2023</p> <p>3.1.1 Detailed "Incentives" component of Management Plan Published</p> <p>3.1.2. Signed certification from local authorities that at least three of the recommendations of the Management Plan have been implemented</p> <p>3.2 Municipal records of Founding charters of MMCIP, bank accounts of MMCIP showing transfers of funds in and out, annual MMCIP implementation reports</p>	<p>incentives component of the <i>Ara rubrogenys</i> Management Plan</p> <p>3.2. Municipal Macaw Conservation Incentive Programmes have been created in each of Omereque, Saipina, Pasorapa and Aiquile: modalities of how to advance macaw conservation are being discussed in these municipalities and in Comarapa municipality, discussions have started in Presto and Pojo municipalities.</p> <p>We expect that the output will be fully achieved by project close</p>
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Output	Indicators	Advances in this period
<p>Output 4: Population dynamics, community well-being and local perceptions about the importance of macaw conservation are increasingly well understood</p>	<p>4.1 Community members understanding of the importance of Macaw conservation, and their knowledge about what conservation activities they can undertake, has increased by 100%, by December 2024 (baseline, 150 people out of 800 already have such understanding)</p> <p>4.1.1 Pre- and post- project socio-economic surveys</p>	<p>4.1 We continued our social marketing campaigns in Omereque and Pasorapa and started campaigns in Aiquile and Saipina. We have now undertaken baseline data collection in all four municipalities to be able to assess change of economic realities and perceptions about the macaw.</p>

3.3 Progress towards the project Outcome

We can confirm that we still believe that the indicators are adequate for measuring the intended Outcome, and that we the project is likely to achieve the outcome by the end of funding.

<p>Outcome Trade in wild-caught macaw adults, chicks and eggs is stopped because the species is effectively protected from poachers and traffickers by local farmer-stewards in exchange for economic incentives</p>	<p>0.1 Numbers of breeding pairs of <i>Ara rubrogenys</i> increase by 5% between July 2022 and June 2025</p> <p>0.2 Cases of bird, chick and egg off-take reduced to zero by June 2025</p> <p>0.3 2000 local landowners, at least 75% of whom are females, perceive a 30% increase in their incomes, as a result of Macaw conservation, by June 2025</p>
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3.4 Monitoring of assumptions

Outcome Assumption: *Rural communities in Bolivia are willing and able to undertake significant conservation activities in exchange for relatively low levels of economic support. We assume that such a quid pro quo can work because we have signed contracts with 9,000 farmers across Bolivia to conserve more than 500,000 hectares of watershed forests. Based on piloting the proposed project in two municipalities with macaw populations we calculate that this model can also work for Macaw conservation as there is a similar ratio between the low cost of conservation and the value of economic support the project could provide.*

Conservation Agreements protecting 24,826 hectares and the desire from the Saipina and Comarapa governments to create new protected areas suggest that this assumption is valid.

Output 1 Assumption: *Communities within the macaw distribution range are able and willing to undertake conservation activities in exchange for development projects, because their cost of conservation activities is less than the benefits of the economic development that the project will bring. We assume this because we have already piloted the incentive programme in five communities.*

We believe this assumption still hold true, as we have signed Conservation Agreements with 164 families to protect 24,826 hectares. Of agreements signed in 2022, there has been 100% compliance.

Output 2 Assumption: *Authorities are willing and able to implement it the management plan's recommendations. We assume this because we have evidence of interest from all range state municipalities, the Departmental Governments of Santa Cruz, Chuquisaca and Cochabamba and the National Government*

While the national government seems to have lost interest in the project, we have seen increased interest at departmental and local government level, as evidenced by the state government using the macaw in its logo for an international forest conservation meeting, and the joining of two new municipalities to the project.

Output 3 Assumption: *Municipal governments are willing and able to set up the MMCIP local funds. We assume this because we have helped more than 60 Municipal Governments across Bolivia set up similar funding mechanisms for watershed protection. The local water funds that we have helped set up annually transfer more than £300,000 worth of local resources to upstream landowners.*

Municipal governments have used significant amounts of their own funds (£21,000 in 2023-2024) to co-finance the project and invest in macaw conservation and have undertaken the first steps to create and implement the MMCIP local funds.

Output 4 Assumption: *Targeted information will change behaviour. We assume this based on the literature on behavioural economics (e.g. Ariely 2008) and the literature around the Social Marketing for conservation methodology promoted by Rare (we implemented a Rare Pride campaign and were mentored by Rare in 2010)*

We integrate social marketing campaigns into all our conservation agreement events and are seeing increasing interest in knowing more about and conserving the species.

Output 4 Assumption: *Our count methodology provides accurate estimates of breeding pairs and overall populations size. We worked with a local specialist bird NGO, Armonia (the Birdlife partner in Bolivia) who have extensive experience surveying this and other species of macaws and parrots, to comply with survey best practices (the baseline survey occurred in February-March 2021 nesting season before project initiation (results are currently being analyzed and interpreted). We will undertake the endline survey as part of this project.*

We have no evidence to suggest that this assumption is no longer valid, but we will be testing it during the 2024-2025 reporting period.

Output 4 Assumption: *Our survey methodology provides accurate estimates of socioeconomic status and well-being. We have undertaken and published the results of a series of socioeconomic surveys elsewhere in Bolivia and will partner with Professors Zhao Ma and Jonathan Bauchelet (Purdue University) who have extensive experience in the project area, to ensure that we comply with survey best practices.*

We have no evidence to suggest that this assumption is no longer valid, but we will be testing it during the 2024-2025 reporting period

3.5 Impact: achievement of positive impact on illegal wildlife trade and poverty reduction

Our original proposed impact was that: Extinction of the Red fronted Macaw (*Ara rubrogenys*) is prevented, and poverty is alleviated in communities across the macaws' geographical range

We still believe that our work across the macaw's range, complemented by the work of our partner Armonía, will allow us to jointly achieve this expected impact. However, it is still early days in the project, so we do not yet have further evidence to support this belief. In terms of human development and wellbeing we have trained and are supporting 164 families in conservation and species monitoring and have provided these families with economic development projects with a value of [REDACTED] in 2023-2024.

4. Thematic focus

The theme that our project is focused on is developing sustainable livelihoods to benefit people directly affected by IWT. The greatest threat to Red-fronted Macaws is poaching and trafficking of eggs and chicks. We are reducing this threat by forming teams of local macaw guardians and helping them patrol nest sites and forage areas, to prevent poaching by other community members and outsiders.

However, we cannot expect trade to disappear without an economic alternative, so are also providing direct, continued economic benefits to local community members in exchange for stopping the macaw trade. These development projects help communities cover the opportunity cost of preventing trafficking. We are also institutionalizing threat reduction and long-term management of the macaw population by creating Municipal Programmes to sustainably finance the initiative.

Prior to our project, macaw trafficking was providing short term income opportunities to perhaps 150 communities. Villagers poached and tolerated outsiders' poaching. Our short-term goal was to make conservation more economically worthwhile than poaching. To achieve this, we are providing develop projects to communities and individuals – especially females – who commit to undertake conservation and anti-poaching activities. In exchange for protecting macaw habitat and preventing poaching, villagers receive projects that diversify their long-term income sources away from climate- susceptible annual crops, to more resilient perennial crops, such as fruit trees, and other drought-resistant livelihood strategies such as honey production.

Our notable sustainable livelihoods achievement this year was to sign conservation agreements in four municipalities, resulting in more than 23,000 hectares under conservation, and supporting **164 families, with water access and economic development projects worth [REDACTED]** (two thirds of which were funded by the municipal governments).

5. Impact on species in focus

An unexpected advance of the project is our progress in creating two new protected areas in Saipina and Comarapa municipalities. Through the creation of these areas, and the conservation agreements we are signing, we expect that we will reduce poaching and trafficking of macaw chicks and eggs to zero in the rural communities where 85% of the Red Fronted Macaw population resides. By complementing the IWT Challenge Fund project that was led by Armonía – which focused on in the Caine watershed, home to 15% of the global macaw population, we will be able to stabilize the species, and initiate the long-term recovery of the Red Fronted Macaw. To assess progress, Natura and Armonía will repeat our 2021 census in 2025, when we will expect to record a population increase of 2% (from the 2021 baseline of 1,160 individuals). However, we currently have no data to assess if this will be achieved or not.

6. Project support for multidimensional poverty reduction

The development projects we provide, e.g., ensuring access to water, increasing corn yield through irrigation and technification, will indirectly help mitigate the primary threat to the

species, persecution by farmers for crop raiding. The macaw is already a source of pride for locals. Our economic support will shift the balance to allow villagers to support the species, as it will also help them improve their livelihoods, and will provide an option to “cashing in” on macaws by giving traffickers and poachers free entry to the community.

By project end we expect that eight municipalities will have created Municipal Macaw Incentive Programs, which will continue the project once IWT Challenge Fund support is over. These Incentive Programs will use municipal funds to continue to support local livelihoods, increase pride in the species, and make the economic case for in situ conservation rather than poaching. Over the two years of the project so far, we have delivered economic development projects worth more than £70,000, of which more than 85% was financed by the local governments.

We believe that this government buy-in and the empowerment of the communities that the project is promoting, will engender long term sustainability at the local level. Sustainability will require us to inculcate the village-wide conclusion that it is in everyone’s economic interest for the entire village to participate. Such a decision will then activate community institutions to run the program, to make sure all villagers contribute, and to ensure that community structures (and not Natura) monitor and enforce compliance. We are already seeing this through the activity of the four monitoring leaders and the 150+ local conservation volunteers.

7. Gender Equality and Social Inclusion (GESI)

Please quantify the proportion of women on the Project Board.	The project is led by Nigel [REDACTED] and Maria [REDACTED], with support from Henry [REDACTED] and Zulema [REDACTED], and field leadership by Maximo [REDACTED] and Elia [REDACTED] (i.e. 3 of the 6 team leaders are women)
Please quantify the proportion of project partners that are led by women, or which have a senior leadership team consisting of at least 50% women.	Natura has a senior leadership team consisting of 80% women

GESI Scale	Description	
Sensitive	The GESI context has been considered and project activities take this into account in their design and implementation. The project addresses basic needs and vulnerabilities of women and marginalised groups, and the project will not contribute to or create further inequalities.	X

Last year’s reviewer stated “*it would be useful to understand whether a full gender analysis has taken place in relation to this work, and whether the gender components of each activity have been considered. For example, whether women are being recruited in patrols, are there any barriers to recruitment, if they are recruited are they able to participate in an equally active way to men and is this being monitored*”.

“*It would be useful to understand how ... women’s leadership is being (promoted) and whether risks have been identified linked to this work, for example community tension, and whether unintended consequences are being monitored*”.

Even though three of the six members of the project leadership team are women and Natura has a senior leadership team consisting of 80% women, we have struggled to ensure that the project benefits women and girls as much as we would have hoped.

As we stated in our proposal, we have spent twenty years seeing, and understanding, that in the often-male dominated culture of Bolivia, women’s and especially girl’s voices are rarely

heard. Many women own land in Bolivia's Santa Cruz valleys but are unable to use it effectively. Traditional development projects that focus on improving crop yields and productivity invariably benefit men. In contrast, women are usually responsible for collecting and managing household water supplies. By enhancing water access, we will immediately improve the living standards of many women.

We have tried to ensure meaningful participation for all engaged in the project by holding project updates during the regular scheduled community meetings when all villagers can join, but such meetings are often sparsely attended by the women who tend to stay at home with their children.

In teams of the patrolling teams, things are even more complicated. Each of the 164 families who have received project benefits are responsible for being part of a patrol. More than 300 adults are therefore eligible to patrol and are receiving project support. However, the reality is that women cannot patrol alone for reasons of safety, and that in any case women have far less time to devote to conservation activities. Unlike men, who usually only have one job tending the fields, women must help with harvests, as well as performing numerous household and childcare tasks. Women's time availability to patrol is thus far lower than men's and so there have ended up being far fewer women patrolling than we would have expected and hoped. The project team has wrestled with this inequity in 2023-2024m, but have developed a series of proposals, primarily changing incentive structures, that we will test in 2024-2025.

8. Monitoring and evaluation

At this stage we cannot demonstrate that the Outputs and Activities of the project will contribute to the project Outcome. This is part of our theory of change that can only be tested at project end, when we try to assess the status of the macaw population across its range.

Our primary indicators of achievements so far are:

- Number of landowners actively monitoring macaw habitat
- Number of hectares conserved, and types and value of development projects delivered in exchange for conservation commitments
- Number of municipalities investing their own development funds in macaw conservation

We collect data on these indicators via our regular project activities, municipal documents, and interviews with key actors.

Last year's reviewer noted that the projects M&E framework is robust; the logframe has a clear logic, SMART indicators that have been clearly reported against, identified assumptions and MOVs. A range of data collection activity has taken place in year one including surveys, field visits, and the use of drones and GPS. The project also builds on a robust evidence base from previous work.

Over the reporting period there have been no changes made to the M&E plan, which has been, and continues to be led by Natura. We believe that our M&E is robust and have had a series of recent independent evaluations of our work. We also recently facilitated the publication of a series of studies of a randomized control we implemented from 2010-2015.

M&E on the ground is primarily undertaken by the community guardian leaders, working closely with municipal governments, who then share data with Natura's regional office (Vallegrande). We hope that this process will naturally lead to local ownership of the project and its monitoring.

9. Lessons learnt

We have learned several important lessons this year:

- **The difficulties of coordinating with other NGOs:** even those in the same field. We had hoped that with similar projects on the same species funded by the same donor we would have been able to develop a very strong collaboration with Armonía, our local macaw "partner". This has unfortunately not been the case, with the Armonía and Natura projects running parallel courses in different geographic areas, but rarely collaborating. Before our

IWT Challenge Project finishes, we plan to undertake a new survey of the macaw and will hope to fully reengage with Armonía at that time. We fully recognize that we need Armonía's support for biological surveys and so will expect to contract them in early 2025.

- **Staff turnover:** we have lost several key management staff in the institution this last year, not least our Administrator. This has complicated the project somewhat but has helped us to better understand the importance of standardized procedures and protocols.
- **GESI analysis and implementation:** as can be inferred from the text above, we are struggling to undertake a GESI positive project, but will redouble our efforts in 2024-2025.
- **Water is the most primordial need for rural communities:** we have been surprised how many communities request water access systems in exchange for their conservation commitment. Water provision is a fundamental need for all, and it is clear that authorities are willing to invest and pay for it. Given that many community water sources rely on the natural ecosystems around them, conservationists could profitably increase their focus on water as a potential economic driver of conservation
- **A little goes a long way:** while on the one hand municipal investments of £60,000 over two years are impressive, on the other hand, such investments have helped provide water access and livelihood improvements to close to 1000 people. Improved water supplies for 1000 people plus more than 30,000 hectares under conservation for £60,000 of municipal funding is a very good deal!

Last year's reviewer mentioned that *"it would ... have been useful to understand what the implications (of getting community by-in) are for overall delivery and whether any adaptation has taken place, or needs to be taken as a result, including revising down targets if appropriate"*. While start up delays certainly happened, these were not egregious, and the project was quickly back on track. Such delays are standard, and it would be surprising if they did not occur, and so they were included into our planning process.

The reviewer also asked if there were *"key factors that have enabled such positive engagement at the municipal level"*. It is difficult for us to identify such "key factors" because working with communities is in our institutional DNA: we have had positive engagement at the municipal level for more than 20 years now! That said, there are two things that we do differently from many Bolivian NGOs:

- a) Our commitment to communities and local authorities is never for a project, which, by definition, is a limited time span. Rather, our commitment is for 10 or 20 years – or as long as it takes. This makes long term planning, and sustainable outcomes, feasible. We have been working in Comarapa, for example, for almost 20 years, and so the IWT Challenge Fund project is simply one in a line of initiatives, that builds on and hence benefits from our previous investments.
- b) Related to this, unlike most NGOs, we never offer a project to a municipality and request a small amount of municipal counterpart funding of, say, 15%. Rather we flip over this relationship and promote the idea that it is a municipal project to which Natura will add counterpart funding of 15%.

The reviewer also noted that it is not clear from last year's report whether any analysis had been made of the different dimensions of poverty. The answer to this question is no, we do not know if there are factors that make certain communities more vulnerable and certain groups within communities more vulnerable. Indeed, our decision to work with a particular community is based solely on whether that community has valuable macaw foraging habitat or nesting sites. The compensation packages usually comprise community level assistance and so help the most vulnerable with, for example water access systems. We have seriously considered the reviewer's point, but have concluded that the only way to run an effective conservation project is to compensate and conserve the people and places that are most important for conservation, rather than people and places that are the poorest.

Although these are all very important lessons, we do not currently think that we will need to submit a Change Request to account for any of them.

10. Actions taken in response to previous reviews (if applicable)

In the review of last year's Annual Report, we were asked to address five issues. We perceived the review to be appropriate and so have worked together to resolve the following:

- 1. Revisit the safeguarding policy and protocols and ensure staff and project participants are adequately trained:** We revisited and checked our safeguarding policy and protocols in 2023 and made some slight changes and updates, and 20% of project staff have received formal training on safeguarding. We intend to expand this to 100% by the end of this year.
- 2. Provide full explanation of the cause for delays, the specific impact they have had on the project, and mitigating action that has been taken and implications for future delivery:** It seems that in the last report we exaggerated the scope and extent of delays: our apologies for that. There have been no significant delays to the project, and the only activity we are slightly behind on is 3.1iv) *Help National and Departmental Governments and Municipalities publish "Incentives" component of Management Plan*. The municipal governments have developed their own versions of guidelines and policies for incentive-based conservation of the macaw, but because this was only completed in March, we have not yet been able to engage departmental and national governments on this issue. We expect to catch up on this by July.
- 3. Provide detail on how assumptions are being monitored and adapted as needed**
As noted in our answer to question 3.4 above, data suggest that all the assumptions that we have checked monitored are still valid. We have not yet tested two of our three Output 4 assumptions but expect to do so, as planned, during the final year of the project.
- 4. Provide detail of any GESI analysis that has been carried out, including the identification of any risks or unintended consequences, and how they will be measured:** We have reported on our GESI analysis above.
- 5. Report progress against intended delivery to date to clearly show the extent to which delivery is on or off track:** As mentioned above, it appears that we exaggerated the scope and extent of delays in our last report. The project is fully on track, with a slight delay to one activity. In this report we have endeavoured to better report progress against our annual targets, and we feel we are on track with most of them.

11. Risk Management

No new risks have arisen in the last 12 months that were not previously accounted for, and so we have not developed an updated version of our risk register.

12. Sustainability and legacy

Last year's reviewer noted that: *"it is not clear from reporting whether an exit strategy has been developed, it would be useful to include information on this in future reporting"*. We find this comment rather baffling. As noted in our original proposal, we expect that "by project end, eight municipalities – our five primary partner municipalities plus three more – will have created Municipal Macaw Incentive Programs, which will continue the project once IWT Challenge Fund support is over. These Incentive Programs will use municipal funds to continue to support local livelihoods, increase pride in the species, and make the economic case for in situ conservation rather than poaching. In the same way that Natura has "graduated" an increasing number of municipalities where we have set up Water Funds elsewhere in Bolivia, we expect to leave the region within the next 10 years, leaving behind institutions that are self-financed with well-trained technical staff.

In other words, we view our entire project as an exit strategy: build local support for macaw conservation, create and strengthen local institutions to undertake such conservation, seed finance the institutions, and then leave. In the last two years, four local governments have created such legislation and are discussing the appropriate institutional structures to make the legislation binding over the long term. These governments have already invested £60,000 in conservation agreements, and two governments have started the process to set up new

protected areas for the macaw. As far as we can see then, the intended sustainable benefits of our project are still valid, and we do not plan make changes to what was originally proposed.

13. IWT Challenge Fund identity

The Red Front Macaw protection campaign called “Sowing the Future with the Red Front Macaw” has been developed and implemented; whose main objective was to position the importance of protecting the Red-fronted macaw in residents of local communities, promoting the development of sustainable productive activities and achieving recognition from the authorities towards these communities as fundamental pillars and generators of change.

Activities were carried out to consolidate the residents' understanding of the importance of preserving the existence of the Red-fronted macaw as an endemic species in the region, generating spaces for dialogue, participation and recognition between municipal authorities and community members to exchange ideas and reaffirm the commitment of both parties to the preservation of this species.

Likewise, dissemination material was prepared (Banner, graphic arts, radio spots, videos, informative article, examples below) for the population to communicate and inform about the importance of the preservation of the Red-fronted macaw. The target group for the implementation of this campaign was young people, community leaders, key actors in decision-making in the municipalities.

At the end of the reporting period, we collaborated with the Departmental Government of Santa Cruz to host the Technical Meeting of the Governors Climate and Forests Task Force (www.gcftf.org) that was also attended by the British Ambassador to Bolivia, Richard Porter. Although the Red-fronted macaw was not the focus of the meeting, the species was part of the meeting’s logo, and so we used the event to discuss and promote the IWT Challenge Fund project with the governor of Santa Cruz, Mario Aguilera and the British Ambassador. The British Embassy logo appeared on all meeting materials rather than the IWT Challenge Fund logo.

We are working closely with the British Embassy on several projects, including both this project and two other Darwin projects. IWT Challenge Fund funding is not likely not recognised as a distinct project with a clear identity, but rather forms part of the larger programme.



14. Safeguarding

Has your Safeguarding Policy been updated in the past 12 months?	Yes
Have any concerns been investigated in the past 12 months	No
Does project have a Safeguarding focal point?	Yes, Tatiana [REDACTED]
Has the focal point attended any formal training in the last 12 months?	No
What proportion (and number) of project staff have received formal training on Safeguarding?	Past: 20 % Planned: 100 %
Has there been any lessons learnt or challenges on Safeguarding in the past 12 months? Please ensure no sensitive data is included within responses.	No

Does the project have any developments or activities planned around Safeguarding in the coming 12 months? If so, please specify. No

Please describe any community sensitisation that has taken place over the past 12 months; include topics covered and number of participants.

Have there been any concerns around Health, Safety and Security of your project over the past year? If yes, please outline how this was resolved.

Has there been any lessons learnt or challenges on Safeguarding in the past 12 months? No

Does the project have any developments or activities planned around Safeguarding in the coming 12 months? No

15. Project expenditure

Table 1: Project expenditure during the reporting period (April 2023-March 2024)

Project spend (indicative) since last Annual Report	2023/24 Grant (£)	2023/24 Total actual IWT Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs				
Consultancy costs				
Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items				
Others				
TOTAL	102,800	102,800		

Table 2: Project mobilised or matched funding during the reporting period (1 April 2023 – 31 March 2024)

	Secured to date	Expected by end of project	Sources
Matched funding leveraged by the partners to deliver the project (£)			American Bird Conservancy, Municipal Governments
Total additional finance mobilised for new activities occurring outside of the project, building on evidence, best practices and the project (£)			World Land Trust, and we also mobilised [redacted] in additional funds from the American Bird Conservancy

16. Other comments on progress not covered elsewhere

Not applicable

17. OPTIONAL: Outstanding achievements or progress of your project so far
This section may be used for publicity purposes.

There have been no outstanding achievements this year. We expect them all at project end!

Image, Video or Graphic Information:

File Type (Image / Video / Graphic)	File Name or File Location	Caption including description, country and credit	Social media accounts and websites to be tagged (leave blank if none)	Consent of subjects received (delete as necessary)
Images	To be sent	Monitoring		No
Images	To be sent	Signing conservation agreements		No

Annex 1: Report of progress and achievements against logframe for Financial Year 2023-2024

Project summary	SMART Indicators	Progress and Achievements April 2023 - March 2024	Actions required/planned for next period
Impact: Extinction of the Red-fronted Macaw (<i>Ara rubrogenys</i>) is prevented and poverty is alleviated in communities across the macaws' geographical range		No advances recorded so far	
Outcome: Trade in wild-caught macaw adults, chicks and eggs is stopped because the species is effectively protected from poachers and traffickers by local farmer-stewards in exchange for economic incentives	<p>0.1 Numbers of breeding pairs of <i>Ara rubrogenys</i> increase by 5% between July 2022 and June 2025</p> <p>0.2 Cases of bird, chick and egg off-take reduced to zero by June 2025</p> <p>0.3 2000 local landowners, at least 75% of whom are females, perceive a 30% increase in their incomes, as a result of Macaw conservation, by June 2025</p>	<p>0.1. No advances recorded so far</p> <p>0.2. No advances recorded so far</p> <p>0.3. 164 families received projects worth \$31,000 from the municipal governments of Pasorapa, Saipina, Omereque and Aiquile.</p>	As per activities in full log frame
Output 1: Teams of local Macaw Guardians are formed and are patrolling nest sites and forage areas	<p>1.1 300 local Macaw Guardians are trained by June 2024</p> <p>1.2 50 Macaw Guardian teams are patrolling all important nesting and foraging sites by December 2024</p>	<p>164 local Macaw Guardians have been trained</p> <p>25 teams are patrolling important nesting and foraging sites</p>	
1ii) Select cadre of community volunteers to be Macaw Guardians		Completed in four municipalities	Completed
1v) Build contacts with law enforcement agencies and provide legal support		We established contact with the Forestry and Environmental Preservation Police (POFOMA), and law enforcement agencies in the governments of Santa Cruz and Cochabamba	Completed
1vi) Collaborate with local communities and law enforcement agencies to document and act on results of patrolling activities		We helped communities report to the Forestry and Environmental Preservation Police (POFOMA),	Completed

Project summary	SMART Indicators	Progress and Achievements April 2023 - March 2024	Actions required/planned for next period
Output 2: Local community members receive direct, continued economic benefits in exchange for conservation activities and for stopping the macaw trade	2.1 800 landowners in 40 communities, at least 75% of whom are females, receive economic incentives worth \$40,000 from eight Municipal Macaw Conservation Incentive Programmes and have increased incomes by 30%, June 2025	We signed conservation agreements in four municipalities, resulting in more 23,000 new hectares under conservation, and supporting 164 families, with projects worth \$32,000 (2/3 funded by the municipal government).	To be continued
2i) Use results from the 2021 survey to identify and map individual land parcels		Completed in four municipalities	Continue in two other municipalities
2ii) Offer incentive packages for community patrolling and on land parcels in communities close to all important macaw nesting, foraging and sleeping sites		Completed in four municipalities	Continue in two other municipalities
2iii) Sign conservation agreements with community authorities and land owners		Completed in four municipalities	Continue in two other municipalities
2iv) Deliver compensation packages (i.e. bee hives, irrigation systems, etc.)		Completed in four municipalities	Continue in two other municipalities
2iv) Monitor compliance and, if appropriate, renew agreements		Completed in two municipalities	Continue in all other municipalities
Output 3: Threat reduction and strategies for long-term sustainable management of the macaw population are institutionalized	3.1 Bolivian National, Departmental and Local Governments implement a detailed "Conservation Incentives" component of the Management Plan that institutionalizes local incentive programmes by June 2024 3.2 Six municipalities with resident <i>Ara rubrogenys</i> breeding pairs lead the creation and operation of Municipal Macaw Conservation Incentive Programs (MMCIP) to promote habitat and nest conservation, and to patrol and prevent incursions from traders by December 2023	3.1. Four municipalities are implementing the conservation incentives component of the <i>Ara rubrogenys</i> Management Plan 3.2. Macaw conservation funds have been created in each of Omereque, Saipina, Pasorapa and Aiquile: modalities of how to advance macaw conservation are being discussed in these municipalities and in Comarapa municipality, discussions have started in Presto and Pojo municipalities.	Continue in two other municipalities
3.1iv) Help National and Departmental Governments and Municipalities publish "Incentives" component of Management Plan		Completed in four municipalities	Continue municipal process, engage with state/national governments
3.2i) Present MMCIP proposal to municipal governments, and where appropriate other stakeholders (such as the private sector or water users)		Completed in four municipalities	Continue in two other municipalities
3.2ii) Help municipal authorities design MMCIP and pass appropriate legislation		Complete in four municipalities	Continue in two other municipalities
3.2iii) Support municipal implementation of MMCIP funds		Complete in four municipalities	Continue in two other municipalities

Annex 2: Project's full current logframe as presented in the application form

Project summary	SMART Indicators	Means of verification	Important Assumptions
Impact: Extinction of the Red-fronted Macaw (<i>Ara rubrogenys</i>) is prevented and poverty is alleviated in communities across the macaws' geographical range			
Outcome: Trade in wild-caught macaw adults, chicks and eggs is stopped because the species is effectively protected from poachers and traffickers by local farmer-stewards in exchange for economic incentives	<p>0.1 Numbers of breeding pairs of <i>Ara rubrogenys</i> increase by 5% between July 2022 and June 2025 (baseline 130 pairs)</p> <p>0.2 Cases of bird, chick and egg off-take reduced to zero by June 2025 (baseline 70 cases per year)</p> <p>0.3 2000 local landowners, at least 75% of whom are females, perceive a 30% increase in their incomes, as a result of Macaw conservation, by June 2025 (baseline \$2000 annual incomes)</p>	<p>0.1 Pre- and post- project biological surveys</p> <p>0.2 Post- project biological and social surveys</p> <p>0.3 Pre- and post- project socio-economic surveys</p>	Rural communities in Bolivia are able to undertake conservation in exchange for relatively low levels of economic support. We assume that such a quid pro quo can work because we have signed contracts with 9,000 farmers across Bolivia to conserve more than 500,000 hectares of watershed forests. Based on piloting the proposed project in two municipalities with macaw populations we calculate that this model can also work for Macaw conservation as there is a similar ratio between the low cost of conservation and the value of economic support we could provide.
Output 1: Teams of local Macaw Guardians are formed and are patrolling nest sites and forage areas	<p>1.1 300 local Macaw Guardians are trained by June 2024 (baseline 0 Guardians)</p> <p>1.2 50 Macaw Guardian teams are patrolling all important nesting and foraging sites by December 2024 (baseline 0 teams)</p>	<p>1.1.1 Signatures certifying attendance at Macaw Guardian Training Courses</p> <p>1.1.2 Patrolling commitments signed by Guardians and their communities</p> <p>1.1.3 GPS points of patrolling missions</p> <p>1.1.4 Records of cases of poachers and traffickers detained by Guardians</p>	Community patrols can effectively patrol discourage poachers and traffickers, either through community pressure on locals, or by reporting outsiders to law enforcement officials. We assume this based on published data and our own records that suggest that economic gains from poaching are not high
Output 2: Local community members receive direct, continued economic benefits in exchange for conservation activities and for stopping the macaw trade	2.1 800 local landowners in 40 communities, at least 75% of whom are females, receive economic incentives worth \$40,000 from eight Municipal Macaw Conservation Incentive Programmes (MMCIP), and have increased their annual incomes by 30%, by June 2025 (baseline 168 families in Pasorapa Municipality pilot)	<p>2.1.1 Signed agreements detailing delivery of development projects such as honey production, improved irrigation systems</p> <p>2.1.2. Receipts showing value of delivered incentives (i.e. cost of beehives, irrigation pipes etc.)</p> <p>2.1.3 Measures of income in pre and post- project socio-economic surveys</p>	Communities within the macaw distribution range are able and willing to undertake conservation activities in exchange for development projects, because their cost of conservation activities is less than the benefits of the economic development that the project will bring. We assume this because we have already piloted the incentive programme in five communities.

Project summary	SMART Indicators	Means of verification	Important Assumptions
<p>Output 3: Threat reduction and strategies for long-term sustainable management of the macaw population are institutionalized</p>	<p>3.1 Bolivian National, Departmental and Local Governments implement a detailed "Conservation Incentives" component of the <i>Ara rubrogenys</i> Management Plan that institutionalizes local incentive programmes by June 2024 (baseline, draft management plan is currently being discussed by stakeholders)</p> <p>3.2 Six municipalities with resident <i>Ara rubrogenys</i> breeding pairs lead the creation and operation of Municipal Macaw Conservation Incentive Programs (MMCIP) to promote habitat and nest conservation, and to patrol and prevent incursions from traders by December 2023 (baseline 0 municipalities)</p>	<p>3.1.1 Detailed "Incentives" component of Management Plan Published by governments</p> <p>3.1.2 Signed certification from local authorities that at least three of the recommendations of the Management Plan have been implemented</p> <p>3.2 Municipal records of Founding charters of MMCIP, bank accounts of MMCIP showing transfers of funds in and out, annual MMCIP implementation reports</p>	<p>Authorities are willing and able to implement it the management plan's recommendations. We assume this because we have evidence of interest from all range state municipalities, the Departmental Governments of Santa Cruz, Chuquisaca and Cochabamba and the National Government</p> <p>Municipal governments are willing and able to set up the MMCIP local funds. We assume this because we have helped more than 60 Municipal Governments across Bolivia set up similar funding mechanisms for watershed protection. The local water funds that we have helped set up annually transfer more than GBP 300,000 worth of local resources to upstream landowners.</p>
<p>Output 4: Macaw population dynamics, community well-being and local perceptions about the importance of macaw conservation are increasingly well understood</p>	<p>4.1 Community members understanding of the importance of conservation, and their knowledge about what conservation activities they can undertake, has increased by 100%, by December 2024 (baseline, 150 people already have such understanding)</p> <p>4.2 One peer-reviewed academic journal article is published about Macaw population dynamics by June 2025 (baseline 0 articles published)</p> <p>4.3 One peer-reviewed academic journal article published about community socio economics and perceptions by June 2025 (baseline 0 articles published)</p>	<p>4.1.1 Pre- and post- project socio-economic surveys</p> <p>4.2.1 Published articles</p> <p>4.3.1 Published article</p>	<p>Targeted information will change behaviour. We assume this based on the literature on behavioural economics (e.g. Ariely 2008) and the literature around the Social Marketing for conservation methodology promoted by Rare (we implemented a Rare Pride campaign and were mentored by Rare)</p> <p>Our count methodology provides accurate estimates of breeding pairs and overall populations size. We worked with a local specialist bird NGO, Armonía (the Birdlife partner in Bolivia) who have extensive experience surveying this and other species of macaws and parrots, to comply with survey best practices (the baseline</p>

Project summary	SMART Indicators	Means of verification	Important Assumptions
			<p>survey occurred in February-March 2021 nesting season before project initiation. We will undertake the endline survey as part of this project.</p> <p>Our survey methodology provides accurate estimates of socioeconomic status and wellbeing. We have undertaken and published the results of a series of socioeconomic surveys elsewhere in Bolivia.</p>
<p>Activities</p> <p>1i) Use results from the 2021 macaw survey to identify and map sites and communities important for conservation</p> <p>1ii) Select cadre of community volunteers to be Macaw Guardians</p> <p>1iii) Run training courses to build community capacity for patrolling, data collection, use of GPS receivers and surveying</p> <p>1iv) Help Macaw Guardians design and undertake monitoring patrols</p> <p>1v) Build contacts with law enforcement agencies and provide legal support to communities</p> <p>1vi) Collaborate with local communities and law enforcement agencies to document and act on results of patrolling activities</p> <p>2i) Use results from the 2021 macaw survey to identify and map individual land parcels important for conservation</p> <p>2ii) Offer incentive packages for community patrolling and on individual land parcels in communities close to all important macaw nesting, foraging and sleeping sites</p> <p>2iii) Sign conservation agreements with community authorities and volunteer land owners</p> <p>2iv) Deliver compensation packages (i.e bee hives, irrigation systems, fruit tree seedlings etc.)</p> <p>2v) Monitor compliance and, if appropriate, renew agreements</p> <p>3.1i) Review and improve "Incentives" component of existing draft Management Plan</p> <p>3.1ii) Hold facilitated meeting with all relevant stakeholders</p> <p>3.1iii) Draft details of how to implement "Incentives" component of plan, request public comments and revise accordingly</p> <p>3.1iv) Help National and Departmental Governments and Municipalities publish "Incentives" component of Management Plan</p> <p>3.2i) Present MMCIP proposal to municipal governments, and where appropriate other stakeholders (such as the private sector or water users)</p> <p>3.2ii) Help municipal authorities to design MMCIP and pass appropriate creation legislation</p> <p>3.2iii) Support municipal implementation of MMCIP fund as the governments purchase development projects and takes on long term project management.</p> <p>4.1i) Design and implement social marketing campaign to explain the project and to promote conservation and anti-trafficking activities</p> <p>4.2i) Design and implement macaw population survey at project end</p> <p>4.2ii) Draft, review and finalize publication of second set of results</p> <p>4.3i) Design and implement socioeconomic and perceptions survey pre-project</p> <p>4.3ii) implement the same survey post project</p> <p>4.3iii) Draft, review and finalize publication of results</p>			

Annex 3 Standard Indicators

Table 1 Project Standard Indicators

IWTCF Indicator number	Name of indicator	Units	Disaggregation	Year 1 Total	Year 2 Total	Total to date	Total planned during the project
IWTCF-A01	Number of people who received training in sustainable livelihood skills	People	Gender; males and females Stakeholder group: Local Communities; training on skills related to use of compensation packages	110	328	438	800
IWTCF-A02	Number of people reporting they are applying new capabilities (skills and knowledge) 6 (or more) months after training.	Number	Gender; males and females Stakeholder group: Local Communities; training on skills related to use of compensation packages	0	110	110	350
IWTCF-B21	Number of policies and frameworks developed or formally contributed to by projects and being implemented by appropriate authorities.	Number	Typology of policy (Community/sub-national/national)	0	4	4	3
IWTCF-D01	Number of trainers trained reporting to have delivered further training by the end of the project.	People/ Number trained	Gender; male female Age Group; adults/ adolescent; Stakeholder group: Local Communities, Type of training: wildlife monitoring	3	4	7	20
IWTCF-D03	Number of local/national organisations with improved capability and capacity as a result of the project.	Organisa- - tions	Organisation Type.	2	10	12	20

Table 2 Publications

Title	Type	Detail	Gender of Lead Author	Nationality of Lead Author	Publishers	Available from
No documents published						

Annex 4: Onwards – supplementary material (optional but encouraged as evidence of project achievement)

We will send separately a series of documents as annexes that show:

- 1) The municipal decrees that opened the funding lines for the municipal macaw conservation funds
- 2) The signing of conservation agreements
- 3) Monitoring
- 4) Photos documenting these processes

Checklist for submission

	Check
Different reporting templates have different questions, and it is important you use the correct one. Have you checked you have used the correct template (checking fund, type of report (i.e. Annual or Final), and year) and deleted the blue guidance text before submission?	Yes
Is the report less than 10MB? If so, please email to BCF-Reports@niras.com putting the project number in the subject line.	No
Is your report more than 10MB? If so, please discuss with BCF-Reports@niras.com about the best way to deliver the report, putting the project number in the subject line.	Yes
Have you included means of verification? You should not submit every project document, but the main outputs and a selection of the others would strengthen the report.	Yes
If you are submitting photos for publicity purposes, do these meet the outlined requirements (see section 17)?	Yes
Have you involved your partners in preparation of the report and named the main contributors	Yes
Have you completed the Project Expenditure table fully?	Yes
Do not include claim forms or other communications with this report.	